

# ELECTROMECHANICAL

<b>Switches</b>	
<b>Basic/Snap Switches</b>	
Cherry . . . . .	1851, 1852
Crouzet . . . . .	1854
Honeywell . . . . .	1855, 1856, 1857
Omrone . . . . .	1858, 1859, 1860, 1861, 1862, 1863
OTTO . . . . .	1853
<b>Tactile Switches</b>	
ALPS . . . . .	1864, 1865, 1866
APEM . . . . .	1873
Cherry Electrical Products . . . . .	1873
C&K . . . . .	1866, 1867
E-Switch . . . . .	1868, 1869
NKK Switches . . . . .	1870
Omrone . . . . .	1871, 1873
Panasonic . . . . .	1872
<b>Detection Switches</b>	
ALPS . . . . .	1874
C&K . . . . .	1874
Panasonic . . . . .	1874
<b>Directional Switches &amp; Encoders</b>	
ALPS . . . . .	1875, 1877
Avago . . . . .	1876
Bourns . . . . .	1878
C&K . . . . .	1875, 1876
CUI Inc . . . . .	1876
Panasonic . . . . .	1876
<b>Pushbutton Switches</b>	
TE Connectivity/Alcoswitch . . . . .	1879
APEM . . . . .	1880
Bulgin . . . . .	1881
C&K . . . . .	1882, 1883, 1884, 1885
E-Switch . . . . .	1886, 1887
Honeywell . . . . .	Available at mouser.com
ITW Switches . . . . .	1888
Marquardt . . . . .	1888
NKK Switches . . . . .	1889, 1890, 1891, 1892
Omrone . . . . .	Available at mouser.com
OTTO . . . . .	1893, 1894
Schurter . . . . .	1897, 1898, 1899
Schneider Electric . . . . .	1895, 1896
<b>Toggle Switches</b>	
TE Connectivity/Alcoswitch . . . . .	1900
Carling Technologies . . . . .	1901
C&K . . . . .	1902, 1903
E-Switch . . . . .	1904
Electroswitch . . . . .	1904
Honeywell . . . . .	1905
NKK Switches . . . . .	1906, 1907, 1908
OTTO . . . . .	1909
<b>Rocker/Paddle Switches</b>	
ALPS . . . . .	1910
APEM . . . . .	1910, 1911
Carling Technologies . . . . .	1910
Cherry Electrical Products . . . . .	1912
C&K . . . . .	1913
CW Industries . . . . .	1914
E-Switch . . . . .	1915
Marquardt . . . . .	1916
NKK Switches . . . . .	1917
<b>Slide Switches</b>	
TE Connectivity/Alcoswitch . . . . .	1918
Alpha . . . . .	1919
C&K . . . . .	1920, 1921
NKK Switches . . . . .	1922
<b>Magnetic/Reed/Tilt Switches</b>	
Amseco . . . . .	1923
Hamlin/Littelfuse . . . . .	1924
Meder . . . . .	1925
Schneider Electric . . . . .	1923
<b>DIP/SIP Switches</b>	
TE Connectivity/Alcoswitch . . . . .	1926
C&K . . . . .	1927
CTS . . . . .	1928
Omrone . . . . .	1928, 1929
<b>Rotary Switches</b>	
APEM . . . . .	1930
Bourns . . . . .	1930
Carling Technologies . . . . .	1930
C&K . . . . .	1930, 1932
Electroswitch . . . . .	1931, 1933
Lorlin . . . . .	1934
NKK Switches . . . . .	1935
Omrone . . . . .	1936
Phoenix Contact . . . . .	1931
<b>Thumbwheel/Pushwheel Switches</b>	
Omrone . . . . .	1937
<b>Limit Switches</b>	
Honeywell . . . . .	1938, 1939, 1940
Schneider Electric . . . . .	1941
<b>Switch Seals</b>	
APM HEXSEAL . . . . .	1942
<b>Relays</b>	
<b>Frequency Relays</b>	
Panasonic . . . . .	1943
Radiall . . . . .	1944
Teledyne . . . . .	1944, 1945, 1946, 1947
<b>PCB Low-Signal Relays</b>	
Fujitsu . . . . .	1948
Kemet/NEC-Tokin . . . . .	1949
Omrone . . . . .	1950, 1951, 1952
Panasonic . . . . .	1953
TE Connectivity/Axicom . . . . .	1954, 1955
<b>PCB General Purpose Relays</b>	
Fujitsu . . . . .	1956, 1957
Magnecraft/Schneider Electric . . . . .	1958
Omrone . . . . .	1959, 1960, 1961, 1962, 1963, 1964
Panasonic . . . . .	1965, 1966, 1967, 1968, 1969
TE Connectivity/P&B . . . . .	1971
TE Connectivity/OEG . . . . .	1970
TE Connectivity/Schrack . . . . .	1970
<b>Automotive Relays</b>	
Fujitsu . . . . .	1972
Panasonic . . . . .	1973, 1974, 1975
<b>Reed Relays</b>	
Coto Technology . . . . .	1976, 1977
Hamlin/Littelfuse . . . . .	1978
Magnecraft/Schneider Electric . . . . .	1979
<b>Meder</b>	. . . . .
TE Connectivity/P&B . . . . .	1981
<b>Solid State Relay/I/O Modules</b>	
Avago . . . . .	1982
CII (Continental Industries) . . . . .	1983, 1984
Clare . . . . .	1985
Crouzet . . . . .	1986
Crydom . . . . .	1987, 1988, 1989, 1990, 1991, 1992, 1993
Omron . . . . .	1994, 1995, 1996, 1997
Panasonic . . . . .	1998, 1999, 2000, 2001, 2002, 2003
Teledyne . . . . .	2004, 2005
Vishay . . . . .	2006
<b>General Purpose/Industrial Relays</b>	
Magnecraft/Schneider Electric . . . . .	2007, 2008, 2009, 2010
Omron . . . . .	2011, 2012, 2013, 2014, 2015, 2016, 2017
Panasonic . . . . .	Available at mouser.com
Phoenix Contact . . . . .	2023, 2024
Song Chuan . . . . .	2025
TE Connectivity/AMP . . . . .	2022
TE Connectivity/OEB . . . . .	2019
TE Connectivity/P&B . . . . .	2018, 2019, 2020, 2021, 2022
TE Connectivity/Schrack . . . . .	2018, 2022
White Rodgers . . . . .	2026
<b>Controllers/Counters/Timers</b>	
Crouzet . . . . .	2027, 2028
Omrone . . . . .	2029, 2031, 2032, 2033
Schneider Electric . . . . .	2030
<b>Motors/Drives</b>	
Applied Motion . . . . .	2034, 2035
Schneider Electric . . . . .	2036
<b>Circuit Breakers</b>	
Altech . . . . .	2037
Carling Technologies . . . . .	2038, 2039
TE Connectivity/P&B . . . . .	2040, 2041
Phoenix Contact . . . . .	2042
Schurter . . . . .	2043
<b>Audio</b>	
CUI Inc . . . . .	2044, 2045
Mallory Sonalert Products . . . . .	2046, 2047, 2048
Projects Unlimited . . . . .	2049, 2050, 2051, 2052
<b>Knobs</b>	
TE Connectivity/Alcoswitch . . . . .	2053
<b>Hardware</b>	
Harwin . . . . .	2054, 2055
Heyco . . . . .	2056, 2057, 2058, 2059
Keystone . . . . .	2060, 2061, 2062, 2063, 2064
RAF Hardware . . . . .	2065, 2066, 2067, 2068,
Schurter . . . . .	2069, 2070, 2071, 2072
Wurth Electronics . . . . .	2073

# CHERRY Snap Action Switches

RoHS Compliant This page of product is RoHS compliant.

**CHERRY**

## DC SERIES: SEALED SNAP ACTION SWITCHES

### Specifications:

- Package Size (In.) .783L x .256W x .365H

### Typical Applications:

- Automotive
- Power Tools
- Lawn and Garden



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cherry Part No.	Fig.	Terminal Type	Actuator Length: in.	Actuator Style	Operating Force	Operating Position: in.	Price Each	1	50	100	250
UL 0.1A, 125 VAC ENEC 0.1A, 250VAC												
540-DC3C-A1AA	DC3C-A1AA	A	.110 Short Solder	-	Button	200g	.331±.012	5.04	3.96	3.36	3.06	
540-DC3C-A1LB	DC3C-A1LB	B	.110 Short Solder	0.189	Straight	80g	.331±.012	6.02	4.45	3.85	3.61	
UL 5.0A, 125-250 VAC, ENEC 6 A, 250VAC												
540-DC1C-A1AA	DC1C-A1AA	A	.110 Short Solder	-	Button	200g	.331±.012	4.64	3.64	3.09	2.82	
540-DC1C-A1LB	DC1C-A1LB	B	.110 Short Solder	0.189	Straight	200g	.331±.012	5.05	3.73	3.23	3.03	
540-DC1C-A1RB	DC1C-A1RB	C	.110 Short Solder	0.098	Roller	200g	.331±.012	7.35	5.43	4.70	4.41	
10.1A, 125-250VAC, ENEC 0.1A, 250VAC												
540-DC2C-A1AA	DC2C-A1AA	A	.110 Short Solder	-	Button	340g	.331±.012	5.02	3.71	3.21	3.01	
540-DC2C-A1LB	DC2C-A1LB	B	.110 Short Solder	0.189	Straight	150g	.331±.012	5.92	4.38	3.79	3.55	

## DB SERIES: SUBMINIATURE SNAP ACTION SWITCHES

### Specifications:

- Package Size (In.) .787L x .256W x .355H
- DBxA: NO
- DBxB: NC
- DBxC: DT

### Typical Applications:

- Amusement Machines
- Industrial Controls



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cherry Part No.	Fig.	Terminal Type	Actuator Length: in.	Actuator Style	Operating Force	Operating Position: in.	Price Each	1	50	100	250
UL 0.1A, 125-250VAC VDE 100mA, 250V												
540-DB3C-B1AA	DB3C-B1AA	D	.110 x 0.20 QC	-	Button	150g	.330±.012	2.57	2.17	1.73	1.63	
540-DB3C-B1LB	DB3C-B1LB	E	.110 x 0.20 QC	0.189	Lever SR	60g	.421±.051	2.69	2.28	1.81	1.71	
UL 5.0A, 125-250VAC; VDE 6 A, 250V												
540-DB1C-A1LB	DB1C-A1LB	F	.110 Short Solder	0.189	Lever SR	60g	.421±.051	2.43	2.06	1.64	1.54	
540-DB1C-B1AA	DB1C-B1AA	D	.110 x 0.20 QC	-	Button	150g	.330±.012	2.47	2.09	1.66	1.56	
UL 10.1A, 125-250VAC 1/4 HP, 125VAC; VDE 10 (1.5) A, 250V												
540-DB2C-A1RC	DB2C-A1RC	G	.110 Short Solder	0.185	Roller SR	95g	.638±.071	2.61	2.21	1.76	1.67	
540-DB2C-B1AA	DB2C-B1AA	D	.110 x 0.20 QC	-	Button	250g	.330±.012	2.47	2.09	1.66	1.56	
540-DB2C-C1AA	DB2C-C1AA	H	.051 x 0.20 PCB	-	Button	250g	.330±.012	2.31	1.95	1.55	1.46	

## DG SERIES: SUB-SUBMINIATURE SNAP ACTION SWITCHES

### Specifications:

- Package Size (In.) .504L x .228W x .255H

### Typical Applications:

- Automotive
- Computer
- Medical Equipment



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cherry Part No.	Fig.	Terminal Type	Actuator Length: in.	Actuator Style	Operating Force	Operating Position: in.	Price Each	1	50	100	250
50mA 30 VDC												
540-DG23-B1LA	DG23-B1LA	I	Insertion Molded	0.169	Straight	140	.268±.031-.016	2.33	1.98	1.57	1.48	
540-DG23-B1RA	DG23-B1RA	J	Insertion Molded	0.075	Roller	140	.488±.020	4.53	3.56	3.02	2.75	
540-DG23-B3LA	DG23-B3LA	K	Insertion Molded Left	0.169	Straight	140	.268±.031-.016	2.33	1.98	1.57	1.48	
3A 125VAC, 2A 30 VDC												
540-DG13-B1AA	DG13-B1AA	L	Insertion Molded	-	Button	140	.213±.008	2.28	1.93	1.53	1.45	
540-DG13-B1LA	DG13-B1LA	I	Insertion Molded	0.169	Straight	140	.268±.031-.016	2.28	1.93	1.54	1.45	
540-DG13-B1RA	DG13-B1RA	J	Insertion Molded	0.075	Roller	140	.488±.020	4.23	3.32	2.82	2.57	

## E70 SERIES: SEALED SNAP ACTION SWITCHES

### Specifications:

- Package Size (In.) .915L x .385W x .880H

### Typical Applications:

- Automotive

- Lawn and Garden



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cherry Part No.	Fig.	Terminal Type	Actuator Length: in.	Actuator Style	Operating Force	Operating Position: in.	Price Each	1	50	100	250
10.1A, 1/4 H.P., 125/250VAC												
540-E72-40AT	E72-40AT	M	10" 16 awg Wire Leads	-	Button	300g	.310±.35	14.09	9.76	8.90	8.33	
540-E72-40HT	E72-40HT	N	10" 16 awg Wire Leads	0.858	Straight	67g	.440±.75	14.99	10.39	9.47	8.86	

## E SERIES: GENERAL PURPOSE SINGLE POLE SWITCHES

### Specifications:

- Terminals: .250" Q.C.
- Package Size (In.) 1.823L x .644W x .640H

### Typical Applications:

- Appliances
- Industrial Controls



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cherry Part No.	Fig.	Actuator Length: in.	Actuator Style	Operating Force	Operating Position: in.	Price Each	1	50	100	250
Rating: 15A-125/250VAC, 3/4 HP-125VAC, 1-1/2 HP-250VAC											
540-E13-00E	E13-00E	O	-	Button	425g	0.285±.020	3.71	2.92	2.48	2.25	
540-E13-00H	E13-00H	P	1.5	Straight	100g	0.312±.062	5.17	3.82	3.31	3.10	
540-E13-00J	E13-00J	Q	-	3/8 x 32 thread, plastic button	425g	0.670±.030	4.33	3.40	2.88	2.63	
540-E13-00K	E13-00K	R	1.391	Roller	100g	0.718±.062	6.27	4.63	4.01	3.76	
540-E13-00M	E13-00M	Q	-	3/8 x 32 thread, metal button	425g	0.812±.030	5.35	3.95	3.41	3.21	
540-E13-50H	E13-50H	Q	1.75	Straight	65g	0.281±.062	5.17	3.82	3.31	3.10	
Rating: 25A-125/250VAC, 1HP-125VAC, 2HP-250VAC											
540-E14-00M	E14-00M	Q	-	3/8 x 32 thread, metal button	850g	0.775±.030	6.37	4.71	4.08	3.82	
540-0012-0023	0012-0023	-	-	Brass Hex Nut	-	-	.20	.188	.183	.175	

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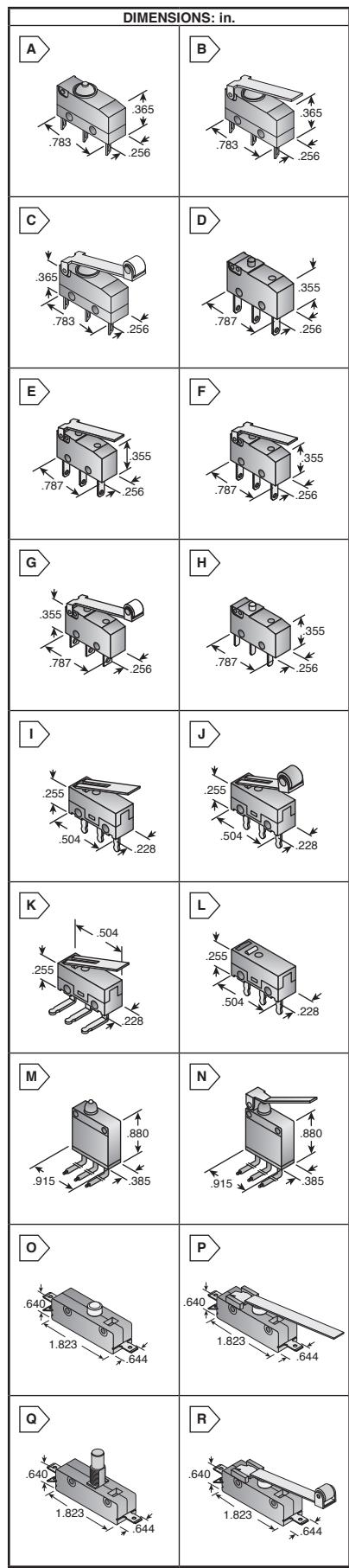
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1851

Cherry Snap Action Switches



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# CHERRY Snap Action Switches



## E SERIES: GENERAL PURPOSE DOUBLE POLE SWITCHES

### Specifications:

- Terminals: .250" Q.C.
- Package Size (In.) 1.823L x .644W x 1.125H

### Typical Applications:

- Appliances
- Industrial Controls



RoHS Compliant

### 15A-125VAC/250VAC, 3/4HP-125VAC

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cherry Part No.	Fig.	Actuator Length (in.)	Actuator Style	Operating Force	Operating Position (in.)	Price Each			
							1	50	100	250
540-E19-00A	E19-00A	A	-	Button	850G	0.285±0.030	7.94	5.88	5.08	4.76
540-E19-00H	E19-00H	B	1.5	Straight	205g	0.312±0.062	9.28	6.43	5.87	5.48
540-E19-00J	E19-00J	C	-	3/8 x 32 thread, plastic button	850g	0.670±0.030	9.85	6.82	6.22	5.82
540-E19-00M	E19-00M	C	-	3/8 x 32 thread, metal button	850g	0.812±0.030	9.75	6.76	6.16	5.76
540-E19-50H	E19-50H	B	1.75	Straight	130g	0.281±0.062	8.52	5.90	5.39	5.04

### 20A-125VAC/250VAC, 1HP-125VAC

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cherry Part No.	Fig.	Actuator Length (in.)	Actuator Style	Operating Force	Operating Position (in.)	Price Each			
							1	50	100	250
540-E20-00A	E20-00A	A	-	Button	1280g	0.248±0.030	11.66	8.09	7.37	6.89
540-E20-00K	E20-00K	D	0.652	Roller	425g	0.860±0.062	13.73	9.52	8.68	8.12
540-0012-0023	0012-0023	-	-	Brass Hex Nut	-	-	.20	.188	.183	.175

## E SERIES: PANEL MOUNT SNAP ACTION SWITCHES

### Specifications:

- Package Size (In.) 1.250L x .680W x .970H

### Typical Applications:

- HVAC
- Office Equipment



RoHS Compliant

### Single Pole

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cherry Part No.	Fig.	Terminal Type	Actuator Style	Operating Force	Operating Position (in.)	Price Each			
							1	50	100	250
<b>0.1 Amp, 125VAC</b>										
540-E68-00A	E68-00A	E	.187 Q.C.	Button	425g	0.720±0.820	5.55	4.89	4.76	4.49
540-E68-30A	E68-30A	E	.187 Q.C.	Button	475g	0.610±0.710	5.82	5.13	4.99	4.71
<b>10 Amp, 125/250VAC, 1/3 H.P., 125/250VAC</b>										
540-E69-00A	E69-00A	E	.187 Q.C.	Button	425g	0.610±0.710	4.77	3.74	3.17	2.89
540-E69-30A	E69-30A	E	.187 Q.C.	Button	475g	0.610±0.710	4.63	4.08	3.97	3.74
540-E69-40A	E69-40A	E	.187 Q.C.	Button	425g	0.300±0.400	4.77	3.74	3.17	2.89

### Double Pole

- Package Size (In.) 1.570L x .680W x .970H

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cherry Part No.	Fig.	Terminal Type	Actuator Style	Operating Force	Operating Position (in.)	Price Each			
							1	50	100	250
<b>0.1 Amp, 125VAC</b>										
540-E78-00A	E78-00A	F	.187 Q.C.	Button	680g	0.720±0.820	10.59	9.52	8.98	8.46
<b>10 Amp, 125/250VAC, 1/3 H.P., 125/250VAC</b>										
540-E79-00A	E79-00A	F	.187 Q.C.	Button	680g	0.720±0.821	8.11	7.14	6.95	6.55
540-E79-30A	E79-30A	F	.187 Q.C.	Button	757g	0.610±0.710	8.11	7.14	6.95	6.55
540-E79-40A	E79-40A	F	.187 Q.C.	Button	680g	0.300±0.400	8.59	7.57	7.37	6.94
540-F79-30A	F79-30A	F	.187 x .032 Q.C.	Button	757g	0.610±0.710	7.06	6.22	6.05	5.71

## GP SERIES: HEAVY DUTY SNAP ACTION SWITCHES

### Features:

- Ultra-small travel differential
- Mechanical life tested to 1 million cycles
- Current switching to 20 amps
- Wide variety of actuators
- Screw or solder terminals standard
- Low operate forces available

Two versions are available, Replace (.) with: 1 U.S. version  
mounting holes, 0.140 or 0 Metric version mounting holes, 4.4



### 15A, 125VAC/250VAC

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cherry Part No.	Fig.	Terminal Type	Actuator Length (in.)	Actuator Style	Operating Force (oz.)	Operating Position (in.)	Price Each			
								1	50	100	250
540-GPTCNH_1	GPTCNH_1	G	Screw	-	Panel mount plunger	12.3	.826/.890	14.57	10.11	9.21	8.62
540-GPTCRH_1	GPTCRH_1	H	Screw	-	Panel mount roller plunger	12.3	1.240/1.320	21.44	14.87	13.56	12.68
540-GPTCRS_1	GPTCRS_1	I	Screw	1.91	Lever/Roller	3.5	1.157/1.221	11.17	7.75	7.06	6.60

### 20A, 125VAC/250VAC

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cherry Part No.	Fig.	Terminal Type	Actuator Length (in.)	Actuator Style	Operating Force (oz.)	Operating Position (in.)	Price Each			
								1	50	100	250
540-GPTBNH_1	GPTBNH_1	G	Screw	-	Panel mount plunger	12.3	.826/.890	15.27	10.59	9.65	9.03

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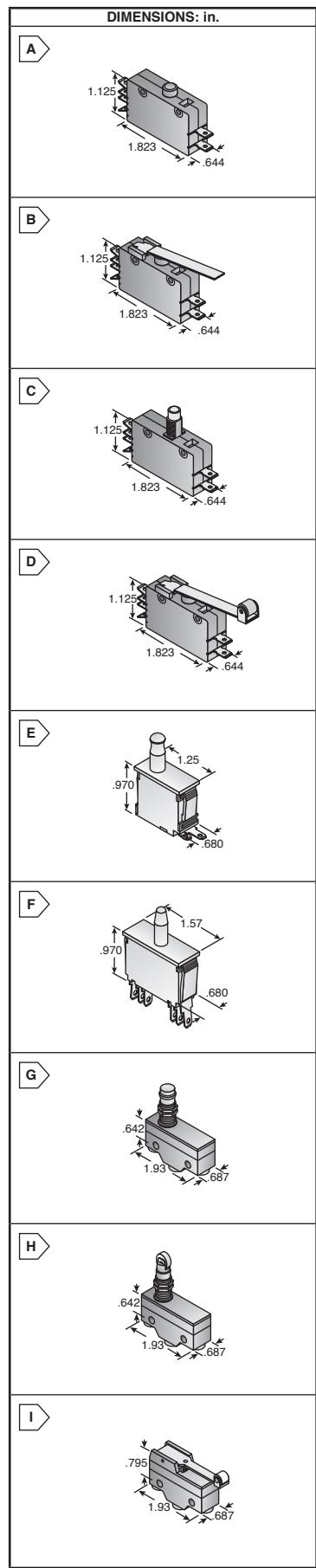
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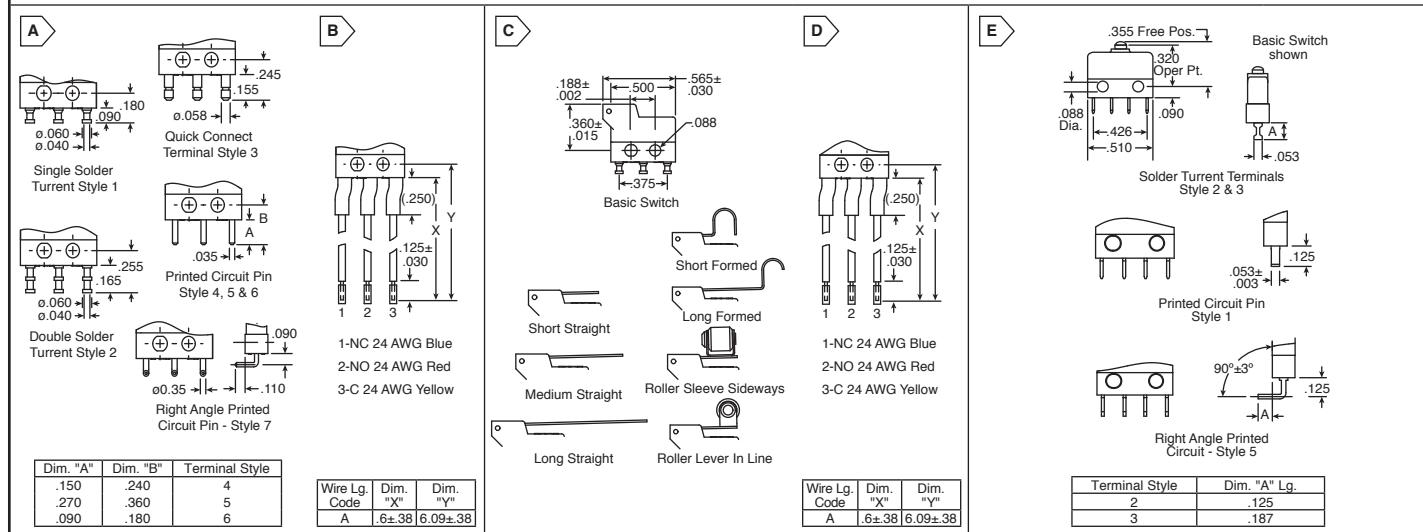
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# OTTO Basic Switches

**OTTO**

DIMENSIONS: in.



## B2 SERIES SUBMINIATURE SWITCHES

### Features:

- Sensitive movement differentials
- Low operating forces
- Long operating life
- Qualified under MIL-PRF-8805/4, MIL-PRF-8805/106 & MIL-PRF-8805/109

### Specifications:

- Max Rating: 2A
- Operating Force: 5oz.
- Actuator: Button
- Contact Form: SPDT
- Voltage Rating: 28V

Quick Connect Terminal



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	OTTO Part No.	Fig.	Termination Style	Current Rating (A)	Movement Diff. (in.)	Contact Material	Price Each		
							1	25	50
<b>Solder</b>									
999-B2-111351	B2-111351	A	Single Solder, Style 1	7	.005	Silver/Gold High Current	16.45	15.95	13.37
999-B2-211351	B2-211351	A	Single Solder, Style 1	7	.005	Silver/Gold High Current	14.53	14.09	11.80
999-B2-112351	B2-112351	A	Double Solder, Style 2	7	.005	Silver/Gold High Current	16.45	15.95	13.37
999-B2-211353	B2-211353	A	Double Solder, Style 2	4	.005	Silver/Gold Low Current	19.32	18.74	15.71
999-B2-111353	B2-111353	A	Quick Connect, Style 3	4	.005	Silver/Gold Low Current	21.25	20.61	17.28
<b>PC Pin</b>									
999-B2-112353	B2-112353	A	PC Pin 0.150"lg., Style 4	4	.005	Silver/Gold Low Current	21.25	20.61	17.28
999-B2-212353	B2-212353	A	PC Pin 0.270"lg., Style 5	4	.005	Silver/Gold Low Current	16.74	16.23	15.02
<b>With Wires 6 in. lg.</b>									
999-B2-21A321	B2-21A321	B	With 24 AWG Wires	7	.002	Silver/Gold High Current	19.32	18.74	15.71
999-B2-21A351	B2-21A351	B	With 24 AWG Wires	7	.005	Silver/Gold High Current	18.03	17.48	14.64

## B2 BASIC SWITCHES WITH INTEGRAL LEVERS

### Features:

- Subminiature with integral actuating levers
- Long operating life
- Qualified under MIL-PRF-8805/4, MIL-PRF-8805/106 & MIL-PRF-8805/109

### Specifications:

- Voltage Rating AC: 115V, 250V
- Current Rating: 7A
- Actuator: Button
- Contact Form: SPDT

Short Formed Lever



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	OTTO Part No.	Fig.	Lever Style	Operating Force (oz.)	Movement Diff. (in.)	Operating Point Dimensions: in.	Price Each		
							1	25	50
<b>Solder</b>									
999-B2-500111	B2-500111	C	Short Straight	1.76	0.020	0.332±0.045	15.49	15.02	12.57
999-B2-500211	B2-500211	C	Medium Straight	1.10	0.035	0.325±0.075	13.41	13.00	12.02
999-B2-500311	B2-500311	C	Long Straight	0.71	0.060	0.305±0.115	16.37	15.87	13.29
999-B2-501611	B2-501611	C	Roller Sleeve Sideways	2.29	0.020	0.581±0.045	19.42	18.83	15.78
999-B2-501911	B2-501911	C	Roller Lever In Line	2.29	0.020	0.581±0.050	19.42	18.83	15.78
<b>PC Pin</b>									
999-B2-500411	B2-500411	C	Short Formed	2.10	0.015	0.545±0.036	16.37	15.87	13.29
<b>With Wires 6 in. lg.</b>									
999-B2-5003A1	B2-5003A1	D	Long Straight	0.71	0.060	0.305±0.115	18.51	13.21	12.48
999-B2-5019A1	B2-5019A1	D	Roller Lever In Line	2.29	0.020	0.581±0.050	21.37	15.26	14.40

## B3 BASIC SWITCHES

### Features:

- Less than 25mΩ contact resistance
- Up to 8A switching capability
- Button accepts actuation directly from a cam
- Available in Commercial & Military grades
- Qualified under MIL-PRF-8805/76 & MIL-PRF-8805/101

### Specifications:

- Actuator: Button
- Current Rating: 8A
- Voltage Rating DC: 28V
- Operating Force: 5oz.

Solder Turret Terminal



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	OTTO Part No.	Fig.	Style No.	Contact Form	Contact Material	Price Each		
						1	25	50
<b>Solder</b>								
999-B3-12141	B3-12141	E	2	SPDT-DB, Form Z	Silver/Gold High Current	16.95	16.44	15.21
999-B3-12142	B3-12142	E	2	SPDT-DB, Form Z	Silver/Gold Low Current	24.41	21.78	21.12
999-B3-13131	B3-13131	E	3	SPDT, Form C	Silver/Gold High Current	20.04	19.43	16.28
<b>PC Pin</b>								
999-B3-10064	B3-10064	E	1	SPDT, Form C	Silver/Gold High Current	22.40	18.77	18.20
<b>Right Angle PC Pin</b>								
999-B3-15131	B3-15131	E	5	SPDT, Form C	Silver/Gold High Current	24.83	22.16	21.49
999-B3-15141	B3-15141	E	5	SPDT-DB, Form Z	Silver/Gold High Current	24.83	22.16	21.49

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(800) 346-6873

1853

**OTTO Snap Action Switches**

# CROUZET Basic/Snap Action and Limit Switches



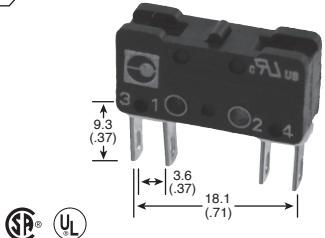
Pin Plunger

Roller Lever

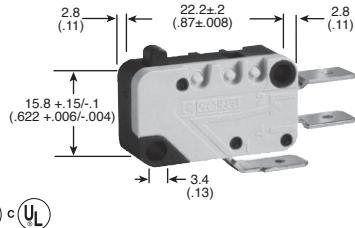
Plunger

DIMENSIONS: mm (in)

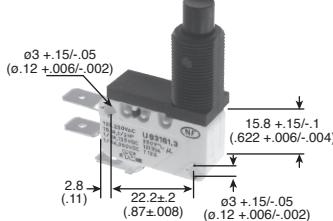
A



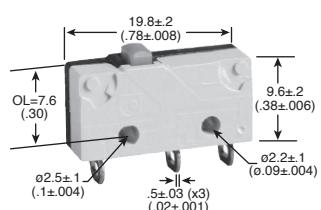
B



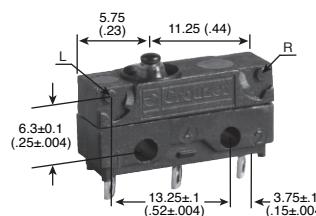
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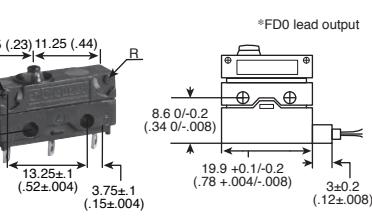
D



E



F



## BASIC / SNAP ACTION SWITCHES

\*IP 67

For quantities greater than listed, call for quote.

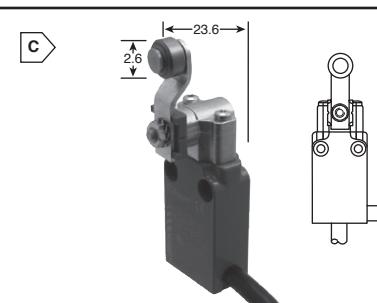
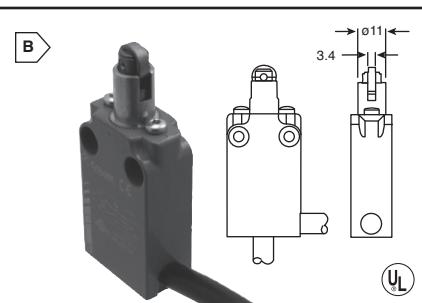
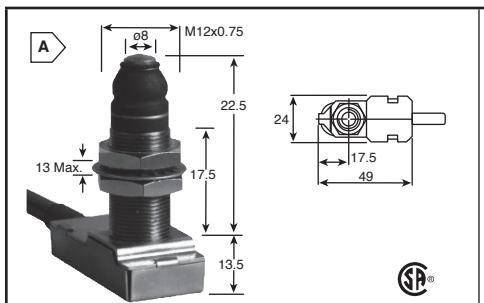
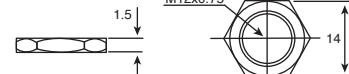
MOUSER STOCK NO.	Crouzet Part No.	Fig.	Rating AC	Actuator	Form	Contact Rating	Current Force	Termination Style	Price Each			
									1	10	25	50
<b>Subminiature</b>												
874-831330C1.0	831330C1.0	A	250V	Pin Plunger	SPDT	5 A	1.6 N	Q.C.	7.14	5.69	5.41	5.17
<b>Miniature</b>												
874-831612C6.0	831612C6.0	B	250V	Pin Plunger	SPDT	15.1 A	0.8 N	Q.C.	3.16	2.51	2.39	2.29
874-831613C6.0	831613C6.0	B	250V	Pin Plunger	SPDT	10.1 A	0.8 N	Q.C.	2.81	2.24	2.13	2.04
874-831618C6.0	831618C6.0	B	-	Pin Plunger	SPDT	0.1 A	0.8 N	Q.C.	3.62	2.89	2.74	2.62
874-831613C6.EB	831613C6.EB	B	250V	Roller Lever	SPDT	10.1 A	0.8 N	Q.C.	3.62	2.89	2.74	2.62
874-831613C3.L	831613C3.L	C	250V	Plunger	SPDT	10.1 A	0.8 N	Q.C.	6.21	4.94	4.70	4.50
<b>Subminiature</b>												
874-831704C2.0	831704C2.0	D	-	Plunger	SPDT	5 A	1.5 N	Solder	2.92	2.33	2.21	2.12
<b>Sealed Subminiature</b>												
* 874-831860C2.0	831860C2.0	E	250 V	Roller Lever	SPDT	6 A	2.5 N	Solder	5.63	4.48	4.26	4.08
* 874-831860CFD0.0	831860CFD0.0	F	250 V	Roller Lever	SPDT	6 A	2.5 N	Solder	10.23	8.15	7.75	7.41

## SWITCH ACCESSORIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crouzet Part No.	Mouser Description	Price Each			
			1	10	25	50
874-70602118	70602118	NUTS FOR SW-83161-L for L type actuator	.28	.225	.213	.204

DIMENSIONS: mm



## LIMIT SWITCHES

IP Rating: IP 66, IP 67  
depending on type

DIMENSIONS: mm

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crouzet Part No.	Fig.	Rating AC	Voltage	Actuator	Contact Form	Current Rating	Operating Force	Price Each			
									1	10	25	50
<b>Automotive Limit Switches</b>												
874-83733315	83733315	A	50V	Plunger	-	-	5 A	6 N	35.15	28.00	26.62	25.47
<b>Positive Opening Enclosed Limit Switches</b>												
874-83871102	83871102	B	250V	Roller Plunger	SPDT-DB	-	10 A	36 N	91.07	72.56	68.99	65.99
874-83873102	83873102	C	-	Roller Lever	SPDT-DB	-	10 A	15 N cm	93.35	74.38	70.72	67.64

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# HONEYWELL Basic Switches



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# Honeywell

## PREMIUM LARGE BASIC SWITCHES

The switch is on. Simple, superior, durable, and irreplaceable even by 21st-century standards, the MICRO SWITCH™ technology cycles on. Today, Honeywell Sensing and Control (S&C) manufactures millions of MICRO SWITCH™ basic switches annually for water and irrigation, aerospace and defense, industrial, off-highway, and medical applications. They are globally compliant, and known worldwide for their compact and lightweight design, accurate repeatability, and extended life.

Looking for enhanced accuracy and repeatability? Our premium line of MICRO SWITCH™ Large and Subminiature switches were designed for high-precision applications. Originally developed to support United States aircraft in World War II, advancements in packaging and operating controls have helped further expand applications over the past 75 years while maintaining enhanced and repeatability.

### Features:

- Contact Form: SPDT
- Termination Style: Screw

\* Termination Style: Solder  
\*\* Environmentally Sealed

\*\*\* DEMKO

### Potential Applications:

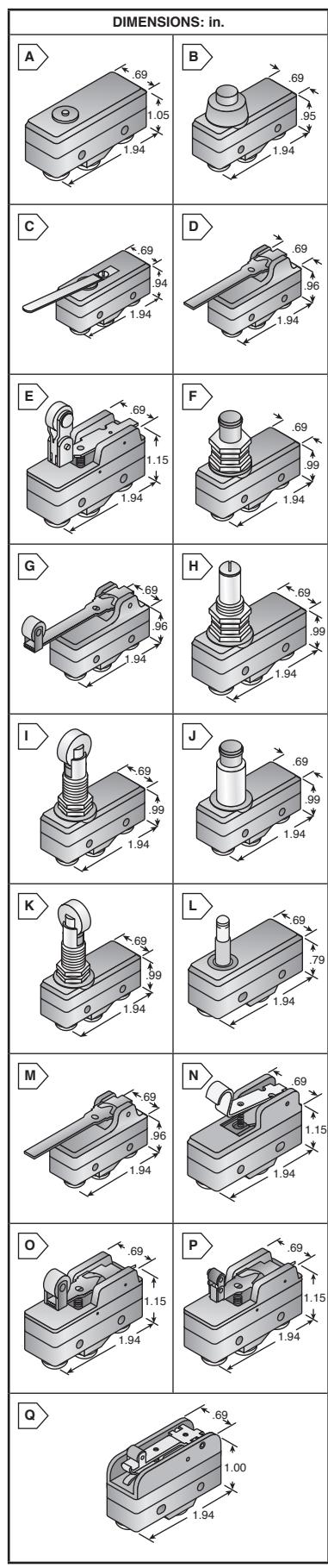
- Irrigation systems
- Semi-trailer trucks
- Timing devices
- Office equipment
- Test instruments
- Medical/dental equipment
- HVAC equipment
- Manually operated devices
- Valves



E12252

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Honeywell Part No.	Fig.	Voltage	Actuator Type	Op. Force (max.)	Price Each		
						1	10	50
785-BA-2R-A2	BA-2R-A2	A	20A@480VAC	Pin Plunger	14-22 N	14.37	11.07	9.80
785-BA-2R708-P7	BA-2R708-P7	A	250VAC	Pin Plunger	3.89 N	36.18	27.08	25.95
* 785-BZ-2R	BZ-2R	A	250VAC	Pin Plunger	3.61 N	11.16	8.22	7.28
785-BZ-2R-A2	BZ-2R-A2	A	125VAC	Pin Plunger	3.61 N	11.91	8.78	7.78
785-BZ-2R-P4	BZ-2R-P4	A	250VAC	Pin Plunger	3.61 N	13.33	10.27	9.10
785-BZ-3YT	BZ-3YT	A	115VAC	Pin Plunger	7.23 N	30.20	22.61	21.66
785-BZ-R21-A2	BZ-R21-A2	A	125VAC	Pin Plunger	1.11 N	17.84	13.74	12.17
785-BA-2RB-A2	BA-2RB-A2	B	20A@480VAC	Overtavel Plunger	14-22 N	10.96	10.12	9.14
785-BZ-2RD-A2	BZ-2RD-A2	B	250VAC	Overtavel Plunger	3.61 N	15.23	11.73	10.39
785-BZ-2RL-A2	BZ-2RL-A2	C	15A@480VAC	Straight Lever 1.95"	5 N	16.45	12.67	11.22
785-BZ-2RW805551-A2	BZ-2RW805551-A2	C	250VAC	Straight Lever	0.7 N	18.72	13.63	12.77
785-BZ-2RW8244-A2	BZ-2RW8244-A2	C	125VAC	Straight Lever	0.7 N	17.79	13.71	12.14
* 785-BZ-2RW84	BZ-2RW84	C	250VAC	Straight Lever	0.28 N	18.01	13.12	12.29
785-BZ-2RW84-A2	BZ-2RW84-A2	C	125VAC	Straight Lever, 2.5"	0.28 N	13.60	10.48	9.28
785-BZ-2RW863-A2	BZ-2RW863-A2	C	125VAC	Straight Lever, .6"	0.28 N	13.69	10.54	9.34
785-BZ-2RW899-A2	BZ-2RW899-A2	C	125VAC	Straight Lever	0.7 N	19.01	14.64	12.97
785-BZ-RW8435-A2	BZ-RW8435-A2	C	125VAC	Straight Lever	7gf	17.42	12.68	11.88
785-BA-2RV-A2	BA-2RV-A2	D	20A@480VAC	Straight Lever 2.5"	2.5 N	16.27	12.53	11.10
785-BA-2RV22-A2	BA-2RV22-A2	E	20A@480VAC	Roller Lever 1.05"	6 N	18.90	14.56	12.89
* 785-BZ-2RL2	BZ-2RL2	E	250VAC	Roller Lever	1.39 N	19.14	13.94	13.06
785-BZ-2RL2-A2	BZ-2RL2-A2	E	125VAC	Roller Lever	1.39 N	19.18	14.78	13.09
785-BZ-2RQ181-A2	BZ-2RQ181-A2	E	125VAC	Overtravel Roller Pligr, Perp.	3.61 N	35.53	28.39	25.48
* 785-BZ-2RW82	BZ-2RW82	E	250VAC	Roller Lever	0.97 N	14.71	12.19	10.80
785-BZ-2RW82-A2	BZ-2RW82-A2	E	125VAC	Roller Lever	0.97 N	16.91	13.03	11.54
* 785-BZ-2RW822	BZ-2RW822	E	250VAC	Roller Lever	1.67 N	16.91	13.03	11.54
785-BZ-2RW822-A2	BZ-2RW822-A2	E	125VAC	Roller Lever	1.67 N	14.19	10.93	9.68
785-BZ-2RW822-P4	BZ-2RW822-P4	E	15A@250VAC	Roller Lever 1.05"	6 N	21.39	16.48	14.59
*** 785-BZ-2RW8225551-A2	BZ-2RW8225551-A2	E	250VAC	Roller Lever	1.67 N	14.72	11.34	10.05
785-BZ-2RW82299-A2	BZ-2RW82299-A2	E	250VAC	Roller Lever, 1.02mm OT	1.67 N	20.95	15.26	14.29
785-BZ-2RW822T	BZ-2RW822T	E	250VAC	Roller Lever, 2.39mm OT	1.67 N	17.86	13.01	12.18
785-BZ-2RW825551-A2	BZ-2RW825551-A2	E	125VAC	Roller Lever, 3.96mm OT	0.97 N	22.09	17.65	15.84
785-BZ-2RW826-A2	BZ-2RW826-A2	E	15A@480VAC	Roller Lever 1.26"	6 N	20.46	15.31	14.67
785-BZ-2RW8299-A2	BZ-2RW8299-A2	E	125VAC	Roller Lever, 2.16mm OT	0.97 N	20.95	15.68	15.02
785-BA-2RQ1-A2	BA-2RQ1-A2	F	20A@480VAC	Panel Mt. Overtavel Plinger	14-22 N	19.79	15.81	14.19
785-BA-2RV2-A2	BA-2RV2-A2	G	20A@250VAC	Roller Lever 2.5"	3.5 N	21.26	16.38	14.50
* 785-BZ-2RD	BZ-2RD	H	250VAC	Overtavel Plunger	3.61 N	13.84	10.66	9.44
785-BZ-2RDS-A2-S	BZ-2RDS-A2-S	B	250VAC	Overtavel Plunger	5.28 N	27.24	21.77	19.54
* 785-BZ-2RN702	BZ-2RN702	H	125VAC	Overtavel Plunger	3.61 N	32.13	25.68	23.04
* 785-BZ-2RQ1	BZ-2RQ1	H	250VAC	Overtavel Plunger	3.61 N	21.07	16.83	15.11
785-BZ-2RQ1-A2	BZ-2RQ1-A2	H	15A@125VAC	Overtavel Plunger	3.61 N	11.07	8.53	7.55
785-BZ-2RQ1872-A2	BZ-2RQ1872-A2	H	1A@125VAC	Overtavel Plunger	3.61 N	34.51	25.83	24.75
785-BZ-2RQ1T	BZ-2RQ1T	H	250VAC	Overtavel Plunger, 5.56mm OT	3.61 N	22.23	17.77	15.95
*** 785-BZ-2RQ66	BZ-2RQ66	H	250VAC	Overtavel Plunger	3.61 N	25.13	20.08	18.02
785-BZ-2RQ68	BZ-2RQ68	H	250VAC	Overtavel Plunger, 3.18mm OT	3.61 N	26.03	24.69	22.25
785-BZ-2RQ69	BZ-2RQ69	H	250VAC	Overtavel Plunger, 3.56mm OT	3.61 N	39.48	29.55	28.31
*** 785-BZ-2RQ77	BZ-2RQ77	H	250VAC	Overtavel Plunger, 3.56mm OT	3.61 N	29.42	22.02	21.10
785-BZ-2RQ784	BZ-2RQ784	H	250VAC	Overtavel Plunger	3.61 N	36.00	26.94	25.82
785-BZ-3RQ1-A2	BZ-3RQ1-A2	H	250VAC	Overtavel Plunger	5.56 N	20.76	16.59	14.89
* 785-BZ-2RQ18	BZ-2RQ18	I	250VAC	Overtavel Plunger	3.61 N	35.94	26.90	25.77
785-BZ-2RQ18-A2	BZ-2RQ18-A2	I	125VAC	Overtavel Roller Plunger	3.61 N	31.93	25.51	22.89
785-BZ-2RQ18T	BZ-2RQ18T	I	250VAC	Overtavel Plunger	3.61 N	35.23	26.37	25.27
785-BZ-2RQ-A2	BZ-2RQ-A2	J	125VAC	Overtavel Plunger	3.61 N	22.58	16.90	16.19
785-BZ-2RQ785	BZ-2RQ785	K	250VAC	Overtavel Plunger	3.61 N	34.13	32.35	29.33
* 785-BZ-2RS	BZ-2RS	L	250VAC	Overtavel Plunger	3.61 N	19.82	15.27	13.52
785-BZ-2RS-A2	BZ-2RS-A2	M	15A@480VAC	Overtavel Plunger	3.61 N	15.80	12.17	10.77
785-BZ-2RW80-A2	BZ-2RW80-A2	N	125VAC	Straight Lever 2.5"	2.5 N	11.08	8.54	7.56
785-BZ-2RW80147-A2	BZ-2RW80147-A2	N	125VAC	Straight Lever	1.67 N	17.51	13.49	11.94
785-BZ-2RW82255-A2-S	BZ-2RW82255-A2-S	O	15A@480VAC	Roller Lever 1.05"	6 N	29.60	23.65	21.23
785-BZ-2RW825-A2	BZ-2RW825-A2	P	15A@480VAC	Roller Lever 0.868"	8 N	24.02	17.98	17.23
785-BZ-RW922-A2	BZ-RW922-A2	Q	10A@125VAC	Roller Lever 1.25"	12 N	52.09	41.41	39.81



# HONEYWELL Basic Switches

RoHS Compliant

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## MICRO SWITCH™ PREMIUM SUBMINIATURE SNAP-ACTION Z SERIES

# Honeywell

### Features:

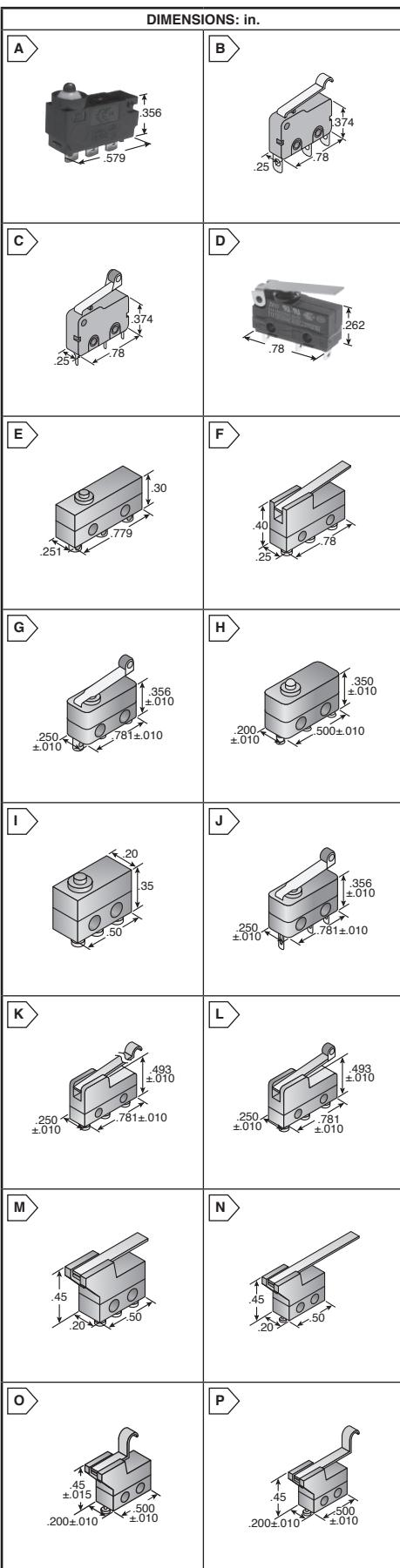
- Small size and light switches lend themselves to numerous potential applications.
- Choice of low energy or power-duty electrical ratings allow the switch to be specified in more types of applications
- Broad range of amp ratings (from 0.1A to 10.1A)
- Watertight IP67 sealing available

### Specifications:

- Contact Form: SPDT
- Operating Temperature: -40°C to 120°C (-40°F to 248°F)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Honeywell Part No.	Fig.	Voltage	Actuator Type	Op. Force (max.)	Termination Style	Price Each		
							1	10	50
<b>ZD Series - Watertight, IP67</b>									
785-ZD30S60C02-Z	ZD30S60C02-Z	A	125VAC	Lever	130g	PCB	4.66	2.90	2.72
785-ZD30S60A05-Z	ZD30S60A05-Z	A	125VAC	Lever	130g	PCB	4.12	2.57	2.40
785-ZD30S60H02-Z	ZD30S60H02-Z	A	125VAC	Lever	130g	PCB	4.65	2.89	2.71
<b>ZM Series</b>									
785-ZM50E10E01	ZM50E10E01	B	125/250VAC	Sim Roller Lever	0.34 N	Solder	3.29	1.97	1.81
785-ZM90G20F01	ZM90G20F01	C	125/250VAC	Roller Lever	0.59 N	PCB Straight	3.14	1.95	1.83
<b>ZW Series - Watertight, IP67</b>									
785-ZW10F15CD1-Z	ZW10F15CD1-Z	D	250VAC	Lever	203g	Solder	6.31	4.35	4.12
785-ZW50F15AD1-Z	ZW50F15AD1-Z	D	250VAC	Plunger, Pin	203g	Solder	4.83	3.01	2.82
785-ZW50F15CD1-Z	ZW50F15CD1-Z	D	250VAC	Lever	203g	Solder	6.72	4.18	3.92
785-ZW50F15FD1-Z	ZW50F15FD1-Z	D	250VAC	Roller Lever	203g	Solder	5.86	3.65	3.42
785-ZW50F91AW1-Z	ZW50F91AW1-Z	D	250VAC	Plunger, Pin	203g	Cable Side Exit	6.70	4.63	4.37
785-ZW50F92AW1-Z	ZW50F92AW1-Z	D	250VAC	Plunger, Pin	203g	Cable Side Exit	9.39	6.49	6.13



## MICRO SWITCH™ PREMIUM MINIATURE AND SUB MINIATURE SWITCHES

Honeywell

### SX Series Features:

- Small precision snap-action switch
- Power load switching capability up to 7A
- Temperature tolerance: -54°C to +121°C

### SM Series Features:

- Power load switching capability up to 11A
- Temperature tolerance: -54°C to +85°C

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Honeywell Part No.	Fig.	Voltage	Actuator Type	Op. Force (max.)	Termination Style	Price Each		
							1	10	50
785-11SM1	11SM1	E	250VAC	Pin Plunger	1.39 N	Solder	11.01	7.60	7.19
785-11SM1-T	11SM1-T	E	250VAC	Pin Plunger	0.83 N	Solder	9.95	7.33	6.50
785-11SM144	11SM144	E	250VAC	Pin Plunger	0.83 N	Solder	11.50	7.94	7.51
785-11SM1-T2	11SM1-T2	E	250VAC	Pin Plunger	0.83 N	Solder	10.00	6.90	6.53
785-11SM3-T	11SM3-T	E	250VAC	Pin Plunger	0.83 N	Solder	7.51	5.19	4.90
785-11SM1	11SM1	F	250VAC	Rod	--	Screw	12.43	9.05	8.48
785-11SM1-T	11SM1-T	F	250VAC	Straight Lever	1.95 N	Solder	8.82	6.43	6.02
785-311SM1-T	311SM1-T	F	5A @ 250VAC	Straight Lever	1.4	Wire Wrap	11.24	8.18	7.67
785-311SM2-H58	311SM2-H58	G	250VAC	Straight Lever	0.30 N	QC	11.43	8.33	7.80
785-311SM2-T	311SM2-T	H	5A @ 250VAC	Straight Lever	1.1	Wire Wrap	9.18	7.11	6.28
785-311SM702-T	311SM702-T	F	4A @ 250VAC	Straight Lever	0.4	Solder	10.44	7.21	6.82
785-11SM2	11SM2	G	125VAC	Roller Lever	1.95 N	Solder	14.55	10.59	9.92
785-11SM2-T	11SM2-T	H	250VAC	Roller Lever	1.95 N	Solder	15.17	10.47	9.90
785-12SX1-T	12SX1-T	H	125VAC	Pin Plunger	0.7 N	Solder	30.80	23.06	22.09
785-311SM3-H58	311SM3-H58	H	250VAC	Straight Lever	0.15 N	QC	9.90	6.84	6.46
785-311SM3-T	311SM3-T	H	5A @ 250VAC	Straight Lever	0.53	Solder	11.48	7.93	7.49
785-311SM703-T	311SM703-T	H	4A @ 250VAC	Straight Lever	0.2	Solder	11.26	7.77	7.35
785-4SX1-T	4SX1-T	H	250VAC	Pin Plunger	1.39 N	Solder	24.23	18.13	17.37
785-9SX39-T	9SX39-T	H	28aaVDC	Pin Plunger	1.39 N	Solder	20.88	16.09	14.25
785-11SX21-T	11SX21-T	I	250VAC	Pin Plunger	0.7 N	Solder	17.42	13.42	11.88
785-1SX1-H58	1SX1-H58	I	250VAC	Pin Plunger	1.39 N	QC	20.18	14.69	13.77
785-1SX1-T	1SX1-T	I	7A @ 250VAC	Pin Plunger	1.39 N	Solder	20.18	16.41	15.77
785-1SX74-T	1SX74-T	I	250VAC	Pin Plunger	1.39 N	Solder	22.58	16.90	16.19
785-2SX1-T	2SX1-T	I	250VAC	Pin Plunger	0.83 N	Solder	21.81	15.88	14.88
785-3SX1-T	3SX1-T	I	125VAC	Pin Plunger	1.39 N	Solder	28.41	21.27	20.38
785-411SM1	411SM1	I	250VAC	Pin Plunger	2.09 N	Solder	20.33	14.81	13.87
785-41SM1-T	41SM1-T	I	250VAC	Pin Plunger	1.39 N	Solder	10.79	7.45	7.04
785-41SM1-T2	41SM1-T2	I	250VAC	Pin Plunger	1.39 N	Solder	10.86	7.50	7.09
785-11SM602-H4	11SM602-H4	J	250VAC	Roller Lever	1.95 N	QC	12.49	9.10	8.52
785-311SM4-T	311SM4-T	K	250VAC	Sim Roller Lever	0.39 N	Solder	11.52	7.95	7.52
785-311SM5-T	311SM5-T	K	250VAC	Sim Roller Lever	0.30 N	Solder	10.05	6.94	6.56
785-311SM705-T	311SM705-T	K	250VAC	Sim Roller Lever	0.12 N	Solder	11.55	8.41	7.88
785-ZX40E10E01	ZX40E10E01	K	125VAC	Sim Roller Lever	0.54 N	Solder	3.09	1.92	1.80
785-21SX39-T	21SX39-T	L	250VAC	Pin Plunger	1.39 N	Solder	9.23	7.10	6.29
785-311SM6-T	311SM6-T	L	250VAC	Roller Lever	0.39 N	Solder	11.61	8.46	7.92
785-311SM68-T	311SM68-T	L	125VAC	Roller Lever	0.39 N	Solder	19.91	14.50	13.58
785-311SM706-T	311SM706-T	L	250VAC	Roller Lever	0.16 N	Solder	11.95	8.25	7.80
785-311SX1-T	311SX1-T	M	5A @ 250VAC	Straight Lever	1.76	Solder	15.98	13.01	12.51
785-311SX2-T	311SX2-T	M	5A @ 250VAC	Straight Lever	1.1	Solder	21.63	16.67	14.76
785-311SX3-T	311SX3-T	N	250VAC	Straight Lever	0.20 N	Solder	21.01	15.72	15.06
785-311SX4-T	311SX4-T	O	250VAC	Sim Roller Lever	0.58 N	Solder	20.83	15.94	14.10
785-311SX5-T	311SX5-T	P	250VAC	Sim Roller Lever	0.31 N	Solder	21.80	16.80	14.86
785-313SX4-T	313SX4-T	P	125VAC	Sim Roller Lever	0.58 N	Solder	29.22	21.87	20.95

# HONEYWELL Basic Switches

RoHS Compliant This page of product is RoHS compliant.

# Honeywell

## MICRO SWITCH™ HEAVY-DUTY LIMIT SWITCHES

Housed in a rugged, die-cast body, the switch is epoxy coated for protection. Wide choice of mounting and actuator options. Low temperature and fluorocarbon (high temperature) construction, as well as factory-sealed, pre-wired versions, are available.

\* Solder Lug

MOUSER STOCK NO.	Honeywell Part No.	Fig.	Contact Form	Circuitry	Actuator Type	Op. Force (Max.)	For quantities greater than listed, call for quote.		
							1	10	50
785-LSA1A	LSA1A	A	SPDT	1 NC 1 NO	Side Rotary	0.45 N	139.67	113.91	108.63
785-LSA3K	LSA3K	A	SPDT	1 NC 1 NO	Side Rotary	0.45 N	139.97	118.76	108.86
* 785-LSA4L	LSA4L	A	DPDT	2 NC 2 NO	Side Rotary	0.45 N	163.86	141.36	130.17
785-LSA7L	LSA7L	A	DPDT	2 NC 2 NO	Side Rotary	0.45 N	181.67	172.26	156.11
785-LSM2D	LSM2D	A	DPDT	2 NC 2 NO	Side Rotary	0.45 N	172.28	148.63	136.86
785-LSM6D	LSM6D	A	DPDT	2 NC 2 NO	Side Rotary	0.45 N	172.28	148.62	136.85
785-LSN1A	LSN1A	A	SPDT	1 NC 1 NO	Side Rotary	0.45 N	165.31	140.26	128.57
785-LSU1A	LSU1A	A	SPDT	1 NC 1 NO	Side Rotary	0.45 N	147.56	138.18	126.16
785-LSU3K	LSU3K	A	SPDT	1 NC 1 NO	Side Rotary	0.45 N	155.48	152.59	149.84
785-LSW1A	LSW1A	A	SPDT	1 NC 1 NO	Side Plunger-adj.	26.69 N	169.98	138.63	132.21
785-LSYAB3K	LSYAB3K	A	SPDT	1 NC 1 NO	Side Rotary	0.45 N	143.03	121.36	111.24
785-LSYPB1A	LSYPB1A	A	SPDT	1 NC 1 NO	Side Rotary	0.45 N	169.17	137.96	131.57
785-LSC1A	LSC1A	B	SPDT	1 NC 1 NO	Top Plunger	17.79 N	152.50	129.39	118.61
785-LSJ1A-7A	LSJ1A-7A	C	SPDT	1 NC 1 NO	Wobble-Plastic Rod	2.78 N	151.97	142.32	129.93
785-LSK1A-8C	LSK1A-8C	D	SPDT	1 NC 1 NO	Wobble-Coil Spring	1.95 N	157.43	128.39	122.45
785-LSV1A	LSV1A	E	SPDT	1 NC 1 NO	Top Plunger-adj.	17.79 N	161.24	131.50	125.41

## V-BASIC SWITCHES

\* Termination Style: Quick Connect

\* Solder Lug

† Through Hole

MOUSER STOCK NO.	Honeywell Part No.	Fig.	Contact Form	Voltage	Actuator Type	Op. Force (Max.)	For quantities greater than listed, call for quote.		
							1	10	50
785-V7-1B17D8	V7-1B17D8	F	SPDT	250VAC	Pin Plunger	1.47 N	4.87	3.03	2.84
785-V7-1C17E9	V7-1C17E9	F	SPDT	277VAC	Pin Plunger	1.47 N	5.80	3.61	3.38
785-V7-1S17D8	V7-1S17D8	F	SPDT	125VAC	Pin Plunger	1.47 N	7.20	4.48	4.20
785-V7-1V19E9	V7-1V19E9	F	SPDT	277VAC	Pin Plunger	2.21 N	6.75	4.97	4.41
785-V7-1V29E9	V7-1V29E9	F	SPNO	277VAC	Pin Plunger	2.21 N	5.10	3.18	2.98
785-V7-1Z19E9	V7-1Z19E9	F	SPDT	250VAC	Pin Plunger	7.9 N	6.16	4.54	4.02
785-V7-1Z29E9	V7-1Z29E9	F	SPNO	250VAC	Pin Plunger	7.9 N	5.50	3.79	3.20
785-V7-2B17D8	V7-2B17D8	F	SPDT	250VAC	Pin Plunger	2.63 N	3.53	2.40	2.17
785-V7-3E17D8	V7-3E17D8	F	SPDT	277VAC	Pin Plunger	0.49 N	5.04	3.14	2.94
785-V7-4A17D8	V7-4A17D8	F	SPDT	250VAC	Pin Plunger	0.25 N	4.73	2.96	2.77
785-V7-5F17D8	V7-5F17D8	F	SPDT	250VAC	Pin Plunger	0.15 N	5.19	3.23	3.03
785-V7-6B19D8	V7-6B19D8	F	SPDT	277VAC	Pin Plunger	1.67 N	5.63	3.50	3.28
785-V7-6C17D8	V7-6C17D8	F	SPDT	277VAC	Pin Plunger	1.67 N	5.66	3.52	3.30
785-V7-1C17D8-201	V7-1C17D8-201	G	SPDT	277VAC	Roller Lever	1.72 N	5.71	3.56	3.33
785-V7-1C17E9-201	V7-1C17E9-201	G	SPDT	277VAC	Roller Lever	1.72 N	6.15	3.83	3.59
785-V7-2B17D8-201	V7-2B17D8-201	G	SPDT	277VAC	Roller Lever	0.86 N	5.71	3.55	3.33
785-V7-2S17D8-201	V7-2S17D8-201	G	SPDT	125VAC	Roller Lever	0.88 N	7.86	5.43	5.13
785-V7-7B17D8-201	V7-7B17D8-201	G	SPDT	277VAC	Roller Lever	2.78 N	6.81	4.70	3.97
785-V7-2B17D8-207	V7-2B17D8-207	G	SPDT	277VAC	Roller Lever	0.44 N	5.71	3.94	3.33
785-V7-7D17D8-207	V7-7D17D8-207	G	SPDT	125VAC	Roller Lever	1.39 N	10.76	7.43	7.03
† 785-V7-1C13D8-201	V7-1C13D8-201	G	SPDT	277VAC	Roller Lever	6.17 N	5.62	3.88	3.28
785-V7-1C17E9-207	V7-1C17E9-207	H	SPDT	277VAC	Roller Lever	0.84 N	6.15	3.83	3.59
785-V7-1B17D8-207	V7-1B17D8-207	I	SPDT	277VAC	Roller Lever	3.0 N	6.62	4.57	3.86
785-V7-1C17D8-207	V7-1C17D8-207	I	SPDT	277VAC	Roller Lever	3.2 N	6.97	4.34	4.06
785-V7-1B17D8-263	V7-1B17D8-263	J	SPDT	277VAC	Sim Roller Lever	0.88 N	4.31	2.97	2.66
785-V7-1C17D8-263	V7-1C17D8-263	J	SPDT	277VAC	Sim Roller Lever	0.89 N	7.00	4.36	4.08
785-V7-1S17D8-263	V7-1S17D8-263	J	SPDT	125VAC	Sim Roller Lever	0.88 N	6.67	4.61	4.36
785-V7-6C17D8-263	V7-6C17D8-263	J	SPDT	277VAC	Sim Roller Lever	2.22 N	6.15	3.83	3.59
785-V7-7B19D8-263	V7-7B19D8-263	J	SPDT	277VAC	Sim Roller Lever	1.39 N	5.54	3.82	3.23
785-V7-1B17D8-022	V7-1B17D8-022	K	SPDT	277VAC	Straight Lever	0.80 N	5.77	3.59	3.37
785-V7-1C17D8-022	V7-1C17D8-022	K	SPDT	277VAC	Straight Lever	0.80 N	6.97	4.81	4.06
785-V7-1S17D8-022	V7-1S17D8-022	K	SPDT	125VAC	Straight Lever	0.83 N	6.75	4.97	4.41
785-V7-3E17E9-022	V7-3E17E9-022	K	SPDT	277VAC	Straight Lever	0.29 N	5.22	3.25	3.04
785-V7-1B19D8-022	V7-1B19D8-022	K	SPDT	277VAC	Straight Lever	2.9 N	5.92	4.08	3.45
785-V7-2B17D8-022	V7-2B17D8-022	K	SPDT	277VAC	Straight Lever	1.5 N	5.71	3.94	3.33
785-V7-1B17D8-048	V7-1B17D8-048	L	SPDT	277VAC	Straight Lever	0.49 N	4.99	3.29	3.08
785-V7-1C17D8-048	V7-1C17D8-048	L	SPDT	277VAC	Straight Lever	0.44 N	7.00	4.36	4.08
785-V7-1V19E9-048	V7-1V19E9-048	L	SPDT	277VAC	Straight Lever	0.54 N	6.30	3.92	3.67
785-V7-3S17D8-048	V7-3S17D8-048	L	SPDT	125VAC	Straight Lever	0.16 N	5.92	3.68	3.45
785-V7-6B19D8-057	V7-6B19D8-057	L	SPDT	250VAC	Straight Lever	0.54 N	6.36	4.39	3.71
785-V7-9W1AE9-048	V7-9W1AE9-048	L	SPDT	250VAC	Straight Lever	0.88 N	7.29	5.03	4.76
785-V7-2B17D8-048	V7-2B17D8-048	L	SPDT	277VAC	Straight Lever	0.7 N	5.71	3.94	3.33
* 785-V7-6C17D8-048-1	V7-6C17D8-048-1	L	SPDT	277VAC	Straight Lever	4.23 N	8.30	6.12	5.42
785-V7-1C17D8-002	V7-1C17D8-002	M	SPDT	277VAC	Straight Lever	1.57 N	7.00	4.83	4.08
785-V7-6C18D8-002	V7-6C18D8-002	M	SPDT	277VAC	Straight Lever	4.05 N	5.63	3.50	3.28

## MICRO SWITCH™ SPECIAL APPLICATION PRECISION SWITCHES

Contain a spring and set of contacts that convert mechanical energy applied to an actuator into an electrical output. Products include door interlocks that automatically cut power when a service drawer is opened, as well as switches that can handle a variety of special electrical load requirements. Wide variety of actuators, terminations, circuitry configurations, electrical ratings, contact materials, operating characteristics and sealing provide application flexibility. U.S., European and other approval agency compliance allow global use.

MOUSER STOCK NO.	Honeywell Part No.	Fig.	Contact Form	Voltage	Actuator Type	Op. Force (Max.)	For quantities greater than listed, call for quote.		
							Termination Style	1	10
785-TB1-2	1TB1-2	N	DPDT	250VAC	Pin Plunger	3.61 N	Solder	36.36	27.21
785-3MN1	3MN1	O	DPDT	480VAC	Pin Plunger	5.56 N	Screw	39.88	31.86
785-DT-2R-A7	DT-2R-A7	P	DPDT	28VDC	Pin Plunger	2.78 N	Screw	69.51	57.68
785-MT-4RV22-A28	MT-4RV22-A28	Q	SPDT	125VDC	Roller Lever	1.25 N	Screw	120.63	102.35
785-MT-4RV-A28	MT-4RV-A28	R	SPDT	125VDC	Straight Lever	0.56 N	Screw	106.75	90.58
								83.03	

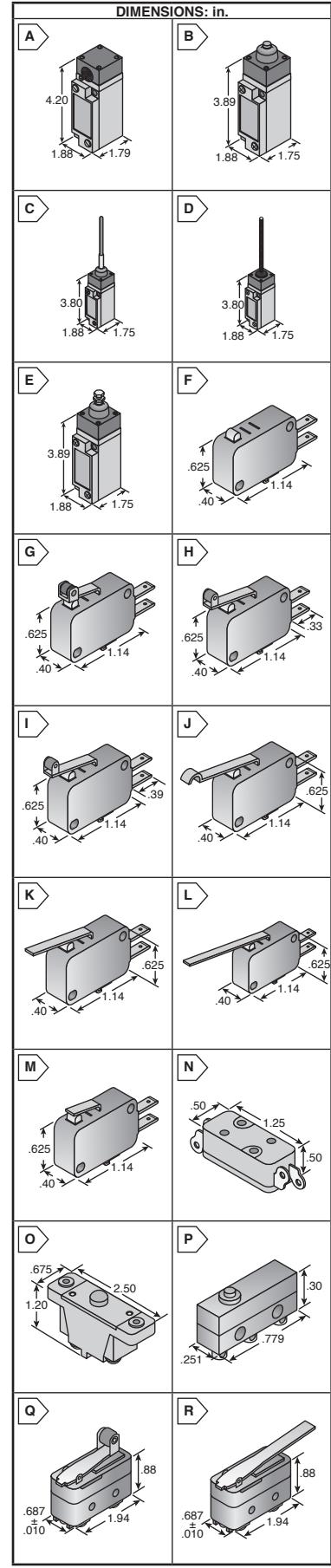
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(800) 346-6873

1857



Honeywell Basic/Snap Switches

# OMRON Basic Snap Action Switches

RoHS Compliant

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OMRON

## D2F SERIES: PC MOUNT SUBMINIATURE BASIC SWITCHES

### Specifications:

- Contact form: SPDT
- Contact material: D2F Silver alloy / D2F-01 Gold alloy
- Insulation resistance: 100MΩ min. @ 500VDC

### Features:

- Long life span assured by high-precision dual spring reverse-action mechanism



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Actuator Type	Operating Force (Max.)	Terminals	Price Each			
						1	25	50	100

General Purpose, Low Force, Rated 1A @ 125VAC / 0.5A @ 30VDC

653-D2FF	D2F-F	A	Pin plunger	75gf	PCB straight	1.98	1.77	1.57	1.42
653-D2FL	D2F-FL	B	Hinge lever	25gf	PCB straight	1.45	1.32	1.17	1.05
653-D2FFLA	D2F-FL-A	B	Hinge lever	25gf	Right-angled PCB	2.19	1.96	1.74	1.57
653-D2FL-A1	D2F-FL-A1	B	Hinge lever	25gf	Left-angled PCB	3.36	3.00	2.67	2.41

General Purpose, Standard, Rated 3A @ 125VAC / 2A @ 30VDC

653-D2F	D2F	A	Pin plunger	150gf	PCB straight	1.51	1.36	1.21	1.09
653-D2F-T	D2F-T	A	Pin plunger	150gf	Self-clinching PCB	1.47	1.32	1.17	1.06
653-D2F-D3	D2F-D3	A	Pin plunger	150gf	Solder	1.49	1.34	1.19	1.07
653-D2FL20	D2F-L20	C	Hinge roller lever	25gf	PCB straight	2.81	2.52	2.24	2.01
653-D2F-L	D2F-L	B	Hinge lever	80gf	PCB straight	1.68	1.61	1.55	1.48
653-D2F-L-A	D2F-L-A	B	Hinge lever	80gf	Right-angled PCB	2.19	1.96	1.74	1.57
653-D2F-L-A1	D2F-L-A1	B	Hinge lever	80gf	Left-angled PCB	1.94	1.87	1.83	1.65
653-D2F-L-D	D2F-L-D	B	Hinge lever	80gf	Compact solder	1.69	1.55	1.44	1.31
653-D2FL3	D2F-L3	D	Simulated roller lever	80gf	PCB straight	2.40	2.26	2.21	1.92
653-D2F-L2	D2F-L2	C	Hinge roller lever	80gf	PCB straight	5.59	5.08	4.52	4.07
653-D2F-L2-T	D2F-L2-T	C	Hinge roller lever	80gf	Self-clinching PCB	2.88	2.63	2.41	2.22
653-D2F-L2-D	D2F-L2-D	C	Hinge roller lever	80gf	Compact solder	5.81	5.29	4.86	4.48

Micro-Load, Low Force, Rated 0.1A @ 30VDC

653-D2F-01F	D2F-01F	A	Pin plunger	75gf	PCB straight	1.33	1.28	1.21	1.09
653-D2F-01FL	D2F-01FL	B	Hinge lever	25gf	PCB straight	1.35	1.30	1.26	1.21
653-D2F-01FL-A	D2F-01FL-A	B	Hinge lever	25gf	Right-angled PCB	3.85	3.17	3.02	2.57
653-D2F-01FLD	D2F-01FL-D	B	Hinge lever	25gf	Compact solder	2.49	2.36	2.25	2.02

Micro-Load, Standard, Rated 0.1A @ 30VDC

653-D2F-01	D2F-01	A	Pin plunger	150gf	PCB straight	1.51	1.36	1.21	1.14
653-D2F-01-D	D2F-01-D	A	Pin plunger	150gf	Compact solder	1.77	1.63	1.50	1.38
653-D2F-01L	D2F-01L	B	Hinge lever	80gf	PCB straight	1.31	1.27	1.22	1.18
653-D2F01L-A	D2F-01L-A	B	Hinge lever	80gf	Right-angled PCB	2.28	2.07	1.89	1.74
653-D2F-01L-D	D2F-01L-D	B	Hinge lever	80gf	Compact solder	2.25	2.02	1.80	1.62
653-D2F-01L2	D2F-01L2	C	Hinge roller lever	80gf	PCB straight	3.96	3.62	3.32	3.06
653-D2F-01L3	D2F-01L3	D	Simulated roller lever	80gf	PCB straight	1.83	1.66	1.47	1.32

Basic/Snap Switches Omron

## D2FS SERIES: ULTRA SUBMINIATURE BASIC SWITCHES

### Specifications:

- IP40 rating
- Electrical Life: 10,000 Cycles
- Contact material: Silver
- Voltage Rating - DC : 6V
- Current Rating: 100mA (DC)
- Contact Form: SPST-NO

### Features:

- Reliable basic switch with external lever
- Self-cleaning contacts

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Actuator	Operating Force (Max.)	Terminals	Price Each			
						1	25	50	100
653-D2FS-F-N	D2FS-F-N	E	Pin Plunger	87gf	PCB straight	.87	.76	.62	.55
653-D2FS-F-N-A	D2FS-F-N-A	F	Pin Plunger	87gf	Right-angled straight PCB	.95	.82	.67	.59
653-D2FS-F-N-A1	D2FS-F-N-A1	F	Pin Plunger	87gf	Left-angled straight PCB	.95	.82	.67	.59
653-D2FS-F-N-T	D2FS-F-N-T	G	Pin Plunger	87gf	Self-clinching PCB	.87	.76	.62	.55
653-D2FS-FL-N	D2FS-FL-N	H	Hinge Lever	25gf	PCB straight	1.04	.92	.72	.64
653-D2FS-FL-N-A	D2FS-FL-N-A	H	Hinge Lever	25gf	Right-angled straight PCB	1.11	.96	.78	.69
653-D2FS-FL-N-A1	D2FS-FL-N-A1	H	Hinge Lever	25gf	Left-angled straight PCB	1.11	.96	.78	.69
653-D2FS-FL-N-T	D2FS-FL-N-T	H	Hinge Lever	25gf	Self-clinching PCB	1.04	.92	.72	.64

## D3V SERIES: COST-EFFECTIVE SNAP ACTION SWITCHES

### Specifications:

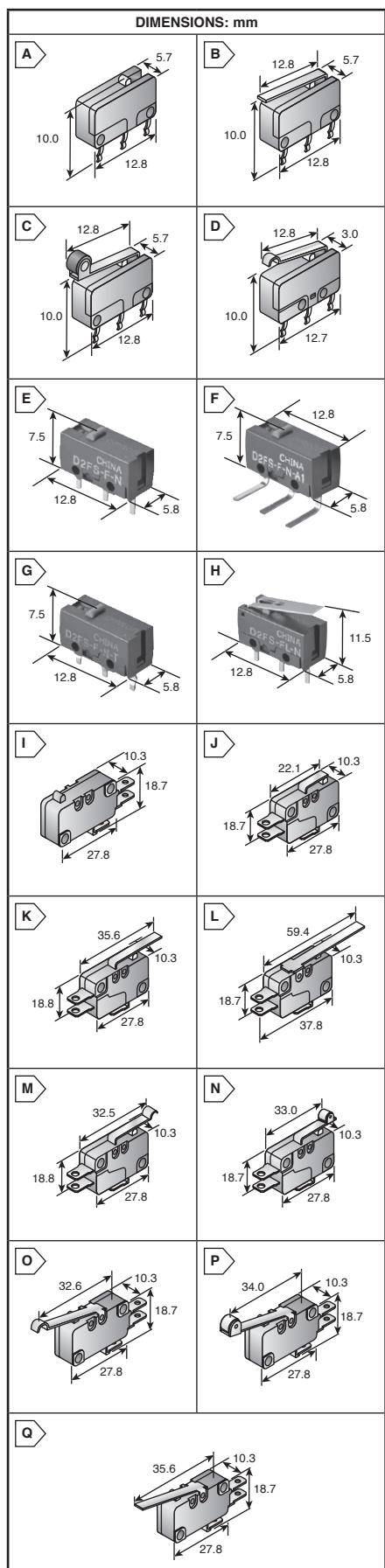
- Contact material: Silver alloy
- Insulation resistance: 100MΩ min. @ 500VDC

### Features:

- Reliable basic switch with external lever
- Self-cleaning contacts

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Actuator Type	Operating Force (Max.)	Contact Form	Terminals	Contact Gap (mm)	Mounting Hole (mm)	Price Each	
									1	25
No Hinge, Rated 16A @ 250VAC										
653-D3V-16-1C5	D3V-16-1C5	I	Pin plunger	200gf	SPDT	QC #250	1.0	3.1	2.22	1.99
Internal Hinge, Rated 11A @ 250VAC										
653-D3V-11G1C25	D3V-11G1C25	J	Short hinge lever	200gf	SPDT	QC #187	0.5	2.9	2.17	1.95
653-D3V-11G2C25	D3V-11G2C25	K	Hinge lever	200gf	SPDT	QC #187	0.5	2.9	2.49	2.24
653-D3V-11G31-C25-K	D3V-11G31-C25-K	L	Long hinge lever	200gf	SPDT	QC #187	0.5	2.9	1.88	1.69
653-D3V-11G41C25	D3V-11G41C25	M	Sim. roller lever	200gf	SPDT	QC #187	0.5	2.9	2.75	2.48
653-D3V-11G61C25	D3V-11G61C25	N	Hinge roller lever	200gf	SPDT	QC #187	0.5	2.9	3.01	2.70
Internal Hinge, Rated 16A @ 250VAC										
653-D3V-16G1C25	D3V-16G1C25	I	Pin plunger	200gf	SPDT	QC #187	0.5	2.9	2.24	2.15
653-D3V-16G1C25A	D3V-16G1C25A	I	Pin plunger	200gf	SPDT	QC #187	0.5	3.1	2.23	2.01
653-D3V-16G-3C25	D3V-16G-3C25	I	Pin plunger	200gf	SPST-NO	QC #187	0.5	3.1	1.67	1.51
653-D3V-16G2C25	D3V-16G2C25	K	Hinge lever	200gf	SPDT	QC #187	0.5	2.9	3.26	2.95
653-D3V-16G41C25	D3V-16G41C25	M	Sim. roller lever	200gf	SPDT	QC #187	0.5	2.9	2.47	2.23
653-D3V-16G61C25	D3V-16G61C25	N	Hinge roller lever	200gf	SPDT	QC #187	0.5	2.9	3.74	3.42
653-D3V-166-1C5	D3V-166-1C5	N	Hinge roller lever	200gf	SPDT	QC #250	1.0	3.1	1.97	1.77
Internal Hinge, Rated 21A @ 250VAC										
653-D3V-21G-1C4A-K	D3V-21G-1C4A-K	I	Pin plunger	125gf	SPDT	QC #250	0.5	2.9	1.76	1.58
External Hinge, Rated 11A @ 250VAC										
653-D3V-11G4M1C25	D3V-11G4M1C25	O	Sim. roller lever	200gf	SPDT	QC #187	0.5	2.9	2.45	2.20
653-D3V-11G6M1C25	D3V-11G6M1C25	P	Hinge roller lever	200gf	SPDT	QC #187	0.5	2.9	2.77	2.49
External Hinge, Rated 16A @ 250VAC										
653-D3V-16G2M1C25	D3V-16G2M1C25	Q	Hinge lever	200gf	SPDT	QC #187	0.5	2.9	2.18	2.09



# OMRON Basic Switches

 This page of product is RoHS compliant.

## D2MQ SERIES: ULTRA SUBMINIATURE BASIC SWITCHES

### Specifications:

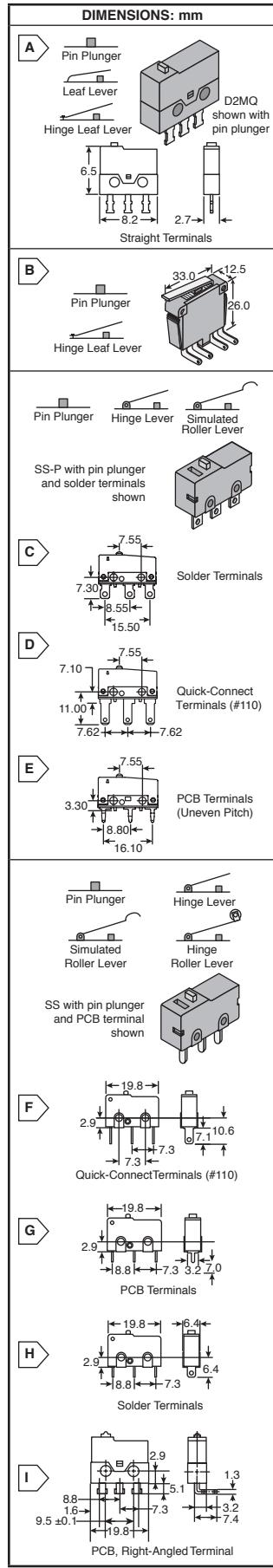
- Contact form: SPDT
- Contact material: 0.5A silver-plated; 50mA gold-plated
- Contact gap: 0.15mm
- Use M1.4 mounting screws to mount the switch

### Features:

- Excellent electrical characteristics with a snap action mechanism despite super miniaturized design
- Ideal for applications where size is extremely limited and high reliability is demanded

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Actuator Type	Operating Force (max.)	Terminals	Price Each			
						1	25	50	100
<b>Contact Rating 50mA @ 30VDC</b>									
653-D2MQ-1-105	D2MQ-1-105	A	Pin plunger	120 gf	PCB straight	3.75	3.37	2.70	2.55
<b>Contact Rating 0.5A @ 30VDC</b>									
653-D2MQ-1	D2MQ-1	A	Pin plunger	120 gf	PCB straight	3.59	3.27	2.90	2.61
653-D2MQ-1-TL	D2MQ-1-TL	A	Pin plunger	120 gf	Left-angled PCB	3.75	3.37	3.00	2.70
653-D2MQ-1-L	D2MQ-1-L	A	Leaf lever	60 gf	PCB straight	3.44	3.16	3.00	2.70
653-D2MQ-1-TR	D2MQ-1-TR	A	Leaf lever	60 gf	Right-angled PCB	3.35	3.01	2.68	2.27
653-D2MQ-1-TL-TL	D2MQ-1-TL-TL	A	Leaf lever	60 gf	Left-angled PCB	3.84	3.45	3.06	2.60
653-D2MQ-4L-1	D2MQ-4L-1	A	Hinge leaf lever	40 gf	PCB straight	2.97	2.67	2.37	2.14
653-D2MQ-4L-1-R	D2MQ-4L-1-R	A	Hinge leaf lever	40 gf	Right-angled PCB	3.59	3.28	3.01	2.77
653-D2MQ-4L-1-L	D2MQ-4L-1-L	A	Hinge leaf lever	40 gf	Left-angled PCB	3.33	3.04	2.79	2.57



## D2T SERIES: DPST-NO COMPACT SNAP ACTION SWITCHES

### Specifications:

- Contact material: Silver
- Electrical ratings: 5A @ 125/250VAC between terminals 1 & 2; 0.1A @ 125VAC between terminals 3 & 4
- Insulation resistance: 100MΩ min. @ 500VDC

### Features:

- Incorporates circuits for power and low-level loads
- Contact gap of 0.7mm min.
- Panel or screw mounted with ease



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Actuator Type	Operating Force (max.)	Terminals	Price Each			
						1	25	50	100
653-D2T-T1S	D2T-T1S	B	Pin plunger	330 gf	Straight solder	5.47	4.99	4.57	4.21
653-D2T-T1	D2T-T1	B	Pin plunger	330 gf	Right-angled solder	5.47	4.99	4.57	4.21
653-D2T-LT1S	D2T-LT1S	B	Hinge lever	150 gf	Straight solder	4.74	4.32	3.96	3.66
653-D2T-LT1	D2T-LT1	B	Hinge lever	150 gf	Right-angled solder	5.65	5.14	4.72	4.36

## SS-P SERIES: SUBMINIATURE BASIC SWITCHES

### Specifications:

- Contact material: SS-3P - silver alloy rivet; SS-01P - gold alloy crossbar
- Contact gap: 0.5mm

### Features:

- Insert molded case for enhanced resistance to flux
- Simple construction with single-leaf spring
- SS series compatible mounting



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Actuator Type	Operating Force (max.)	Terminals	Price Each			
						1	25	50	100
<b>Contact Rating 0.1A @ 30VDC</b>									
653-SS-01GP	SS-01GP	C	Pin plunger	153 gf	Solder	1.12	1.06	.943	.853
653-SS-01GLP	SS-01GLP	C	Hinge lever	51 gf	Solder	.98	.91	.86	.82
653-SS-01GLPT	SS-01GLPT	D	Hinge lever	51 gf	QC #110	1.05	.944	.834	.755
653-SS-01GL13P	SS-01GL13P	C	Simulated roller lever	51 gf	Solder	.99	.94	.83	.75
653-SS-01GL13PT	SS-01GL13PT	D	Simulated roller lever	51 gf	QC #110	1.01	.912	.814	.732
<b>Contact Rating 3A @ 125VAC</b>									
653-SS-3GLP	SS-3GLP	C	Hinge lever	51 gf	Solder	.74	.69	.63	.60
653-SS-3GLPT	SS-3GLPT	D	Hinge lever	51 gf	QC #110	1.05	.944	.839	.797
653-SS-3GL13PD	SS-3GL13PD	E	Simulated roller lever	51 gf	PCB uneven pitch	1.05	.944	.834	.755
653-SS-3GL13PT	SS-3GL13PT	D	Simulated roller lever	51 gf	QC #110	1.05	.944	.84	.753

## SS SERIES: SUBMINIATURE BASIC SNAP ACTION SWITCHES

### Specifications:

- Contact form: SPDT
- Contacts: SS-01 - Bifurcated crossbar; SS-5 and SS-10 - Standard rivets

### Features:

- Economical, subminiature basic switch offers long service life (30 million operations min.)
- All models are free from overtravel restrictions and permit easy setting



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Actuator Type	Operating Force (max.)	Terminals	Price Each			
						1	25	50	100
<b>Contact Rating 0.1A @ 30VDC</b>									
653-SS-01FT	SS-01FT	F	Pin plunger	50 gf	QC #110	3.06	2.75	2.44	2.20
653-SS-01D	SS-01D	G	Pin plunger	150 gf	PCB straight	2.98	2.65	2.38	2.14
653-SS-01	SS-01	H	Pin plunger	150 gf	Solder	2.91	2.75	2.64	2.34
653-SS-01-GL-F	SS-01-GL-F	H	Hinge lever	16 gf	Solder	3.12	2.80	2.49	2.26
653-SS-01-GL	SS-01GL	H	Hinge lever	50 gf	Solder	2.65	2.54	2.27	2.15
653-SS-01-GLT	SS01-GLT	F	Hinge lever	50 gf	QC #110	3.36	3.06	2.72	2.45
653-SS-01GL13	SS-01GL13	H	Simulated roller lever	50 gf	Solder	3.06	2.75	2.44	2.20
653-SS-01GL2D	SS-01GL2D	H	Hinge roller lever	50 gf	PCB straight	3.55	3.19	2.84	2.55
653-SS-01GL2	SS-01GL2	H	Hinge roller lever	50 gf	Solder	3.20	2.92	2.59	2.33
<b>Contact Rating 5A @ 125VAC</b>									
653-SS-5FT	SS-5FT	F	Pin plunger	50 gf	QC #110	1.82	1.63	1.45	1.30
653-SS-5D	SS-5D	G	Pin plunger	150 gf	PCB straight	1.58	1.51	1.43	1.30
653-SS-5D2	SS-5D2	I	Pin plunger	150 gf	Right-angled PCB	2.60	2.33	2.08	1.87
653-SS-5	SS-5	H	Pin plunger	150 gf	Solder	1.05	.993	.959	.915
653-SS-5T	SS-5T	F	Pin plunger	150 gf	QC #110	1.72	1.63	1.57	1.43
653-SS-5GL-F	SS-5GL-F	H	Hinge lever	16 gf	Solder	1.91	1.71	1.52	1.37
653-SS-5GLD	SS-5GLD	G	Hinge lever	50 gf	PCB straight	2.19	1.97	1.75	1.57
653-SS-5GL	SS-5GL	H	Hinge lever	50 gf	Solder	1.28	1.21	1.16	1.12
653-SS-5GLT	SS-5GLT	F	Hinge lever	50 gf	QC #110	1.52	1.43	1.32	1.19
653-SS-5GL13D	SS-5GL13D	G	Simulated roller lever	50 gf	PCB straight	2.27	2.04	1.81	1.63
653-SS-5GL13	SS-5GL13	H	Simulated roller lever	50 gf	Solder	1.60	1.51	1.42	1.28
653-SS-5GL13T	SS-5GL13T	F	Simulated roller lever	50 gf	QC #110	1.12	1.06	1.01	.97
653-SS-5GL2-FT	SS-5GL2-FT	F	Hinge roller lever	16 gf	QC #110	2.63	2.36	2.10	1.89
653-SS-5GL2D	SS-5GL2D	G	Hinge roller lever	50 gf	PCB straight	2.83	2.61	2.32	2.09
653-SS-5GL2	SS-5GL2	H	Hinge roller lever	50 gf	Solder	1.69	1.58	1.42	1.29
653-SS-5GL2T	SS-5GL2T	F	Hinge roller lever	50 gf	QC #110	2.47	2.28	2.03	1.83
<b>Contact Rating 10.1A @ 125VAC</b>									
653-SS-10D	SS-10D	G	Pin plunger	150 gf	PCB straight	2.57	2.38	2.27	2.16
653-SS-10	SS-10	H	Pin plunger	150 gf	Solder	1.86	1.81	1.67	1.51
653-SS-10T	SS-10T	F	Pin plunger	150 gf	QC #110	2.82	2.70	2.56	2.30
653-SS-10GL	SS-10GL	H	Pin plunger	50 gf	Solder	2.13	2.04	1.98	1.78
653-SS-10GLT	SS-10GLT	F	Hinge lever	50 gf	QC #110	2.90	2.62	2.33	2.09
653-SS-10GL13T	SS-10GL13T	F	Simulated roller lever	50 gf	QC #110	2.76	2.64	2.36	2.12
653-SS-10GL2	SS-10GL2	H	Hinge roller lever	50 gf	Solder	2.71	2.44	2.16	1.99
653-SS-10GL2T	SS-10GL2T	F	Hinge roller lever	50 gf	QC #110	3.27	2.94	2.61	2.35

# OMRON Basic Switches

OMRON

## D2MV SERIES: ULTRA-LOW LOAD, MINIATURE BASIC SWITCHES

### Specifications:

- Contact resistance: D2MV-01 - 50mW max.; D2MV-1 - 30mW max.
- Terminal type: Solder/QC #187
- Contact material: D2MV-01 - gold alloy; D2MV-1 - silver

### Features:

- Twin crossbar contact for exceptionally high contact reliability in micro load applications



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Actuator Type	Contact Rating	Operating Force (max.)	Price Each			
						1	25	50	100
653-D2MV-01-1C1	D2MV-01-1C1	A	Pin plunger	0.1A @ 30VDC	10 gf	5.90	5.42	4.81	4.33
653-D2MV-01-1C3	D2MV-01-1C3	A	Pin plunger	0.1A @ 30VDC	50 gf	5.98	5.60	5.36	4.98
653-D2MV-01L111-1C3	D2MV-01L111-1C3	A	Long hinge lever	0.1A @ 30VDC	15 gf	5.15	4.36	3.93	3.88
653-D2MV-01L22-1C3	D2MV-01L22-1C3	A	Short hinge roller lever	0.1A @ 30VDC	50 gf	4.74	4.32	3.96	3.65

## D2MC SERIES: LOW-TORQUE, ROTARY-ACTION BASIC SWITCHES

### Specifications:

- Contact resistance: 20Ω max.
- Contact material: Silver alloy
- Terminal type: Quick-connect #205

### Features:

- Highly reliable rotary-action switch for low torque operation
- Long life - 10,000 operations



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Direction of Actuation	Contact Rating	Operating Torque (max.)	Price Each			
						1	25	50	100
653-D2MC-5E	D2MC-5E	B	Clockwise	5A @ 250VAC	5.1 gf · cm	9.53	8.66	7.88	6.70
653-D2MC-5F	D2MC-5F	B	Clockwise	5A @ 250VAC	7.6 gf · cm	10.28	9.35	8.57	7.91
653-D2MC-5H	D2MC-5H	B	Clockwise	5A @ 250VAC	10.2 gf · cm	10.79	9.82	8.99	8.30
653-D2MC-5EL	D2MC-5EL	B	Counterclockwise	5A @ 250VAC	5.1 gf · cm	9.68	8.82	7.84	6.67
653-CAA1M	CAA1M	C	Actuator lever			.96	.862	.766	.689

## V SERIES: MINIATURE, GENERAL PURPOSE BASIC SWITCHES

### Specifications:

- Contact resistance: 15mΩ max.
- Insulation resistance: 100MΩ min. (@500VDC)
- Contact form: SPDT
- Mounting hole size: 3.1mm, (2.9mm for -K)

### Features:

- Switch housing is a thermoset case, giving high versatility



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Actuator Type	Contact Rating @ 250VAC	Contact Gap (mm)	Operating Force (max.)	Terminals	Price Each			
								1	25	50	100
653-V10G1C24	V-10G1C24-K	D	Pin plunger	10A	0.5	100 gf	QC #187	2.22	2.15	2.09	1.89
653-V10-1A5	V-10-1A5	D	Pin plunger	10A	1.0	200 gf	Solder	2.60	2.37	2.17	2.01
653-V10G21C24	V-10G2-1C24-K	D	Hinge lever	10A	0.5	100 gf	QC #187	2.01	1.95	1.89	1.77
653-V10Q2-1C25-K	V-10Q2-1C25-K	D	Hinge lever	10A	0.5	200 gf	QC #187	2.31	2.25	2.20	1.98
653-V10G3-1C25-K	V-10G3-1C25-K	D	Long hinge lever	10A	0.5	200 gf	QC #187	3.56	3.44	3.34	3.10
653-V10G4-1C24-K	V-10G4-1C24-K	D	Simulated roller lever	10A	0.5	100 gf	QC #187	2.32	2.16	2.10	2.04
653-V10G4-1C25-K	V-10G4-1C25-K	D	Simulated roller lever	10A	0.5	200 gf	QC #187	2.75	2.47	2.20	1.98
653-V10G5-1C24-K	V-10G5-1C24-K	D	Short hinge roller lever	10A	0.5	100 gf	QC #187	2.81	2.72	2.52	2.39
653-V10G51C25	V-10G51C25	D	Short hinge roller lever	10A	0.5	200 gf	QC #187	2.72	2.63	2.56	2.31
653-V10G6-1C24-K	V-10G6-1C24-K	D	Hinge roller lever	10A	0.5	100 gf	QC #187	2.58	2.46	2.38	2.32
653-V15-1A5	V-15-1A5	D	Pin plunger	15A	1.0	200 gf	Solder	3.42	3.07	2.73	2.46
653-V15G-3C25-K	V-15G-3C25-K	D	Pin plunger	15A	0.5	200 gf	QC #187	2.26	2.03	1.80	1.62
653-V15G1C25	V-15G1C25-K	D	Pin plunger	15A	0.5	200 gf	QC #187	2.21	2.16	2.11	1.85
653-V15-1C25	V-15-1C25	D	Pin plunger	15A	1.0	200 gf	QC #187	2.71	2.44	2.17	1.99
653-V15G-1C5-K	V-15G-1C5-K	D	Pin plunger	15A	0.5	200 gf	QC #250	2.71	2.44	2.17	1.95
653-V153C6K	V-153C6-K	D	Pin plunger	15A	1.0	400 gf	QC #250	3.11	2.80	2.46	2.11
653-V15G2C26K	V-15G2C26-K	D	Pin plunger	15A	0.5	400 gf	QC #187	2.59	2.36	2.17	2.00
653-V15-1A6	V-15-1A6	D	Pin plunger	15A	1.0	400 gf	QC #187	2.16	1.94	1.73	1.59
653-V15-1B6	V-15-1B6	D	Pin plunger	15A	1.0	400 gf	Screw	4.52	4.06	3.61	3.25
653-V15G1C26	V-15G1C26-K	D	Pin plunger	15A	0.5	400 gf	QC #187	2.71	2.44	2.17	1.95
653-V15G2C26-K	V-15G2-1C26-K	D	Hinge lever	15A	0.5	200 gf	QC #187	2.26	2.19	2.13	1.92
653-V15G3-1C24-K	V-15G3-1C24-K	D	Long hinge lever	15A	0.5	100 gf	QC #187	2.62	2.41	2.14	1.93
653-V15-1A5	V-153-1A5	D	Long hinge lever	15A	1.0	200 gf	Solder	5.79	5.49	5.05	4.60
653-V15G31C25	V-15G3-1C25-K	D	Long hinge lever	15A	0.5	200 gf	QC #187	2.21	2.16	2.11	1.85
653-V15G31C26	V-15G3-1C26-K	D	Long hinge lever	15A	0.5	400 gf	QC #187	2.71	2.44	2.17	1.95
653-V15G41C25	V-15G4-1C25-K	D	Simulated roller lever	15A	0.5	200 gf	QC #187	2.72	2.55	2.49	1.98
653-V155-1A5-T	V-155-1A5-T	D	Short hinge roller lever	15A	1.0	200 gf	Solder	4.62	4.34	3.86	3.47
653-V15G51C25	V-15G5-1C25-K	D	Short hinge roller lever	15A	0.5	200 gf	QC #187	2.33	2.24	2.10	1.93
653-V155-1C5	V-155-1C5	D	Short hinge roller lever	15A	1.0	200 gf	QC #250	3.59	3.27	3.00	2.77
653-V155-1C26	V-155G1C26-K	D	Short hinge roller lever	15A	0.5	400 gf	QC #187	3.75	3.60	3.29	2.96
653-V156-1C5	V-156-1C5	D	Hinge roller lever	15A	1.0	200 gf	Solder	3.75	3.53	3.13	2.82
653-V15G61C25K	V-15G6-1C25-K	D	Hinge roller lever	15A	0.5	200 gf	QC #187	2.46	2.25	2.14	1.94
653-V15G61C26	V-15G6-1C26-K	D	Hinge roller lever	15A	0.5	400 gf	QC #187	3.21	2.97	2.64	2.38
653-V16G-3C25-KR1	V-16G-3C25-K	D	Pin plunger	16A	0.5	200 gf	QC #187	2.75	2.50	2.30	2.12
653-V16G-2C25	V-16G-2C25	D	Pin plunger	16A	0.5	200 gf	QC #187	2.45	2.24	2.05	1.90
† 653-V16G-1C25-LR1	V-16G-1C25-L(R)	D	Pin plunger	16A	0.5	200 gf	QC #187	2.01	1.80	1.60	1.44
653-V16G-3C26	V-16G-3C26	D	Pin plunger	16A	0.5	400 gf	QC #187	2.87	2.63	2.33	2.10
† 653-V16G2-1C25-LR1	V-16G2-1C25-L(R)	D	Hinge lever	16A	0.5	200 gf	QC #187	2.52	2.27	2.01	1.81
653-V21-1C6	V-21-1C6	D	Pin plunger	21A	1.0	400 gf	Solder	4.42	4.03	3.69	3.41
653-V213-1C6	V-213-1C6	D	Long hinge lever	21A	1.0	400 gf	QC #250	4.45	4.22	3.99	3.69

## VX SERIES: SPDT MINIATURE SNAP ACTION SWITCHES

### Specifications:

### Features:

- Inrush current: 15A max.
- Internal hinge lever mechanism assures outstanding contact reliability



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Actuator Type	Contact Rating	Operating Force (max.)	Terminals	Price Each			
							1	25	50	100
653-VX-01-1C23	VX-01-1C23	E	Pin plunger	0.1A @ 125VAC/30VDC	50 gf	QC #187	3.29	3.00	2.75	2.54
653-VX-5-1A2	VX-5-1A2	E	Pin plunger	5A @ 250VAC	25 gf	Solder	2.80	2.76	2.61	2.56
653-VX-5-1C22	VX-5-1C22	E	Pin plunger	5A @ 250VAC	25 gf	QC #187	2.80	2.59	2.46	2.27
653-VX-52-1C23	VX-52-1C23	E	Hinge lever	5A @ 250VAC	30 gf	QC #187	4.14	3.72	3.30	2.81
653-VX-53-1A3	VX-53-1A3	E	Long hinge lever	5A @ 250VAC	15 gf	Solder	3.22	2.99	2.83	2.64
653-VX-53-1C23	VX-53-1C23	E	Long hinge lever	5A @ 250VAC	15 gf	QC #187	5.31	4.77	4.24	3.60
653-VX-55-1C23	VX-55-1C23	E	Short hinge roller lever	5A @ 250VAC	50 gf	QC #187	3.52	3.27	3.10	2.85
653-VX-56-1C23	VX-56-1C23	E	Hinge roller lever	5A @ 250VAC	30 gf	QC #187	3.50	3.41	3.30	3.20

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Basic/Snap Switches Omron

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# OMRON Sealed Basic Switches

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## D2SW-P SERIES: SEALED SUBMINIATURE BASIC SWITCHES

### Specifications:

- Contact form: SPDT
- Contact material: D2SW-P01 - Gold alloy  
D2SW-P2 - Silver alloy
- Contact rating: D2SW-P01 - Crossbar  
D2SW-P2 - Rivet
- Contact gap: 0.5mm

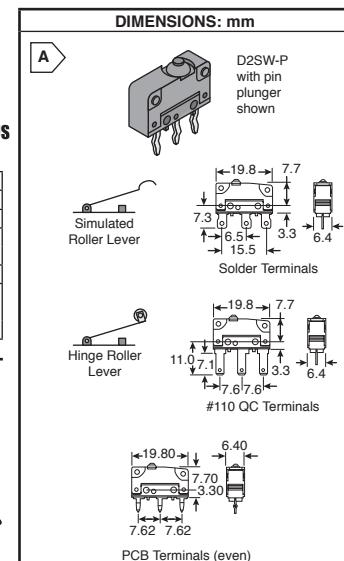
### Features:

- Mounting compatible with SS and D2SW series
- Sealing by using rubber packing means the switch can be used in dustproof or in temporary waterproof environments
- Degree of protection: IEC IP67 (circuit block only)



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Actuator Type	Operating Force (Max.)	Terminals	Price Each			
						1	25	50	100
<b>Contact Rating 0.1A @ 30VDC</b>									
653-D2SW-P01L3B	D2SW-P01L3B	A	Simulated roller lever	61gf	PCB even pitch	2.45	2.17	1.95	1.84
653-D2SW-P01L3T	D2SW-P01L3T	A	Simulated roller lever	61gf	QC #110	2.06	1.88	1.81	1.72
<b>Contact Rating 2A @ 250VAC</b>									
653-D2SW-P2L3H	D2SW-P2L3H	A	Simulated roller lever	61gf	Solder	1.83	1.65	1.46	1.32
653-D2SW-P2L2H	D2SW-P2L2H	A	Hinge roller lever	61gf	Solder	2.27	2.04	1.81	1.63
653-D2SW-P2L2T	D2SW-P2L2T	A	Hinge roller lever	61gf	QC #110	2.67	2.45	2.23	2.07



## D2SW SERIES: SUBMINIATURE WATERTIGHT SNAP ACTION SWITCHES

### Specifications:

- Contact form: SPDT
- Contact material: D2SW-01 - Gold alloy  
D2SW-3 - Silver alloy
- Contact rating: D2SW-01 - Crossbar  
D2SW-3 - Rivet
- Contact gap: 0.5mm
- Molded lead wire length: 30cm

\*Not UL/CSA approved

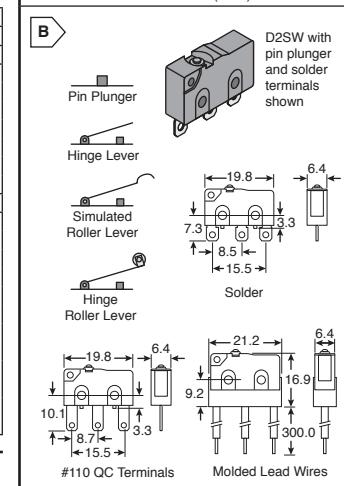
### Features:

- Use of epoxy resin assures stable sealing, making this switch ideal for places subject to water spray or excessive dust
- Degree of protection: IEC IP67



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Actuator Type	Operating Force (Max.)	Terminals	Price Each			
						1	25	50	100
<b>Contact Rating 0.1A @ 30VDC</b>									
653-D2SW-01HS	D2SW-01HS	B	Pin plunger	180gf	Solder	4.03	3.67	3.36	3.11
653-D2SW-01L1MS	D2SW-01L1MS	B	Hinge lever	60gf	Molded lead wires	8.27	7.44	6.61	5.95
653-D2SW-01L3TS	D2SW-01L3TS	B	Simulated roller lever	60gf	QC #110	4.60	4.13	3.67	3.16
653-D2SW-01L3MS	D2SW-01L3MS	B	Simulated roller lever	60gf	Molded lead wires	8.81	8.26	7.88	7.52
653-D2SW-01L2HS	D2SW-01L2HS	B	Hinge roller lever	60gf	Solder	4.89	4.39	3.90	3.33
653-D2SW-01L2TS	D2SW-01L2TS	B	Hinge roller lever	60gf	QC #110	4.89	4.39	3.90	3.51
653-D2SW-01L2MS	D2SW-01L2MS	B	Hinge roller lever	60gf	Molded lead wires	8.64	7.77	6.91	6.22
<b>Contact Rating 3A @ 125VAC</b>									
653-D2SW-3HS	D2SW-3HS	B	Pin plunger	180gf	Solder	3.47	3.24	3.10	2.97
* 653-D2SW-3H	D2SW-3H	B	Pin plunger	180gf	Solder	4.01	3.61	3.21	2.88
653-D2SW-3TS	D2SW-3TS	B	Pin plunger	180gf	QC #110	3.83	3.44	3.06	2.60
* 653-D2SW-3M	D2SW-3M	B	Pin plunger	180gf	Molded lead wires	11.09	10.09	9.25	8.35
653-D2SW-3L1HS	D2SW-3L1HS	B	Hinge lever	60gf	Solder	4.08	3.67	3.25	2.93
653-D2SW-3L1MS	D2SW-3L1MS	B	Hinge lever	60gf	Molded lead wires	6.13	5.96	5.81	4.77
653-D2SW-3L3MS	D2SW-3L3MS	B	Simulated roller lever	60gf	Molded lead wires	5.67	5.40	5.16	4.91
653-D2SW-3L2HS	D2SW-3L2HS	B	Hinge roller lever	60gf	Solder	4.33	3.93	3.71	3.34
* 653-D2SW-3L2H	D2SW-3L2H	B	Hinge roller lever	60gf	Solder	5.59	5.09	4.56	4.10
653-D2SW-3L2TS	D2SW-3L2TS	B	Hinge roller lever	60gf	QC #110	4.55	4.14	3.71	3.34
653-D2SW-3L2MS	D2SW-3L2MS	B	Hinge roller lever	60gf	Molded lead wires	5.90	5.88	5.60	5.04
* 653-D2SW-3L2M	D2SW-3L2M	B	Hinge roller lever	60gf	Molded lead wires	11.97	10.89	9.98	9.22



## D2FW-G SERIES: SUBMINIATURE WATERTIGHT SNAP ACTION SWITCHES

### Specifications:

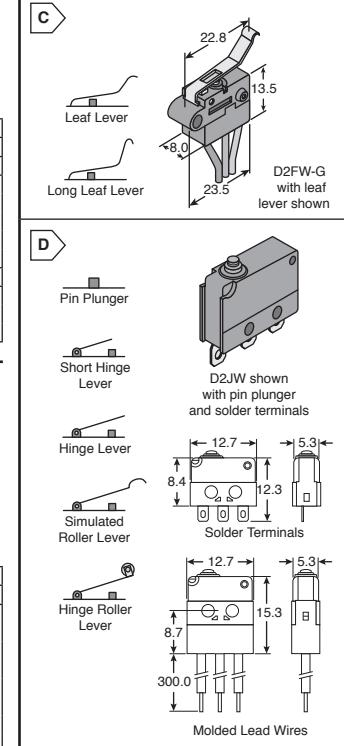
- Contact material: D2FW-G0 - Gold alloy  
D2FW-G2 - Silver alloy
- Contact rating: Crossbar
- Contact gap: 0.25mm
- Molded lead wire length: 30cm

### Features:

- Single-point mounting with an M4 screw
- Molded lead wires are installed using lead-free connections for environmental conservation
- Incorporates a fixed leaf lever for tough environments
- Degree of protection: IEC IP67

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Actuator Type	Operating Force (Max.)	Terminals	Price Each			
							1	25	50	100
<b>Contact Rating 0.1A @ 30VDC</b>										
653-D2FW-G071M	D2FW-G071M	C	SPDT	Leaf lever	250gf	7.98	7.18	6.38	5.74	
653-D2FW-G072M	D2FW-G072M	C	SPST-NC	Leaf lever	250gf	9.47	8.64	7.92	7.31	
653-D2FW-G082M	D2FW-G082M	C	SPST-NC	Long leaf lever	300gf	9.79	8.92	8.18	7.55	
653-D2FW-G073M	D2FW-G073M	C	SPST-NO	Leaf lever	250gf	7.89	7.18	6.38	5.74	
653-D2FW-G083M	D2FW-G083M	C	SPST-NO	Long leaf lever	300gf	7.90	7.10	6.31	5.68	
<b>Contact Rating 1A @ 30VDC</b>										
653-D2FW-G271M	D2FW-G271M	C	SPDT	Leaf lever	250gf	7.98	7.18	6.38	6.00	
653-D2FW-G273M	D2FW-G273M	C	SPST-NO	Leaf lever	250gf	6.47	6.18	6.03	5.05	
653-D2FW-G283M	D2FW-G283M	C	SPST-NO	Long leaf lever	300gf	7.70	7.08	6.80	6.14	



## D2JW SERIES: IMMERSION-PROOF SUBMINIATURE SNAP ACTION SWITCHES

### Specifications:

- Contact rating: 0.1A @ 30VDC
- Contact form: SPDT
- Contact gap: 0.5mm

### Features:

- Ultra-small and highly sealed
- Gold-alloy crossbar contact and coil spring offer long life expectancy and high contact reliability
- Degree of protection: IEC IP67 (excluding the terminals on terminal models)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Actuator Type	Operating Force (Max.)	Terminals	Price Each			
						1	25	50	100
<b>653-D2JW-011</b>									
653-D2JW-011-MD	D2JW-011-MD	D	Pin plunger	250gf	Solder	9.21	7.00	6.63	5.88
653-D2JW-01K1A1-MD	D2JW-01K1A1-MD	D	Short hinge lever	250gf	Molded lead wires	11.79	10.61	9.43	8.56
653-D2JW-01K1	D2JW-01K1	D	Hinge lever	117gf	Molded lead wires	20.89	19.63	18.24	16.83
653-D2JW-01K31	D2JW-01K31	D	Simulated roller lever	97gf	Solder	9.70	8.73	7.76	6.98
653-D2JW-01K31-MD	D2JW-01K31-MD	D	Simulated roller lever	97gf	Molded lead wires	14.24	13.09	12.57	11.36
653-D2JW-01K21	D2JW-01K21	D	Hinge roller lever	100gf	Solder	11.74	10.55	9.39	7.98
653-D2JW-01K21-MD	D2JW-01K21-MD	D	Hinge roller lever	100gf	Molded lead wires	12.39	10.73	8.59	7.83

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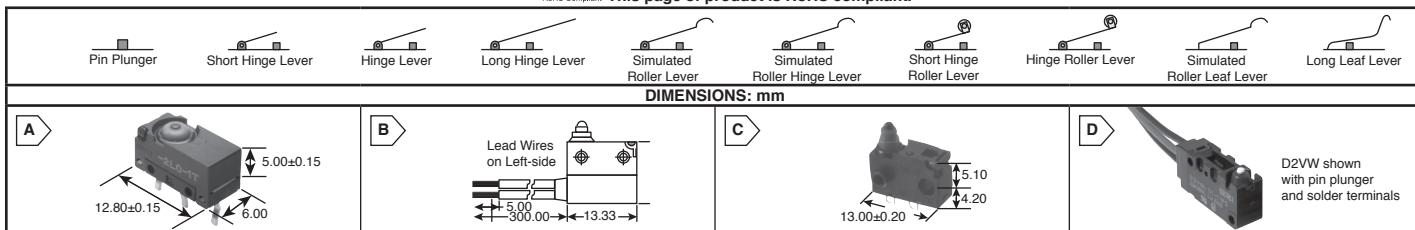
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1861

# OMRON Sealed Basic Switches

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OMRON



## D2FD SERIES: DUST-PROOF, ULTRA-SUBMINIATURE BASIC SWITCHES

### Specifications:

- Contact form: SPDT
- Contact gap: 0.25mm
- Contact material: D2FD-2 Silver alloy
- D2FD-2 Gold alloy

### Features:

- Sealing by using rubber packing means the switch can be used in dust-proof environments (IEC IP6X).
- Switch rating of 2A @ 125VAC possible with a single-leaf movable spring.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Actuator Type	Operating Force (Max.)	Terminals	Price Each			
						1	25	50	100
<b>Rating 0.1A @ 125VAC/30VDC</b>									
653-D2FD-01L0-1T	D2FD-01L0-1T	A	Pin plunger	204gf	PCB	4.40	4.23	3.29	2.91
653-D2FD-01L0-1H	D2FD-01L0-1H	A	Pin plunger	204gf	Solder	4.40	4.23	3.29	2.91
653-D2FD-01L1-1T	D2FD-01L1-1T	A	Hinge lever	66gf	PCB	4.05	3.78	2.94	2.60
653-D2FD-01L1-1H	D2FD-01L1-1H	A	Hinge lever	66gf	Solder	4.70	3.96	3.08	2.73
653-D2FD-01L30-1T	D2FD-01L30-1T	A	Simulated roller lever	66gf	PCB	4.70	3.96	3.08	2.73
653-D2FD-01L30-1H	D2FD-01L30-1H	A	Simulated roller lever	66gf	Solder	4.70	3.96	3.08	2.73
<b>Rating 2A @ 125VAC/30VDC</b>									
653-D2FD-2L0-1T	D2FD-2L0-1T	A	Pin plunger	204gf	PCB	4.20	4.05	3.15	2.79
653-D2FD-2L0-1H	D2FD-2L0-1H	A	Pin plunger	204gf	Solder	4.20	4.05	3.15	2.79
653-D2FD-2L1-1T	D2FD-2L1-1T	A	Hinge lever	66gf	PCB	4.50	4.23	3.29	2.91
653-D2FD-2L30-1T	D2FD-2L30-1T	A	Simulated roller lever	66gf	PCB	4.50	4.23	3.29	2.91
653-D2FD-2L30-1H	D2FD-2L30-1H	A	Simulated roller lever	66gf	Solder	4.50	4.23	3.29	2.91

## D2HW SERIES: SEALED, SUBMINIATURE SNAP ACTION SWITCHES

### Specifications:

- Contact rating: 0.1mA @ 125VAC / 2A @ 12VDC
- Contact material: Gold alloy
- Contact gap: 0.5mm
- Molded lead wire length: 30cm

### Features:

- Smallest sealed snap action switch in the industry with long stroke for reliable ON/OFF action
- Case dimensions 22% smaller than conventional models
- Extra-long stroke even without levers (OT: 1.4mm)

\*UL/CSA Approved

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Actuator Type	Operating Force (Max.)	Terminals	Mounting Structure	Price Each			
								1	25	50	100
653-D2HW-A201D	D2HW-A201D	B	SPDT	Pin plunger	76gf	PCB straight	Without post	2.39	2.25	2.08	1.92
653-D2HW-BL201DL	D2HW-BL201DL	B	SPDT	Pin plunger	76gf	PCB angled	Posts on left	2.20	2.12	1.98	1.85
653-D2HW-C201H	D2HW-C201H	B	SPDT	Pin plunger	76gf	Solder	M-3 Screw mount	3.49	3.13	2.78	2.50
653-D2HW-C201M	D2HW-C201M	B	SPDT	Pin plunger	76gf	Lead wire: Downwards	M-3 Screw mount	6.92	6.22	5.53	4.97
653-D2HW-C211M	D2HW-C211M	B	SPDT	Hinge lever	76gf	Lead wire: Downwards	M-3 Screw mount	6.31	5.96	5.50	5.08
653-D2HW-A221D	D2HW-A221D	B	SPDT	Long hinge lever	50gf	PCB straight	Without post	3.27	2.93	2.60	2.34
653-D2HW-A231D	D2HW-A231D	B	SPDT	Simulated roller hinge lever	66gf	PCB straight	Without post	3.27	2.93	2.60	2.34
653-D2HW-BR231DR	D2HW-BR231DR	B	SPDT	Simulated roller hinge lever	66gf	PCB angled	Posts on right	3.27	2.93	2.60	2.34
653-D2HW-C212MR	D2HW-C212MR	B	SPST-NC	Hinge lever	76gf	Lead wire: Right-side	M-3 Screw mount	5.25	4.72	4.27	4.00
653-D2HW-BL212ML	D2HW-BL212ML	B	SPST-NC	Hinge lever	76gf	Lead wire: Left-side	Posts on left	6.24	5.69	5.21	4.81
653-D2HW-BL203MR	D2HW-BL203MR	B	SPST-NO	Pin plunger	76gf	Lead wire: Right-side	Posts on left	6.29	5.72	5.25	4.84
653-D2HW-C203MR	D2HW-C203MR	B	SPST-NO	Pin plunger	76gf	Lead wire: Right-side	M-3 Screw mount	6.92	6.22	5.53	4.97
* 653-D2HW-C203MRS	D2HW-C203MRS	B	SPST-NO	Pin plunger	76gf	Lead wire: Right-side	M-3 Screw mount	7.36	6.62	5.88	5.30
653-D2HW-C213MR	D2HW-C213MR	B	SPST-NO	Hinge lever	76gf	Lead wire: Right-side	M-3 Screw mount	13.62	11.57	9.87	9.10

## D2QW SERIES: SEALED, ULTRA-SUBMINIATURE BASIC SWITCHES

### Specifications:

- Contact rating: 1mA @ 5VDC / 0.1A @ 30VDC
- Contact material: Gold plated
- Insulation resistance: 100MΩ min. @ 500VDC
- Use M3 screws to mount the switch

### Features:

- Clip contacts with highly reliable slide contact mechanism
- Sliding contact allows for quiet operating sound
- High temperature resistance and drip-proof structure for wide range of applications and environmental conditions
- Extra long stroke (OT 2.7mm)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Actuator Type	Operating Force (Max.)	Terminals	Price Each			
							1	25	50	100
653-D2QW-C003H	D2QW-C003H	C	SPST-NO	Pin plunger	153gf	Solder	5.29	4.75	4.22	3.80
653-D2QW-C073H	D2QW-C073H	C	SPST-NO	Simulated roller leaf lever	153gf	Solder	6.13	5.52	4.90	4.41

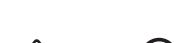
## D2VW SERIES: MINIATURE, WATERTIGHT SNAP ACTION SWITCHES

### Specifications:

- Contact form: SPDT
- Contact material: D2VW-01 Gold alloy
- D2VW-5 Silver alloy
- Mechanical life: 10,000,000 operations min.
- Molded lead wire length: 30cm

### Features:

- High-quality watertight, high-precision miniature snap action switches meet IP67 (IEC 529) requirements (for lead wire types) and IP50 (for terminal types)
- Monoblock construction assures high sealing capability and is ideal for dusty environments or where water is sprayed



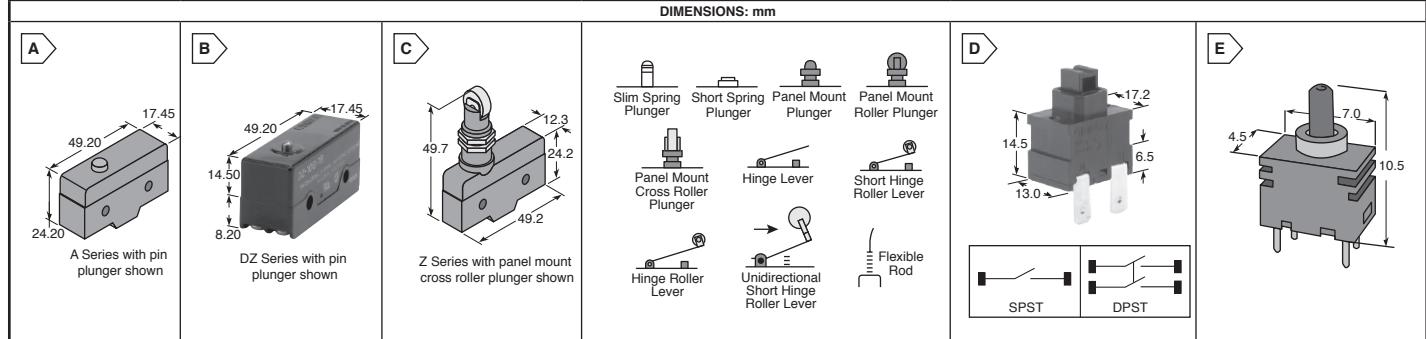
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Actuator Type	Operating Force (Max.)	Terminals	Price Each				
						1	25	50	100	
<b>Rating 0.1A @ 30VDC</b>										
653-D2VW-01-1HS	D2VW-01-1HS	D	Pin plunger	200gf	Solder and QC #187	6.10	5.71	5.22	4.70	
653-D2VW-01L2-1HS	D2VW-01L2-1HS	D	Hinge roller lever	120gf	Solder and QC #187	8.65	7.78	6.91	6.22	
653-D2VW-01L2-1MS	D2VW-01L2-1MS	D	Hinge roller lever	120gf	Molded lead wires	17.24	16.30	15.16	14.21	
<b>Rating 5A @ 250VAC</b>										
653-D2VW-5-1HS	D2VW-5-1HS	D	Pin plunger	200gf	Solder and QC #187	5.03	4.65	4.14	3.72	
653-D2VW-5-1MS	D2VW-5-1MS	D	Pin plunger	200gf	Molded lead wires	8.31	7.69	6.83	6.15	
653-D2VW-5L1-1MS	D2VW-5L1-1MS	D	Hinge lever	120gf	Molded lead wires	8.33	7.49	6.66	5.98	
653-D2VW-5L3-1HS	D2VW-5L3-1HS	D	Simulated roller lever	120gf	Solder and QC #187	4.64	4.40	4.10	3.67	
653-D2VW-5L3-1MS	D2VW-5L3-1MS	D	Simulated roller lever	120gf	Molded lead wires	11.41	10.64	10.43	9.86	
653-D2VW-5L2A-1HS	D2VW-5L2A-1HS	D	Short hinge roller lever	230gf	Solder and QC #187	5.01	4.69	4.57	4.09	
653-D2VW-5L2A-1MS	D2VW-5L2A-1MS	D	Short hinge roller lever	230gf	Molded lead wires	8.61	7.96	7.08	6.37	
653-D2VW-5L2-1HS	D2VW-5L2-1HS	D	Hinge roller lever	120gf	Solder and QC #187	5.00	4.76	4.55	4.12	
653-D2VW-5L2-1MS	D2VW-5L2-1MS	D	Hinge roller lever	120gf	Molded lead wires	7.78	7.41	7.10	6.41	

# OMRON Basic, Pushbutton and Power Switches

 This page of product is RoHS compliant.

DIMENSIONS: mm



## A SERIES: HIGH-CAPACITY SNAP ACTION SWITCHES

### Specifications:

- Contact rating: 20A @ 125/250VAC
- Terminals: Screw
- Contact form: SPDT
- Contact gap: 0.5mm
- Contact material: Silver alloy

### Features:

- High-capacity switch capable of handling 20A loads with inrush currents up to 75A
- Directly switches such loads as motors, halogen lamps, and solenoids
- Same shape as OMRON Z series (except pin plunger)



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Actuator Type	Operating Force (gf)	Mounting Screw	Mounting Hole Size (mm)	Price Each			
							1	25	50	100
653-A20GD-B7-K	A-20GD-B7-K	A	Short spring plunger	400 - 625	#6-32NC	3.56	15.21	14.51	14.35	14.03
653-A20GQ-B7	A-20GQ-B7-K	A	Panel mount plunger	400 - 625	#6-32NC	3.56	19.98	17.97	15.98	13.58
653-A-20GV-B	A-20GV-B	A	Hinge lever	70	M4	4.20	18.77	17.09	15.65	14.45
653-A20GV-B7	A-20GV-B7-K	A	Hinge lever	70	#6-32NC	3.56	9.94	9.48	9.05	8.55
653-A-20GV22-B	A-20GV22-B	A	Short hinge roller lever	160	M4	4.20	14.57	13.25	12.15	11.22
653-A20GV22-B7	A-20GV22-B7-K	A	Short hinge roller lever	160	#6-32NC	3.56	12.45	11.64	10.91	10.28
653-A20GV-B7	A-20GV-B7-K	A	Hinge roller lever	90	#6-32NC	3.56	12.17	11.39	10.57	9.99

## DZ SERIES: SPECIAL PURPOSE BASIC SWITCHES

### Specifications:

- Contact rating: 10A @ 250VAC
- Terminals: Screw
- Contact form: DPDT
- Contact gap: 0.5mm
- Contact material: Silver alloy

### Features:

- Basic switch for two independent circuit controls
- Ideal for switching the circuits operating on two different voltages and for controlling two independent circuits



- Interchangeable with OMRON Z switches, as both are identical in mounting hole dimensions and pitch

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Actuator Type	Operating Force (Max.) (gf)	Over Travel (Min.) (mm)	Mounting Hole Size (mm)	Price Each			
							1	10	20	50
653-DZ-10GV-1B	DZ-10GV-1B	B	Hinge lever	200	0.40	24.00	22.69	21.50	20.11	
653-DZ-10GV22-1B	DZ-10GV22-1B	B	Short hinge roller lever	430	0.13	31.79	28.91	26.51	24.46	
653-DZ-10GW2-1B	DZ-10GW2-1B	B	Hinge roller lever	213	1.20	28.09	25.55	23.43	20.68	
653-DZ-10GW22-1B6	DZ-10GW22-1B6	B	Hinge roller lever	400	0.90	27.25	26.33	25.77	24.44	

## Z SERIES: GENERAL PURPOSE AND DRIP-PROOF BASIC SWITCHES

### Specifications:

- Contact rating: 15A @ 125/250VAC
- Terminals: Screw
- Contact form: SPDT
- Contact material: Silver

### Features:

- High precision in a variety of styles
- A large switching capacity of 15A with high repeat accuracy
- Wide margins of operating conditions



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Actuator Type	Operating Force (Max.) (gf)	Contact Gap (mm)	Mounting Screw	Mounting Hole Size (mm)	Price Each			
								1	25	50	100
<b>General Purpose</b>											
653-Z-15GS-B	Z-15GS-B	C	Slim spring plunger	250 - 350	0.50	M4	4.20	12.83	11.54	10.24	9.23
653-Z-15GD-B	Z-15GD-B	C	Short spring plunger	250 - 350	0.50	M4	4.20	8.90	8.26	7.84	7.46
653-Z-15GD-B7-K	Z-15GD-B7-K	C	Short spring plunger	250 - 350	0.50	#6-32NC	3.56	9.28	8.51	8.12	7.72
653-Z-15GQ-B	Z-15GQ-B	C	Panel mount plunger	250 - 350	0.50	M4	4.20	16.69	15.01	13.33	11.99
653-Z-15GQ-B7-K	Z-15GQ-B7-K	C	Panel mount plunger	250 - 350	0.50	#6-32NC	3.56	14.01	12.87	12.23	11.67
653-Z-15GQ22-B	Z-15GQ22-B	C	Panel mount roller plunger	250 - 350	0.50	M4	4.20	19.54	17.59	15.62	14.05
653-Z-15GQ22-B7-K	Z-15GQ22-B7-K	C	Panel mount roller plunger	250 - 350	0.50	#6-32NC	3.56	19.22	17.29	15.35	13.82
653-Z-15GQ21-B	Z-15GQ21-B	C	Panel mount roller plunger	250 - 350	0.50	M4	4.20	14.89	14.09	13.12	12.51
653-Z-15GQ21-B7-K	Z-15GQ21-B7-K	C	Panel mount cross roller plunger	250 - 350	0.50	#6-32NC	3.56	14.40	13.68	13.23	12.45
653-Z-15GW-B	Z-15GW-B	C	Hinge lever	70	0.50	M4	4.20	13.01	11.71	10.40	9.36
653-Z-15GW-B7-K	Z-15GW-B7-K	C	Hinge lever	70	0.50	#6-32NC	3.56	13.01	11.71	10.40	9.36
653-Z-15GW22-B	Z-15GW22-B	C	Short hinge roller lever	160	0.50	M4	4.20	9.13	8.37	7.99	7.61
653-Z-15GW22-B7-K	Z-15GW22-B7-K	C	Short hinge roller lever	160	0.50	#6-32NC	3.56	9.13	8.37	7.99	7.61
653-Z-15GW2-B	Z-15GW2-B	C	Hinge roller lever	100	0.50	M4	4.20	13.32	11.98	10.65	9.58
653-Z-15GW2-B7-K	Z-15GW2-B7-K	C	Hinge roller lever	100	0.50	#6-32NC	3.56	11.70	11.32	10.57	9.93
653-Z-15GW227-B7-K	Z-15GW227-B7-K	C	Unidirectional short hinge roller lever	170	0.50	#6-32NC	3.56	13.40	12.82	12.16	11.59
<b>Drip Proof</b>											
653-Z15GQ55B	Z-15GQ55-B	C	Panel mount plunger	540	0.50	M4	4.20	20.42	18.56	17.02	15.70
653-Z-15GW2255-B	Z-15GW2255-B	C	Short hinge roller lever	200	0.50	M4	4.20	16.24	14.77	13.55	12.49
653-Z-15GNJ55-B7-K	Z-15GNJ55-B7-K	C	Flexible rod coil spring	50	0.50	#6-32NC	3.56	24.18	22.00	20.17	18.61

## C4V SERIES: MINIATURE POWER SWITCHES

### Specifications:

- Switching capacity: 8A, 125/250VAC
- Operating force: 7N Max.

### Features:

- Unique snap action mechanism allows large-capacity switching
- Sharp feeling with firm switching action
- Contact gap of 3mm minimum



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Operating Mechanism	Price Each			
					1	10	25	50
653-C4V-821M	C4V-821M	D	DPST	Momentary	4.83	4.60	4.34	3.86
653-C4V-821A	C4V-821A	D	DPST	Alternate	4.83	4.60	4.34	3.86

## A9PS SERIES: ULTRA-SUBMINIATURE PUSHBUTTON SWITCHES

### Specifications:

- Switching capacity: 100mA @ 28VAC/DC
- Contact resistance: 80mΩ Max.
- Operating force: 4.9N Max.

### Features:

- Gold-plated clip contact ensures high reliability
- The sealed bottom prevents flux penetration
- Washable, equivalent to IP64 (IEC-60529)

### Applications:

- Security control boards
- Electric power instrumentation
- Program controllers

For quantities greater than listed, call for quote.

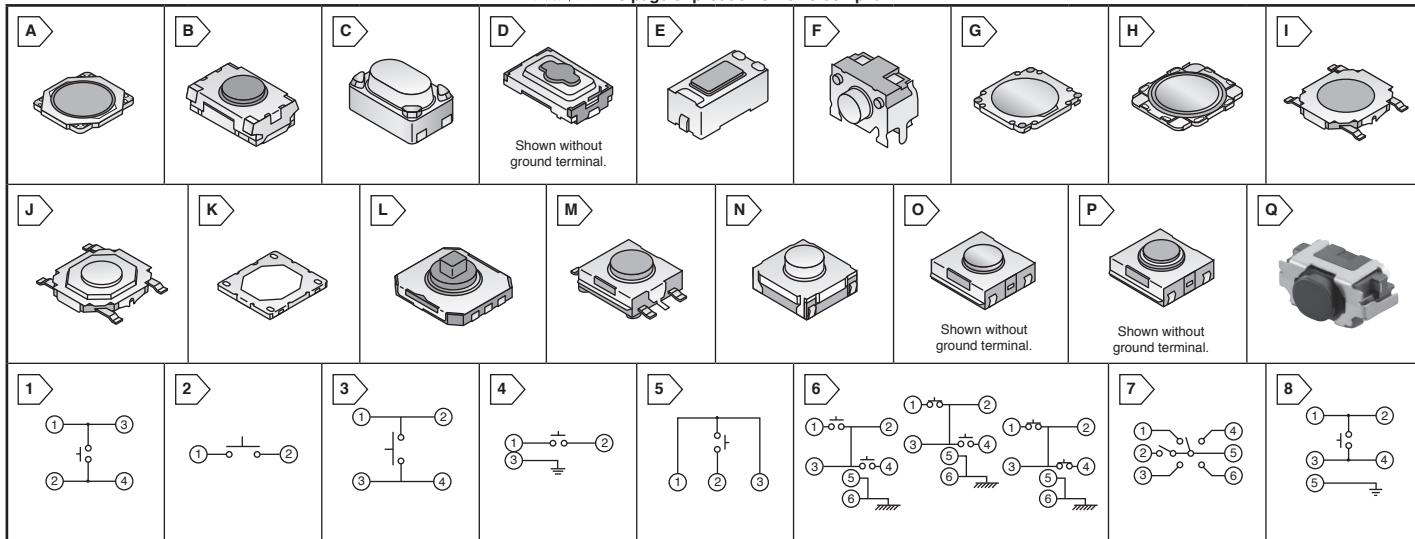
MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Terminal Shape	Operating Mechanism	Price Each			
						1	25	50	100
653-A9PS16-0011	A9PS16-0011	E	SPST	DIP	Momentary	9.66	9.42	8.94	8.21
653-A9PS16-0012	A9PS16-0012	E	SPST	Right-angled	Momentary	12.27	11.96	11.34	10.44
653-A9PS16-0013	A9PS16-0013	E	SPST	Vertical mount	Momentary	12.27	11.96	11.34	10.44
653-A9PS26-0011	A9PS26-0011	E	DPST	DIP	Momentary	10.23	9.97	9.46	8.70
653-A9PS26-0013	A9PS26-0013	E	DPST	Vertical mount	Momentary	11.29	11.01	10.44	9.60

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# ALPS Tactile Switches

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**ALPS**



## LOW PROFILE SMD TACTILE SWITCHES

- Contact rating: 50mA @ 12VDC Max.
- Tape and reel packaging
- Reflow solderable

Tactile Switches **ALPS**

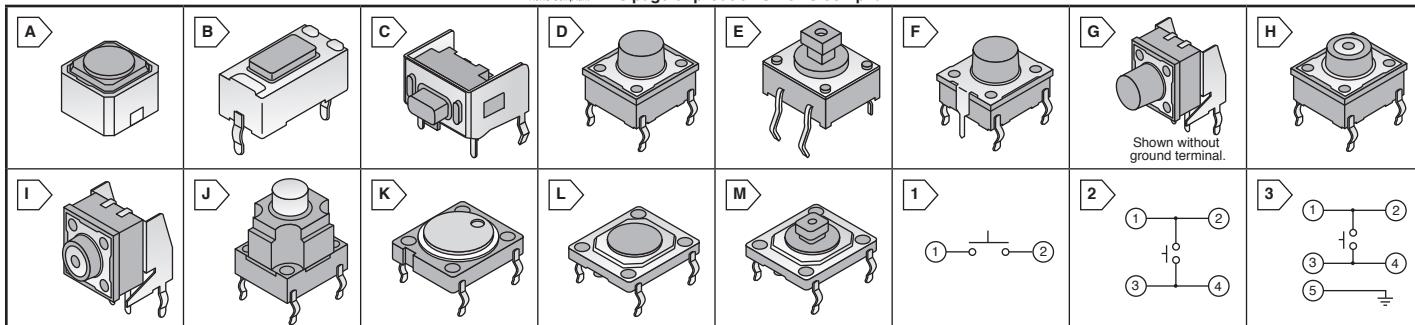
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Dim.: mm			Operating Force	Travel (mm)	Operating Life	Features	Price Each				Reel Qty.	Price Per Piece
			L	W	H					1	50	100	500		
688-SKRWAEE030	SKRWAEE030	A1	3.7	3.7	0.35	160g	0.15	500,000	Compact, low profile	.22	.18	.16	.15	10000	.071
688-SKRKAE	SKRKAE	B2	3.9	2.9	2	160g	0.13	200,000	Compact, low profile	.88	.683	.619	.512	4500	.128
688-SKRPAE	SKRPAB	C3	4.2	3.2	2.5	160g	0.20	100,000	Strong operating force	.41	.38	.35	.31	4000	.07
688-SKRPAE	SKRPAC	C3	4.2	3.2	2.5	260g	0.20	50,000	Strong operating force	.41	.38	.35	.31	4000	.075
688-SKRPAE	SKRPAD	C3	4.2	3.2	2.5	408g	0.20	100,000	Strong operating force	.84	.652	.586	.489	4000	.141
688-SKOYAA	SKOYAA	D4	6.1	3.7	2.5	160g	0.25	50,000	Larger stem face, quicker mounting	1.19	.894	.795	.408	3000	.187
688-SKQYAB	SKQYAB	D4	6.1	3.7	2.5	260g	0.25	50,000	Larger stem face, quicker mounting	.85	.353	.265	.209	3000	.156
688-SKOYAF	SKQYAF	D4	6.1	3.7	2.5	320g	0.25	50,000	Larger stem face, quicker mounting	.85	.662	.596	.485	3000	.353
688-SKQYPA	SKQYPA	D4	6.1	3.7	2.5	160g	0.25	50,000	Larger stem face w/ ground terminal	.86	.673	.607	.496	3000	.364
688-SKOYPB	SKOYPB	D4	6.1	3.7	2.5	260g	0.25	50,000	Larger stem face w/ ground terminal	.86	.673	.607	.496	3000	.364
688-SKOYPD	SKOYPD	D4	6.1	3.7	2.5	320g	0.25	50,000	Larger stem face w/ ground terminal	.86	.673	.607	.496	3000	.364
688-SKQMB	SKQMB	E2	6.0	3.5	4.3	100g	0.25	50,000	Compact for high density mounting	.71	.559	.504	.405	2000	.134
688-SKQMAS	SKQMAS	E2	6.0	3.5	4.3	160g	0.25	50,000	Compact for high density mounting	.71	.559	.504	.405	2000	.134
688-SKQMAQ	SKQMAQ	E2	6.0	3.5	4.3	260g	0.25	30,000	Compact for high density mounting	1.10	.833	.734	.603	2000	.208
688-SKQMAT	SKQMAT	E2	6.0	3.5	5.0	100g	0.25	50,000	Compact for high density mounting	.70	.556	.501	.403	2000	.218
688-SKQMBB	SKQMBB	E2	6.0	3.5	5.0	160g	0.25	50,000	Compact for high density mounting	.71	.559	.504	.405	2000	.131
688-SKQMAR	SKQMAR	E2	6.0	3.5	5.0	260g	0.25	30,000	Compact for high density mounting	.71	.559	.504	.405	2000	.134
688-SKRTLA	SKRTLA	F5	4.5	3.55	3.3	160g	0.20	100,000	Side-actuated, with guide bosses	.79	.615	.553	.461	3000	.102
688-SKRTLB	SKRTLB	F5	4.5	3.55	3.3	160g	0.20	100,000	Side-actuated, without guide bosses	.79	.615	.553	.461	3000	.12
688-SKRMAA	SKRMAA	G3	4.5	4.5	0.4	160g	0.15	500,000	Dust preventative structure	.33	.26	.23	.18	10000	.07
688-SKRMBAB	SKRMBAB	G3	4.5	4.5	0.4	260g	0.20	100,000	Dust preventative structure	.31	.24	.222	.185	10000	.085
688-SKRBAAB	SKRBAAB	H1	4.8	4.8	0.55	160g	0.20	500,000	Dust preventative structure	.42	.324	.291	.248	10000	.058
688-SKRBCAB	SKRBCAB	H1	4.8	4.8	0.55	260g	0.20	50,000	Dust preventative structure	.42	.326	.293	.25	10000	.163
688-SKGQAE	SKGQAE	I3	5.2	5.2	0.8	100g	0.25	500,000	Low-profile	.61	.483	.43	.358	5000	.21
688-SKGQAA	SKGQAA	I3	5.2	5.2	0.8	160g	0.25	500,000	Low-profile	.72	.566	.503	.419	5000	.272
688-SKGQAC	SKGQAC	I3	5.2	5.2	0.8	260g	0.25	50,000	Low-profile	.33	.261	.232	.194	5000	.11
688-SKGQAF	SKGQAF	J3	5.2	5.2	1.5	100g	0.25	500,000	Low-profile	.73	.565	.514	.308	4000	.092
688-SKGQAB	SKGQAB	J3	5.2	5.2	1.5	160g	0.25	500,000	Low-profile	.73	.565	.514	.308	4000	.092
688-SKGQAD	SKGQAD	J3	5.2	5.2	1.5	260g	0.25	100,000	Low-profile	.73	.565	.514	.308	4000	.092
688-SKRNPA	SKRNPA	K6	6.0	6.0	0.9	80g/250g	.25/.40	30,000	Double action; w/o guide bosses	.48	.374	.34	.277	5000	.18
688-SKRHAB	SKRHAB	L7	7.0	7.35	5.0	125g/240g	.25/.15	200,000	4 directional w/ center push	2.45	1.89	1.71	1.41	1300	1.10
688-SKRRAA	SKRRAA	A1	7.5	7.0	0.6	100g	0.25	3,000,000	Long life	.49	.391	.347	.293	7000	.195
688-SKRRAAB	SKRRAAB	A1	7.5	7.0	0.6	160g	0.25	3,000,000	Long life	.50	.392	.348	.294	7000	.09
688-SKHMQKE010	SKHMQKE010	M8	6.2	6.5	3.1	100g	0.25	500,000	Good for high density mounting	.24	.22	.20	.18	3000	.10
688-SKHMQLE010	SKMQLE010	M8	6.2	6.5	3.1	160g	0.25	300,000	Good for high density mounting	.24	.22	.20	.18	3000	.10
688-SKRAAK	SKRAAK	N3	6.2	6.2	3.4	250g	0.30	100,000	Rubber stem, superb pre-stroke	.81	.631	.568	.463	3000	.146
688-SKRAAME010	SKRAAME010	N3	6.2	6.2	5.1	200g	0.50	100,000	Rubber stem, superb pre-stroke	.81	.637	.573	.467	1400	.446
688-SKHUALE010	SKHUALE010	O3	6.2	6.5	2.5	160g	0.25	300,000	Without ground terminal	.30	.276	.255	.233	3000	.148
688-SKHUAUME010	SKHUAME010	O3	6.2	6.5	2.5	260g	0.25	100,000	Without ground terminal	.30	.276	.255	.233	3000	.18
688-SKHUPKE010	SKHUPKE010	O8	6.2	6.5	2.5	100g	0.25	300,000	With ground terminal	.75	.593	.539	.444	3000	.339
688-SKHUPLE010	SKHUPLE010	O8	6.2	6.5	2.5	160g	0.25	300,000	With ground terminal	.67	.539	.489	.45	3000	.313
688-SKHUPME010	SKHUPME010	O8	6.2	6.5	2.5	260g	0.25	100,000	With ground terminal	.67	.539	.489	.449	3000	.312
688-SKHUBHE010	SKHUBHE010	P3	6.2	6.5	3.1	160g	0.25	50,000	Dust proof	.53	.426	.379	.313	3000	.231
688-SKHUQHE010	SKHUQHE010	P8	6.2	6.5	3.1	160g	0.25	50,000	Dust proof w/ ground terminal	1.08	.845	.757	.625	3000	.46
688-SKSLLAE010	SKSLLAE010	Q	4.5	2.2	2.6	160g	0.15	600,000	Half-mount, sharp feeling type	.24	.228	.20	.189	4400	.16

# ALPS Tactile Switches

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**ALPS**



## SMD SOFT FEELING TACTILE SWITCHES

• Contact rating: 50mA @ 16VDC max.

• Tape and reel packaging

• Reflow solderable

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Dim.: mm			Operating Force	Travel (mm)	Operating Life (Cycles)	Features	Price Each				Reel Quantity	Reel Qty. Price Each
			L	W	H					1	50	100	500		
688-SKPMAM	SKPMAM	A1	5.9	6.0	4.3	160g	1.3	100,000	Strong OF prevents mis-operations	.76	.59	.53	.44	2500	.32
688-SKPMAN	SKPMAN	A1	5.9	6.0	5.0	200g	1.3	100,000	Strong OF prevents mis-operations	.76	.59	.53	.44	2000	.32
688-SKPMAP	SKPMAP	A1	5.9	6.0	5.0	250g	1.3	100,000	Strong OF prevents mis-operations	.76	.59	.53	.44	2000	.32

## SNAP-IN SHARP FEELING TYPE TACTILE SWITCHES

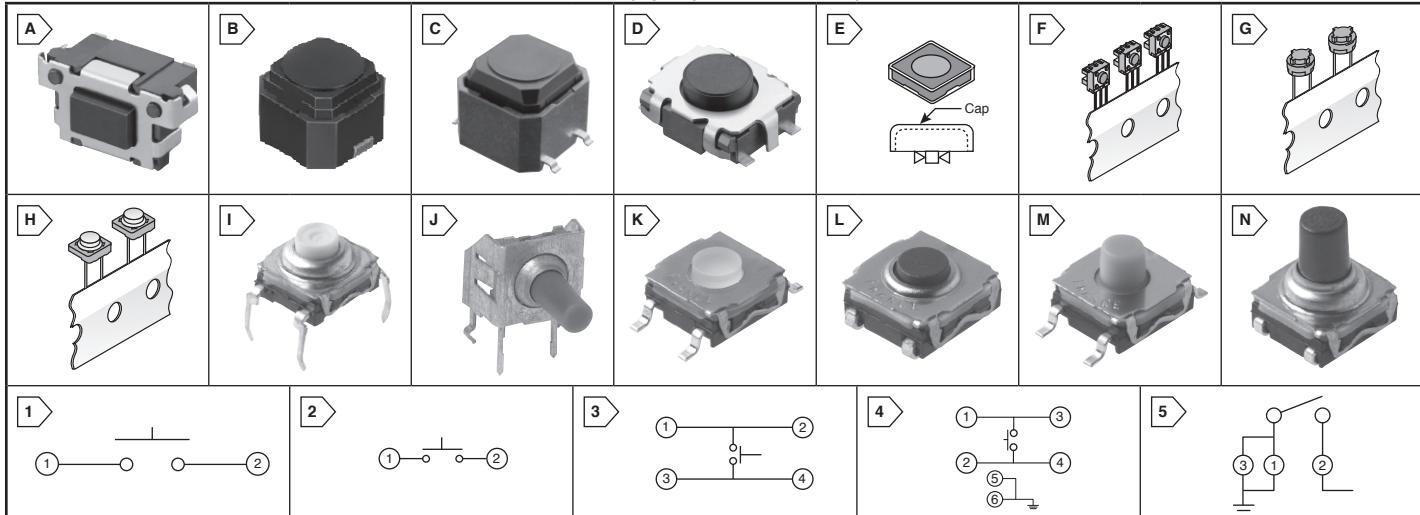
• Contact rating: 50mA @ 12VDC max.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Dim.: mm			Operating Force	Travel (mm)	Operating Life (Cycles)	Features	Price Each				Reel Quantity	Reel Qty. Price Each
			L	W	H					1	50	100	500		
688-SKHLAA	SKHLAA	B1	6.0	3.5	4.3	100g	0.25	50,000	High density mounting, Black stem	.43	.332	.305	.251	1000	.212
688-SKHLAC	SKHLAC	B1	6.0	3.5	4.3	160g	0.25	50,000	High density mounting, Dark gray stem	.52	.404	.371	.306	1000	.24
688-SKHLAJ	SKHLAJ	B1	6.0	3.5	4.3	260g	0.25	30,000	High density mounting, Red stem	.52	.403	.371	.305	1000	.24
688-SKHLAB	SKHLAB	B1	6.0	3.5	5.0	100g	0.25	50,000	High density mounting, Black stem	.43	.331	.305	.251	1000	.197
688-SKHLAD	SKHLAD	B1	6.0	3.5	5.0	160g	0.25	50,000	High density mounting, Dark gray stem	.52	.404	.371	.305	1000	.24
688-SKHLAK	SKHLAK	B1	6.0	3.5	5.0	260g	0.25	30,000	High density mounting, Red stem	.52	.403	.371	.305	1000	.24
688-SKHLA	SKHLA	C1	6.0	3.72	3.5	100g	0.25	50,000	Terminal length = 3.5mm, Black stem	.65	.513	.459	.382	1000	.295
688-SKHLB	SKHLB	C1	6.0	3.72	3.5	160g	0.25	50,000	Terminal length = 3.5mm, Dark gray stem	.65	.513	.459	.382	1000	.133
688-SKHLF	SKHLF	C1	6.0	3.72	3.5	260g	0.25	30,000	Terminal length = 3.5mm, Red stem	.54	.423	.371	.326	1000	.109
688-SKHLCC	SKHLCC	C1	6.0	3.72	3.5	100g	0.25	50,000	Terminal length = 2.5mm, Black stem	.53	.422	.377	.314	1000	.242
688-SKHLDD	SKHLDD	C1	6.0	3.72	3.5	160g	0.25	50,000	Terminal length = 2.5mm, Dark gray stem	.65	.513	.459	.382	1000	.295
688-SKHRAA	SKHRAA	D2	4.5	4.5	3.8	100g	0.25	50,000	High density mounting, Black stem	.59	.485	.441	.386	1000	.325
688-SKHRAB	SKHRAB	D2	4.5	4.5	3.8	160g	0.25	30,000	High density mounting, Dark gray stem	.48	.386	.359	.305	1000	.251
688-SKRAH	SKRAH	D2	4.5	4.5	3.8	260g	0.25	50,000	High density mounting, Red stem	.59	.485	.441	.386	1000	.325
688-SKHHAJ	SKHHAJ	D2	6.0	6.0	4.3	100g	0.25	1,000,000	High density mounting, Black stem	.26	.20	.08	.07	1000	.061
688-SKHHAL	SKHHAL	D2	6.0	6.0	4.3	160g	0.25	500,000	High density mounting, Dark gray stem	.21	.193	.077	.058	1000	.051
688-SKHHAQ	SKHHAQ	D2	6.0	6.0	4.3	260g	0.25	200,000	High density mounting, Red stem	.26	.20	.08	.07	1000	.061
688-SKHHAK	SKHHAK	D2	6.0	6.0	5.0	100g	0.25	1,000,000	High density mounting, Black stem	.26	.20	.08	.07	1000	.061
688-SKHHAM	SKHHAM	D2	6.0	6.0	5.0	160g	0.25	500,000	High density mounting, Dark gray stem	.22	.20	.08	.06	1000	.053
688-SKHHAR	SKHHAR	D2	6.0	6.0	5.0	260g	0.25	200,000	High density mounting, Red stem	.22	.20	.08	.06	1000	.053
688-SKHHBV	SKHHBV	D2	6.0	6.0	7.0	100g	0.25	1,000,000	High density mounting, Black stem	.26	.20	.08	.07	1000	.061
688-SKHHBW	SKHHBW	D2	6.0	6.0	7.0	160g	0.25	500,000	High density mounting, Dark gray stem	.26	.20	.08	.07	1000	.061
688-SKHHBY	SKHHBY	D2	6.0	6.0	7.0	260g	0.25	200,000	High density mounting, Red stem	.22	.20	.08	.06	1000	.053
688-SKHHAN	SKHHAN	D2	6.0	6.0	9.5	100g	0.25	1,000,000	High density mounting, Black stem	.40	.35	.29	.20	-	-
688-SKHHAP	SKHHAP	D2	6.0	6.0	9.5	160g	0.25	500,000	High density mounting, Dark gray stem	.26	.20	.08	.07	1000	.061
688-SKHHBS	SKHHBS	D2	6.0	6.0	9.5	260g	0.25	200,000	High density mounting, Red stem	.56	.44	.20	.16	1000	.134
688-SKHHDT	SKHHDT	D2	6.0	6.0	13.0	100g	0.25	1,000,000	High density mounting, Black stem	.61	.481	.218	.174	1000	.15
688-SKHHDU	SKHHDU	D2	6.0	6.0	13.0	160g	0.25	500,000	High density mounting, Dark gray stem	.61	.481	.229	.185	1000	.164
688-SKHCW	SKHCW	E2	6.0	6.0	7.3	100g	0.25	1,000,000	High density mounting, Black joint stem	.43	.349	.251	.196	1000	.152
688-SKHPJ	SKHPJ	F3	6.0	6.0	4.3	100g	0.25	1,000,000	With ground terminal, Black stem	.23	.18	.162	.135	1000	.114
688-SKHPPL	SKHPPL	F3	6.0	6.0	4.3	160g	0.25	500,000	With ground terminal, Dark gray stem	.23	.178	.16	.133	1000	.107
688-SKHPQ	SKHPQ	F3	6.0	6.0	4.3	260g	0.25	200,000	With ground terminal, Red stem	.11	.096	.086	.072	1000	.061
688-SKHPK	SKHPK	F3	6.0	6.0	5.0	100g	0.25	1,000,000	With ground terminal, Black stem	.23	.178	.16	.133	1000	.107
688-SKHPM	SKHPM	F3	6.0	6.0	5.0	160g	0.25	500,000	With ground terminal, Dark gray stem	.23	.18	.162	.135	1000	.108
688-SKHPR	SKHPR	F3	6.0	6.0	5.0	260g	0.25	200,000	With ground terminal, Red stem	.23	.178	.16	.133	1000	.107
688-SKHHQV	SKHHQV	F3	6.0	6.0	7.0	100g	0.25	1,000,000	With ground terminal, Black stem	.27	.214	.192	.16	1000	.136
688-SKHHQW	SKHHQW	F3	6.0	6.0	7.0	160g	0.25	500,000	With ground terminal, Dark gray stem	.27	.214	.192	.16	1000	.128
688-SKHHQY	SKHHQY	F3	6.0	6.0	7.0	260g	0.25	200,000	With ground terminal, Red stem	.23	.18	.162	.135	1000	.114
688-SKHHPN	SKHHPN	F3	6.0	6.0	9.5	100g	0.25	1,000,000	With ground terminal, Black stem	.23	.178	.16	.133	1000	.115
688-SKHPPP	SKHPPP	F3	6.0	6.0	9.5	160g	0.25	500,000	With ground terminal, Dark gray stem	.12	.12	.117	.112	1000	.108
688-SKHHQN	SKHHQN	F3	6.0	6.0	9.5	260g	0.25	200,000	With ground terminal, Red stem	.23	.178	.16	.133	1000	.107
688-SKHHLM	SKHHLM	G1	6.0	3.85	6.0	100g	0.25	1,000,000	High density mounting, Black stem	.40	.327	.235	.184	1000	.143
688-SKHHLN	SKHHLN	G1	6.0	3.85	6.0	160g	0.25	500,000	High density mounting, Dark gray stem	.30	.245	.102	.081	1000	.071
688-SKHHLP	SKHHLP	G1	6.0	3.85	6.0	260g	0.25	200,000	High density mounting, Red stem	.30	.245	.102	.081	1000	.071
688-SKHHLU	SKHHLU	G1	6.0	5.85	6.0	100g	0.25	1,000,000	High density mounting, Black stem	.30	.245	.102	.081	1000	.071
688-SKHHLV	SKHHLV	G1	6.0	5.85	6.0	160g	0.25	500,000	High density mounting, Dark gray stem	.33	.266	.204	.163	1000	.143
688-SKHHLW	SKHHLW	G1	6.0	5.85	6.0	260g	0.25	200,000	High density mounting, Red stem	.30	.245	.102	.081	1000	.071
688-SKHHLQ	SKHHLQ	G1	6.0	8.35	6.0	100g	0.25	1,000,000	High density mounting, Black stem	.30	.245	.102	.081	1000	.071
688-SKHHLR	SKHHLR	G1	6.0	8.35	6.0	160g	0.25	500,000	High density mounting, Dark gray stem	.30	.245	.102	.092	1000	.086
688-SKHHLS	SKHHLS	G1	6.0	8.35	6.0	260g	0.25	200,000	High density mounting, Red stem	.30	.245	.102	.081	1000	.071
688-SKHHNH	SKHHNH	G1	6.0	15.85	6.0	100g	0.25	500,000	High density mounting, Black stem	.63	.499	.212	.17	1000	.146
688-SKHHNJ	SKHHNJ	G1	6.0	15.85	6.0	160g	0.25	300,000	High density mounting, Dark gray stem	.53	.421	.394	.33	1000	.26
688-SKHHNK	SKHHNK	G1	6.0	15.85	6.0	260g	0.25	200,000	High density mounting, Red stem	.53	.421	.393	.33	1000	.26
688-SKQJAA	SKQJAA	H2	6.6	6.6	5.0	100g	0.25	1,000,000	Dust proof, Black stem	.62	.482	.263	.252	1000	.241
688-SKQJAB	SKQJAB	H2	6.6	6.6	5.0	160g	0.25	500,000	Dust proof, Gray stem	.51	.396	.36	.297	1000	.234
688-SKQJAD	SKQJAD	H2	6.6	6.6	7.0	100g	0.25	1,000,000	Dust proof, Black stem	.51	.396	.36	.297	1000	.234
688-SKQJAE	SKQJAE	H2	6.6	6.6	7.0	160g	0.25	500,000	Dust proof, Gray stem	.62	.483	.439	.362	1000	.285
688-SKQJAJ	SKQJAJ	H2	6.6	6.6	9.5	100g	0.25	200,000	Dust proof, Black stem	.51	.396	.36	.297	1000	.234
688-SKQJAK	SKQJAK	H2	6.6	6.6	9.5	160g	0.25	200,000	Dust proof, Gray stem	.62	.484	.264	.22	1000	.19
688-SKQJLA	SKQJLA	I3	6.6	3.85	6.6	100g	0.25	1,000,000	Dust proof, Black stem	1.16	.901	.45	.428	1000	.406
688-SKQJLB	SKQJLB	I3	6.6	3.85	6.6	160g	0.25	500,000	Dust proof, Gray stem	1.16	.902	.451	.429	1000	.407
688-SKQBAP	SKQBAP	J2	10.0	10.0	13.0	160g	0.3	100,000	Waterproof, Dust proof, Dark gray stem	.95	.738	.666	.549	1000	.432
688-SKQB AJ	SKQB AJ	J2	10.0	10.0	13.0	260g	0.3	100,000	Waterproof, Dust proof, Red stem	.32	.274	.241	.219	1000	.208
688-SKHCBA F010	SKHCBA F010	K2	12.0	12.0	4.3	130g	0.3	1,000,000	Flat stem, Black	.33	.28	.2			

# Tactile Switches

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## ALPS MID-MOUNT SIDE PUSH™ TACT SWITCH™

### Applications:

- Portable audio players and mobile phones
- Remote keyless entry (RKE) systems
- Healthcare products (blood glucose meters, etc.)
- Side switches for ever smaller, lighter digital equipment

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Dim.: mm			Operating Force	Travel (mm)	Operating Life (Cycles)	Features		Price Each			
			L	W	H				1	50	100	500	1000	
688-SKSNLAE010	SKSNLAE010	A1	6.2	3.5	1.35	2.4N	0.2	500,000	Dust proof, High impact resistance, Excellent operating feel	.27	.22	.208	.197	.192

## ALPS SURFACE MOUNT LOW RESISTANCE TYPE TACTILE SWITCHES

- Contact rating: 50mA @ 16V

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Dim.: mm			Operating Force	Travel (mm)	Operating Life (Cycles)	Features		Price Each			
			L	W	H				1	50	100	500	1000	
688-SKPMBHE010	SKPMBHE010	B2	6	5.9	5	160g	1.3	100,000	Soft feeling, Metal contact	.41	.319	.238	.205	
688-SKPRAAE010	SKPRAAE010	C3	7.5	7.8	6.5	500g	1	100,000	Soft feeling, Low-operating noise	.44	.39	.33	-	

## ALPS HIGH OPERATING FORCE AND LONG LIFE TYPE TACT SWITCHES

- Contact rating: 50mA @ 16V

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Dim.: mm			Operating Force	Travel (mm)	Operating Life (Cycles)	Features		Price Each			
			L	W	H				1	50	100	500	1000	
688-SKGACE010	SKGACE010	D4	3	2.7	1.4	400g	0.12	200,000	Compact high operating force type, for automotive selections	.36	.32	.274	.252	
688-SKGPAE010	SKGPAE010	D4	3	2.7	1.4	400g	0.12	200,000	Compact high operating force type, for automotive selections	.47	.42	.36	.33	

## ALPS CAPS AND KEYTOPS

- Contact rating: 50mA @ 12VDC max.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Dim.: mm			Operating Force	Travel (mm)	Operating Life (Cycles)	Features		Price Each			
			L	W	H				1	50	100	500	1000	
688-SK2AA00010	SK2AA00010	E	10.0	10.0	3.0				Red keytop for joint stem type SKHC, SKQE	.37	.341	.224	.215	.206
688-SK2AA00020	SK2AA00020	E	10.0	10.0	3.0				Blue keytop for joint stem type SKHC, SKQE	.46	.419	.276	.265	.253
688-SK2AA00030	SK2AA00030	E	10.0	10.0	3.0				Ivory keytop for joint stem type SKHC, SKQE	.46	.418	.275	.264	.253
688-SK2AA00040	SK2AA00040	E	10.0	10.0	3.0				Black keytop for joint stem type SKHC, SKQE	.24	.225	.147	.142	.136

## ALPS SNAP-IN RADIAL TYPE TACTILE SWITCHES ON TAPE AND REEL

- Contact rating: 50mA @ 12VDC max.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Dim.: mm			Operating Force	Travel (mm)	Operating Life (Cycles)	Features		Price Each				
			L	W	H				1	50	100	500	Reel Qty.	Reel Price	
688-SKQNAE	SKQNAE	F5	o6	---	5	160g	0.25	500,000	Sharp feeling, White stem	.26	.20	.18	.15	2000	.11
688-SKRGALD010	SKRGALD010	F5	o6	---	7	100g	0.25	500,000	Sharp feeling, Black stem	.28	.219	.197	.164	2000	.049
688-SKRGAA010	SKRGAA010	F5	6.2	6.2	3.6	130g	1	500,000	Sharp feeling, Black stem	.26	.246	.222	.204	2000	.151
688-SKRGABD010	SKRGABD010	F5	6.2	6.2	3.6	160g	0.25	500,000	Sharp feeling, White stem	.61	.563	.508	.464	2000	.344
688-SKPLAK	SKPLAK	G2	o6.45	---	5	200g	1.3	100,000	Soft feeling, Green stem	.82	.643	.578	.48	2700	.349
688-SKPLAF	SKPLAF	G2	o6.45	---	5	250g	1.3	100,000	Soft feeling, Yellow stem	.68	.53	.476	.395	2700	.287
688-SKPDAL	SKPDAL	H2	7.8	7.8	5	80g	1.0	500,000	Soft feeling, Light gray stem	.50	.397	.353	.298	800	.231
688-SKPDAM	SKPDAM	H2	7.8	7.8	5	120g	1.0	500,000	Soft feeling, Light blue stem	.27	.215	.19	.16	800	.124
688-SKPDAC	SKPDAC	H2	7.8	7.8	5.5	250g	1.2	100,000	Soft feeling, Blue stem	.61	.485	.43	.352	800	.275

## C&K KSA & KSL SERIES SEALED TACTILE SWITCH

### Features:

- Designed for automatic or manual insertion
- Cambered terminals to ensure self retention
- Top or side actuated

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Operating Force	Height (mm)	Price Each	
				1	25
611-KSA0M211-LFT	I	130g	4.7	.47	.448
611-KSA0M411-LFT	I	300g	4.7	.45	.39
611-KSL0M412-LFT	J	300g	9.9	.72	.678
611-KSL0V411-LFT	J	300g	9.9	.84	.697
611-KSL0M212LFT	J	130gf	9.9	.62	.587
611-KSL0M312LFT	J	130gf	9.9	.88	.839
611-KSL0M411LFT	J	300gf	9.9	.67	.633
611-KSL0M431LFT	J	300gf	9.9	.86	.717
611-KSL0V311LFT	J	130gf	9.9	1.00	.905

## C&K KSC SERIES TACTILE SWITCH FOR SMT

### Features:

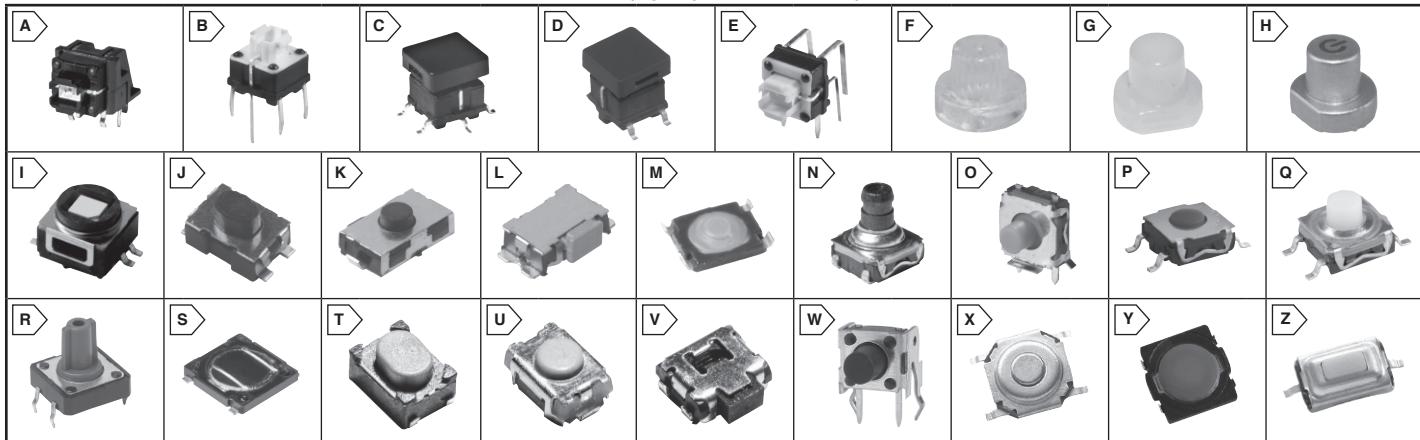
- Positive tactile feeling
- Range of 6 actuation forces
- IP 67
- J or G terminations

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Mfr.	Mfr. Part No.	Fig.	Operating Force	Height (mm)	Price Each	
						1	25
611-KSC221G-LFS			K	160g	3.5	.51	.409
611-KSC221J-LFS			K	160g	3.5	.51	.409
611-KSC241G-LFS			K	300g	3.5	.51	.409
611-KSC241J-LFS			K	300g	3.5	.51	.409
611-KSC351J-LFS			L	550g	3.5	.56	.45
611-KSC421G70SH-LFS			M	160g	5.2	.55	.444
611-KSC421J70SH-LFS			M	300g	5.2	.66	.555
611-KSC641G-LFS			N	300g	7.7	.66	.532
611-KSC641J-LFS			N	300g	7.7	.66	.532
611-KSC721JLFS			N	300g	4.3	.54	.472
611-KSC721GLFS			N	160g	4.3	.55	.527
611-KSC741JLFS			N	400g	4.3	.56	.475

# C&K Tactile Switches

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## ITS SERIES ILLUMINATED TACT SWITCHES AND CAPS

- Voltage Rating DC: 12V
- Operating Force: 160g

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Mfr. Mfr. Part No.	Fig.	LED Color	Mounting Style	Price Each				
					1	10	25	50	
<b>Illuminated Tact Switches</b>									
611-ITS13FR2ST	A	Red, Green	Rt. Angle Thru-Hole	4.39	4.18	3.97	3.87		
611-ITS13FV1ST	B	Red, Green	Vert. Thru-Hole	2.80	2.70	2.48	2.16		
611-ITS13FV2SR	C	Red, Green	SMT Vert. GW	4.82	4.59	4.36	4.25		
611-ITS13FV3SR	D	Red, Green	SMT Vert. J Bend	4.82	4.59	4.36	4.25		
611-ITS23FR1ST	E	Yellow, Green	Rt. Angle Thru-Hole	4.14	3.94	3.74	3.64		
611-ITS23FR2ST	A	Yellow, Green	Rt. Angle Thru-Hole	4.39	4.18	3.97	3.87		
611-ITS23FV1ST	B	Yellow, Green	Vert. Thru-Hole	2.80	2.70	2.48	2.16		
611-ITS23FV2SR	C	Yellow, Green	SMT Vert. GW	4.82	4.59	4.36	4.25		
611-ITS23FV3SR	D	Yellow, Green	SMT Vert. J Bend	4.82	4.59	4.36	4.25		
611-ITS40FR1ST	E	Blue	Rt. Angle Thru-Hole	4.70	4.48	4.26	4.14		
611-ITS40FR2ST	A	Blue	Rt. Angle Thru-Hole	4.96	4.72	4.49	4.37		
611-ITS40FV1ST	B	Blue	Vert. Through Hole	3.50	3.37	3.10	2.70		
611-ITS40FV2SR	C	Blue	SMT Vert. GW	5.44	5.19	4.93	4.80		
611-ITS40FV3SR	D	Blue	SMT Vert. J Bend	5.44	5.19	4.93	4.80		
611-ITS50FR1ST	E	White	Rt. Angle Thru-Hole	4.70	4.48	4.26	4.14		
611-ITS50FR2ST	A	White	Rt. Angle Thru-Hole	4.96	4.72	4.49	4.37		
611-ITS50FV1ST	B	White	Vert. Thru-Hole	3.50	3.37	3.10	2.70		
611-ITS50FV3SR	D	White	SMT Vert. J Bend	5.44	5.19	4.93	4.80		
<b>Snap On Caps</b>									
611-399EA0000	F	Description			.45	.43	.423	.414	
611-400EB0000	G	Natural/clear cap with no marking			.45	.43	.423	.414	
611-400EBA01E	H	Opaque white cap with no marking			.57	.52	.494	.47	
Silver painted cap w/black power mrkg									

## K8 LIGHTED SMT TACT SWITCHES WITH RUGGED LED MOUNTING PROCESS

- Voltage Rating: 32VDC
- Contact Form: SPST
- Operating Force: 4N

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Mfr. Mfr. Part No.	Fig.	LED Color	Mounting Style	Price Each				
					1	10	25	50	
611-K8BU41G	I	Blue	Gullwing, SMD/SMT	4.09	3.93	3.62	3.14		
611-K8OG41G	I	Orange	Gullwing, SMD/SMT	3.59	3.46	3.18	2.76		
611-K8PG41G	I	Green	Gullwing, SMD/SMT	3.80	3.65	3.36	2.92		
611-K8WH41G	I	White	Gullwing, SMD/SMT	4.15	3.95	3.75	3.65		

## KMR2/KSR/KSS/KMS SERIES TACTILE SWITCHES

- Operating Temperature: -40°C to 125°C

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Mfr. Mfr. Part No.	Fig.	Operating Force	Height (mm)	Price Each				
					1	10	25	50	
<b>Microminiature SMT Top Actuated</b>									
611-KMR221G-LFS	J	200g		1.9	.49	.395			
<b>Subminiature SMT, IP 50 Sealed</b>									
611-KSR221G-LFS	K	200g		2.5	.57	.46			
<b>Subminiature SMT Side Actuated, IP 50 Sealed</b>									
611-KSS221GLFS	L	200g		1.7	.64	.513			
611-KMS231GLFS	L	200gf		1.7	.35	.317			
611-KMS233GLFG	L	200gf		1.7	.33	.313			

## KMT0 SERIES NANO-MINIATURE SMT TOP ACTUATED

611-KMT012NGJLHS	M	160g	0.65	.33	.279
611-KMT022NGJLHS	M	160g	0.65	.33	.279
611-KMT072NGJLHS	M	230g	0.65	.33	.279

## KSC9 SERIES SMD SEALED TACT SWITCHES

### FOR ADJUSTABLE SWITCH

For quantities greater than listed, call for quote.

J-Bend		For quantities greater than listed, call for quote.				
611-KSC931JLFS	N	255g	7.7	.76	.638	
611-KSC941JLFS	N	340g	7.7	.76	.638	
<b>Gullwing</b>						
611-KSC921GLFS	N	170g	7.7	.76	.638	
611-KSC931GLFS	N	255g	7.7	.76	.638	
611-KSC941GLFS	N	340g	7.7	.76	.638	
Accessories		Description				
611-BTNKSC940		Button for KSC9, red, 15.4mm		.32	.296	
611-BTNKSC980		Button for KSC9, white, 15.4mm		.32	.296	
611-BTNKSC990		Button for KSC9, black, 15.4mm		.32	.296	

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## RS SERIES: SUB-MINIATURE SMT TACTILE SWITCHES

- Contact Form: SPST-NO Off-Momentary
- Contact Rating: 0.05A@12VDC

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No	Fig.	Operating Force	Price Each	
				1	25
611-RS-022R05C1-PA	RS-022R05C1-PA	W	160gf	.24	.22
611-RS187R05A2DSMTRT	RS-187R05A2-DS MT RT	X	160gf	.56	.475
611-RS-197N05A1-DS RT	RS-197N05A1-DS RT	Y	160gf	.67	.56
611-RS-282G05A3-SM RT	RS-282G05A3-SM RT	Z	250gf	.80	.66

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# E-SWITCH Tactile Switches

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## TL SERIES TACTILE SWITCHES

### Specifications:

- Contact form: SPST
- Contact rating: 50mA @12VDC
- Contact resistance: 20mΩ/2 max

### 4mm x 3mm Gull Wing SMT Top Actuated

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Contact Material	Act. Height Dim. (A) (mm)	Operating Force (g)	For quantities greater than listed, call for quote.			
						1	10	25	50
612-TL1015AF	TL1015AF160QG	A	Silver	.5	160	.90	.872	.822	.723

### 4mm x 3.30mm,SMT Gull Wing

For quantities greater than listed, call for quote.									
612-TL3340AF160QG	TL3340AF160QG	B	Silver	.85	160	.45	.432	.424	.408

### 6 x 3.5mm SMT Gull Wing

For quantities greater than listed, call for quote.									
612-TL3302A	TL3302AF180QG	C	Silver	1.5	180	.63	.606	.594	.572
612-TL3302A-260	TL3302AF260QG	C	Silver	1.5	260	.57	.55	.54	.52

### 6 x 3.1mm SMT Gull Wing

For quantities greater than listed, call for quote.									
612-TL3303F160QG	TL3303F160QG	D	Silver	.5	160	.86	.828	.781	.687

### 6mm SMT J-Lead

For quantities greater than listed, call for quote.									
612-TL3301AJ	TL3301AF160QJ	E	Silver	1.4	160	.48	.463	.454	.437
612-TL3304AF-160QJ	TL3304AF160QJ	F	Silver	.8	160	.77	.753	.71	.625

### 6 x 3.5mm Thru-hole

For quantities greater than listed, call for quote.									
612-TL1107AF130W	TL1107AF130WQ	G	Silver	.8	130	.36	.35	.338	.325
612-TL1107A-260	TL1107AF260WQ	G	Silver	.8	260	.36	.35	.338	.325

### 6mm Thru-hole, Tape and Reel Packaging

For quantities greater than listed, call for quote.									
612-TL59F160Q	TL59FF160Q	H	Silver	1.4	160	.28	.276	.266	.256

### 6mm SMT Gull Wing

For quantities greater than listed, call for quote.									
612-TL3301AF1	TL3301AF160QG	I	Silver	1.4	160	.43	.419	.404	.389
612-TL3301AF2	TL3301AF260QG	I	Silver	1.4	260	.43	.419	.404	.389
612-TL3301EF	TL3301EF100QG	I	Silver	3.7	100	.39	.381	.367	.354
612-TL3301F	TL3301FF160QG	I	Silver	3.4	160	.43	.419	.404	.389
612-TL3301NF	TL3301NF260QG	I	Silver	4.3	260	.43	.419	.404	.389
612-TL3301SP	TL3301SPF160QG	I	Silver	3.9	160	.43	.419	.404	.389
612-TL3301SPF260QG	TL3301SPF260QG	I	Silver	3.9	260	.41	.401	.386	.372
612-TL6700AF160QG	TL6700AF160QG	I	Silver	1.4	160	.87	.84	.792	.697
612-TL6700AF260QG	TL6700AF260QG	I	Silver	1.4	260	.87	.84	.792	.697

### 6mm Thru-hole

For quantities greater than listed, call for quote.									
612-TL1105AF100Q	TL1105AF100Q	J	Silver	5.0	100	.28	.276	.266	.256
612-TL1105A	TL1105AF160Q	J	Silver	5.0	160	.28	.276	.266	.256
612-TL1105AF250	TL1105AF250Q	J	Silver	5.0	250	.28	.276	.266	.256
612-TL1105B	TL1105BF160Q	J	Silver	9.5	160	.19	.186	.179	.173
612-TL1105BF250	TL1105BF250Q	J	Silver	9.5	250	.19	.186	.179	.173
612-TL1105C	TL1105CF160Q	J	Silver	8.0	160	.19	.186	.179	.173
612-TL1105D	TL1105DF160Q	J	Silver	13.0	160	.19	.186	.179	.173
612-TL1105D-250	TL1105DF250Q	J	Silver	13.0	250	.19	.186	.179	.173
612-TL1105EF100Q	TL1105EF100Q	J	Silver	7.3	100	.17	.166	.16	.154
612-TL1105EF250	TL1105EF250Q	J	Silver	7.3	250	.19	.186	.179	.173
612-TL1105F100Q	TL1105F100Q	J	Silver	7.0	100	.19	.186	.179	.173
612-TL1105	TL1105F160Q	J	Silver	7.0	160	.19	.186	.179	.173
612-TL1105F250	TL1105F250Q	J	Silver	7.0	250	.19	.186	.179	.173
612-TL1105FF160Q	TL1105FF160Q	J	Silver	7.0	160	.19	.186	.179	.173
612-TL1105LF250Q	TL1105LF250Q	J	Silver	1.4	250	.27	.262	.252	.243
612-TL1105PF1	TL1105PF160Q	J	Silver	8.5	160	.19	.186	.179	.173
612-TL1105SP	TL1105SPF160Q	J	Silver	2.8	160	.28	.276	.266	.256
612-TL1105SP-250	TL1105SPF250Q	J	Silver	2.8	250	.28	.276	.266	.256
612-TL1105T	TL1105TF160Q	K	Silver	2.4	160	.47	.296	.266	.256

### 6mm Right Angle Thru-hole

For quantities greater than listed, call for quote.									
612-TL1105JAF100Q	TL1105JAF100Q	L	Silver	2.8	100	.47	.448	.44	.423
612-TL1105JA	TL1105JAF160Q	L	Silver	2.8	160	.47	.448	.44	.423
612-TL1105JA-250	TL1105JAF250Q	L	Silver	2.8	250	.47	.448	.44	.423
612-TL1105M	TL1105MF160Q	M	Silver	6.85	160	.35	.339	.327	.315
612-TL1105R	TL1105RF160Q	M	Silver	6.15	160	.35	.339	.327	.315
612-TL1105R-250	TL1105RF250Q	M	Silver	6.15	250	.35	.339	.327	.315
612-TL1105S	TL1105SF160Q	M	Silver	8.35	160	.35	.339	.327	.315
612-TL1105S-250	TL1105SF250Q	M	Silver	8.35	250	.35	.339	.327	.315
612-TL1105VF100	TL1105VF100Q	M	Silver	3.85	100	.35	.339	.327	.315
612-TL1105WF100Q	TL1105WF100Q	M	Silver	3.15	100	.35	.339	.327	.315
612-TL1105W	TL1105WF160Q	M	Silver	3.15	160	.35	.339	.327	.315
612-TL1105W-250	TL1105WF250Q	M	Silver	3.15	250	.35	.339	.327	.315
612-TL1105X	TL1105XF160Q	M	Silver	5.85	160	.35	.339	.327	.315

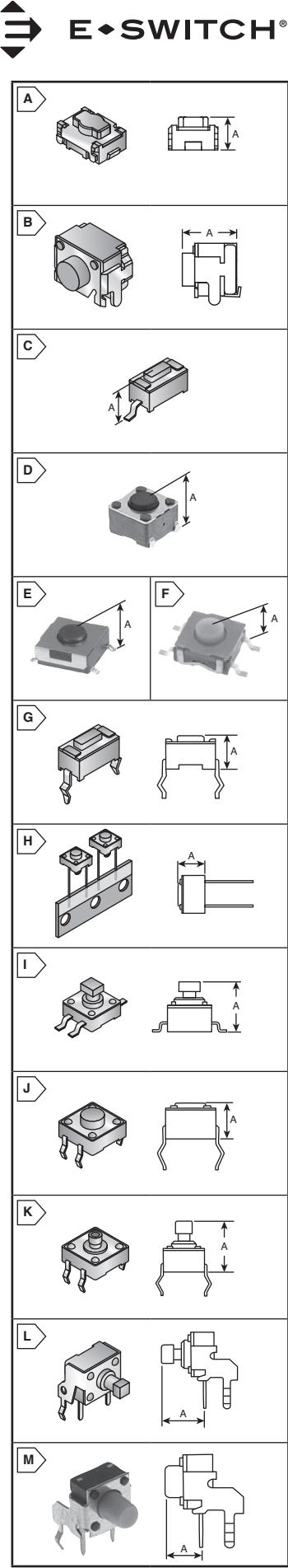
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# E-SWITCH Tactile Switches

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E-SWITCH®

## TL SERIES TACTILE SWITCHES (CONT.)

### Thru-Hole

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Contact Material	Act. Height Dim. (A)	Operating Force (g)	Price Each			
						1	10	25	50
<b>7.2mm x 5.08mm, Thru-hole</b>									
612-TL6110AF13	TL6110AF130QP	A	Silver	4.7	130g	1.22	1.18	1.11	.983
612-TL6110BF13	TL6110BF130QP	A	Silver	5.2	130g	1.22	1.18	1.11	.983
612-TL6110DF3	TL6110DF300QP	A	Silver	10	300g	1.18	1.14	1.05	.916
<b>6.2mm, Long Life, Thru-hole</b>									
612-TL1140AF070Q	TL1140AF070Q	B	Silver	7.35	70g	.55	.532	.522	.502
612-TL1240N1JB	TL1240NQ1JBLK	C	Silver	7.2	160g	.79	.771	.728	.64

### Features & Benefits:

- Right Angle, thru hole terminations
- Multiple single, and bi-color LED options
- Gold plated contacts for high reliability switching
- Sharp, tactile response
- Long travel

LED Specs.	Units	Blue	Red	Green	Yellow
Forward Current	mA	30	40	30	30
Forward Voltage	20mA	3.5-4.0 VDC	1.5-2.4 VDC	1.7-2.8 VDC	1.7-2.8 VDC
Luminous Intensity	mcd	350-700	75-120	60-100	45-75

### 6mm x 6mm

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Contact Material	Act. Height Dim. (A)	Operating Force (g)	Price Each			
						1	10	25	50
612-TL1150AF070Q	TL1150AF070Q	D	Silver	5.75mm	F070	.50	.48	.472	.454

### 4.5mm, SMT Low Profile

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Contact Material	Act. Height Dim. (A)	Operating Force (g)	Price Each			
						1	10	25	50
612-TL3315NF100Q	TL3315NF100Q	E	Silver	Gull Wing	100g	.19	.189	.182	.175
612-TL3315NF160Q	TL3315NF160Q	E	Silver	Gull Wing	160g	.19	.189	.182	.175
612-TL3315NF250Q	TL3315NF250Q	E	Silver	Gull Wing	250g	.19	.189	.182	.175

### Specifications:

- Contact Rating: 50mA @ 12VDC
- Life Expectancy: 30,000 cycles
- Contact Resistance: 500mΩ
- Operating Temperature: -25°C to 85°C

LED Specs.	Units	Green	Red	Yellow	Blue	White
Forward Current	mA	30	15	20	15	30
Forward Voltage	V	1.7-2.6	1.7-2.6	1.7-2.6	3.5-3.8	3.5-4.0
Luminous Intensity @ 20mA	mcd	6	4	5	45	180

### 4.5mm x 6.8mm, SMT, LED

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Contact Material	Act. Height Dim. (A)	Operating Force (g)	LED #1	LED #2	Price Each			
								1	10	25	50
612-TL3200AF160GRQ	TL3200AF160GRQ	F	Silver	2.5mm	F160	Grn	Red	2.47	2.37	2.18	1.89
612-TL3200AF160RRQ	TL3200AF160RRQ	F	Silver	2.5mm	F160	Red	Red	2.47	2.37	2.18	1.89

### Gull Wing and Right Angle

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Contact Material	Act. Height Dim. (A)	Operating Force (g)	Price Each			
						1	10	25	50
<b>6.9mm x 2.5mm, Right Angle SMT, Gull Wing</b>									
612-TL3330AF130QG	TL3330AF130QG	G	Silver	3.5	130g	.37	.361	.348	.335
612-TL3330AF260QG	TL3330AF260QG	G	Silver	3.5	260g	.47	.448	.44	.423
<b>7.1mm, Right Angle SMT, Gull Wing</b>									
612-TL3342F160	TL3342F160QG	H	Silver	7	160g	.63	.603	.591	.569

### Features & Benefits:

- Dual Action Tact Switch
- Positive tactile feedback in 2 distinct positions
- Low profile , SMT design
- With or without actuator

### 7.2mm x 5.08mm, SMT, Gull Wing

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Contact Material	Act. Height Dim. (A)	Operating Force (g)	Price Each			
						1	10	25	50
612-TL6120AF3	TL6120AF300QG	I	Silver	4.7	300g	.97	.933	.88	.774
612-TL6120BF1	TL6120BF130QG	I	Silver	5.2	130g	.87	.848	.80	.704
612-TL6120CF1	TL6120CF160QG	I	Silver	6.9	160g	.98	.944	.891	.784
612-TL6120CF3	TL6120CF300QG	I	Silver	10	300g	.98	.944	.891	.784
612-TL6120DF3	TL6120DF300QG	I	Silver	10	300g	.98	.944	.891	.784
<b>11.5mm Sealed Right Angle</b>									
612-TL6190AF220R	TL6190AF220R	J	Gold	2.9	220g	2.39	2.21	2.07	2.02

### TL6190 Tact Switches Cap

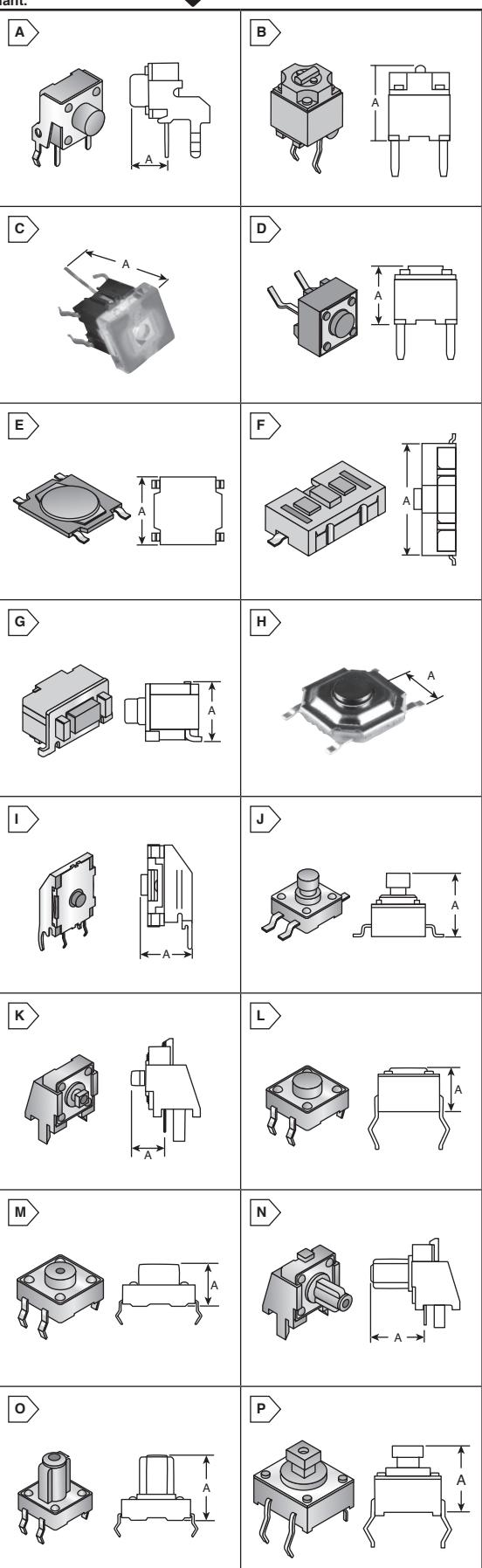
MOUSER STOCK NO.	E-Switch Part No.	Shape	Price Each			
			1	10	25	50
612-TL6190CAP	TL6190CAP	Round	.21	.204	.20	.196

### 12mm, Thru-hole

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Contact Material	Act. Height Dim. (A)	Operating Force (g)	Price Each			
						1	10	25	50
612-TL1100C	TL1100CF160Q	K	Silver	6.45	160g	.45	.429	.421	.405
612-TL1100D	TL1100DF160Q	L	Silver	4.3	160g	.45	.429	.421	.405
612-TL1100E	TL1100EF160Q	M	Silver	7.5	160g	.45	.429	.421	.405
612-TL1100G	TL1100GF160Q	N	Silver	11.2	160g	.64	.613	.601	.579
612-TL1100F	TL1100FF160Q	O	Silver	12	160g	.33	.325	.313	.302
612-TL1100H	TL1100F160Q	P	Silver	3.3	160g	.39	.381	.367	.354

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# NKK Tactile Switches



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## JB SERIES: PROCESSED SEALED LOW PROFILE TACTILES

- Power rating: 50mA @ 24VDC for 180g OF (1.76N); 125mA @ 24VDC 270g OF (2.65N)
- SPST Off-(On)
- Dome contact

MOUSER STOCK NO.	NKK Part No.	Fig.	Description	Operating Force (g)	Price Each			
					1	25	50	100
633-JB15FP	JB15FP	A	Short blue button	180	1.20	1.03	.99	.92
633-JB15KP	JB15KP	B	Short actuator	180	1.61	1.38	1.21	1.05
633-JB15HAP	JB15HAP	C	Extended actuator	270	2.76	2.36	2.04	1.87
<b>Sculptured Snap-On Caps for JB15KP and JB15HAP</b>								
633-AT4058A	AT4058A	D	Black matte finish	-	.50	.456	.402	.38
633-AT4058C	AT4058C	D	Red matte finish	-	.98	.51	.47	.43
<b>Flat Snap-On Caps for JB15KP and JB15HAP</b>								
633-AT4059A	AT4059A	E	Black glossy finish	-	.96	.90	.837	.784
633-AT4059B	AT4059B	E	White glossy finish	-	.92	.86	.80	.75
633-AT4059H	AT4059H	E	Gray glossy finish	-	1.70	1.23	1.09	1.00

## JB SERIES: ILLUMINATED, PROCESSED SEALED LOW PROFILE TACTILES

- Power rating: 50mA @ 24VDC for 180g OF (1.76N); 125mA @ 24VDC 270g OF (2.65N)

- Bright full face illumination
- Dome contact

MOUSER STOCK NO.	NKK Part No.	Fig.	Description	Price Each			
				1	25	50	100
<b>Standard OF (180g); Short Actuator; Flat Snap-on Cap</b>							
633-JB15LPC	JB15LPC-JC	F	Red LED/Flat clear lens/Red diffuser	3.22	3.05	2.89	2.64
633-JB15LPE	JB15LPE-JE	F	Yellow LED/Flat clear lens/Yellow diffuser	3.51	3.33	3.15	2.88
633-JB15LPF	JB15LPF-JF	F	Green LED/Flat clear lens/Green diffuser	3.22	3.05	2.89	2.64
<b>High OF (270g); Extended Actuator; Framed Snap-on Cap</b>							
633-JB15HBPC	JB15HBPC-JC	G	Red LED/Flat clear lens/Red diffuser	4.56	4.33	4.10	3.87
633-JB15HBPE	JB15HBPE-JE	G	Yellow LED/Flat clear lens/Yellow diffuser	5.23	4.76	4.49	4.27
633-JB15HBPF	JB15HBPF-JF	G	Green LED/Flat clear lens/Green diffuser	4.56	4.33	4.10	3.87

## JF SERIES: PROCESSED SEALED ULTRA-THIN TACTILES

- Power rating: 50mA @ 24VDC
- OF: 306g (3.0N)
- 5mm height
- SPST Off-(On)
- Dome contact

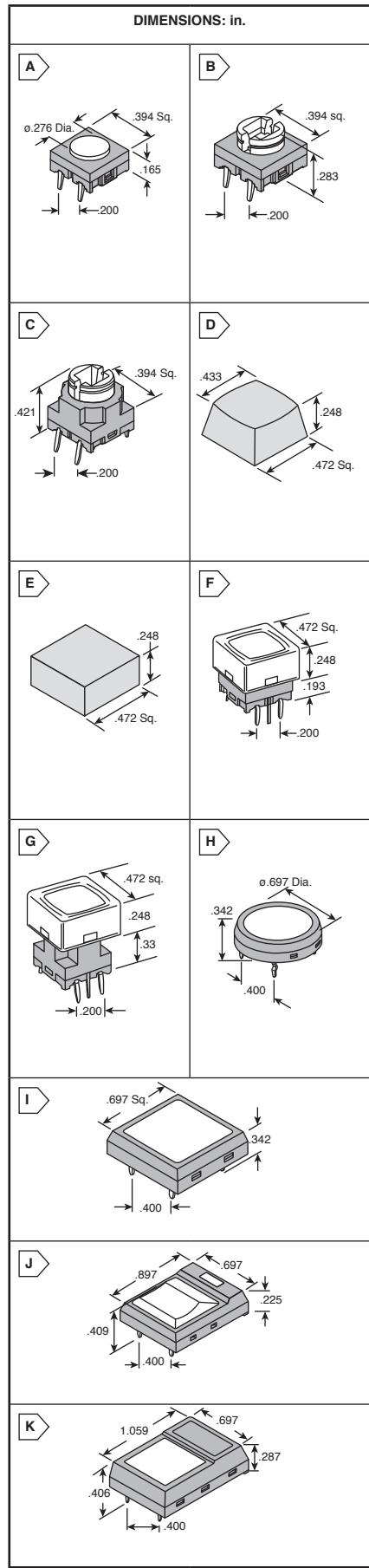
MOUSER STOCK NO.	NKK Part No.	Fig.	Description	Price Each			
				1	25	50	100
<b>Round Housing and Actuator</b>							
633-JF15CP2C	JF15CP2C	H	Black housing/Red actuator	2.24	1.92	1.85	1.79
633-JF15CP2D	JF15CP2D	H	Black housing/Orange actuator	2.93	2.51	2.23	2.07
633-JF15CP2F	JF15CP2F	H	Black housing/Green actuator	3.66	3.13	2.78	2.58
633-JF15CP2G	JF15CP2G	H	Black housing/Blue actuator	2.93	2.51	2.23	2.07
633-JF15CP2H	JF15CP2H	H	Black housing/Gray actuator	3.41	3.30	3.19	3.09
<b>Square Housing and Actuator</b>							
633-JF15SP1C	JF15SP1C	I	Black housing/Red actuator	3.66	3.14	2.79	2.59
633-JF15SP1D	JF15SP1D	I	Black housing/Orange actuator	2.93	2.51	2.23	2.07
633-JF15SP1F	JF15SP1F	I	Black housing/Green actuator	3.66	3.04	2.79	2.75
633-JF15SP1G	JF15SP1G	I	Black housing/Blue actuator	3.66	3.14	2.79	2.59
633-JF15SP1H	JF15SP1H	I	Black housing/Gray actuator	3.88	3.31	3.19	3.09

## JF SERIES: ILLUMINATED, PROCESSED SEALED ULTRA-THIN TACTILES

- Power rating: 50mA @ 24VDC
- OF: 306g (3.0N) for flush actuator; 204g (2.0N) for sculptured actuator
- Spot or full face illumination
- SPST Off-(On)
- Dome contact

MOUSER STOCK NO.	NKK Part No.	Fig.	Description	Price Each			
				1	25	50	100
<b>Spot Illuminated, Sculptured Actuator</b>							
633-JF15RP3HC	JF15RP3HC	J	Gray actuator/Red LED	4.41	4.23	4.10	3.85
633-JF15RP3HF	JF15RP3HF	J	Gray actuator/Green LED	4.93	4.30	4.05	3.85
633-JF15RP3GF	JF15RP3GF	J	Blue actuator/Green LED	5.23	4.98	4.60	4.23
<b>Full Face Illuminated, Square Actuator</b>							
633-JF15AP1CC	JF15AP1CC	K	Red actuator/Red LED	5.30	4.80	4.70	4.25
633-JF15AP1EE	JF15AP1EE	K	Yellow actuator/Yellow LED	6.82	6.08	5.90	5.36

For quantities greater than listed, call for quote.



# OMRON Tactile Switches

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OMRON

## B3 SERIES: MECHANICAL KEYSWITCHES (TACTILE)

### Specifications:

- Contact form: SPST-NO
- Switching capacity: 50mA 24VDC (12VDC for B3SL/B3WN)

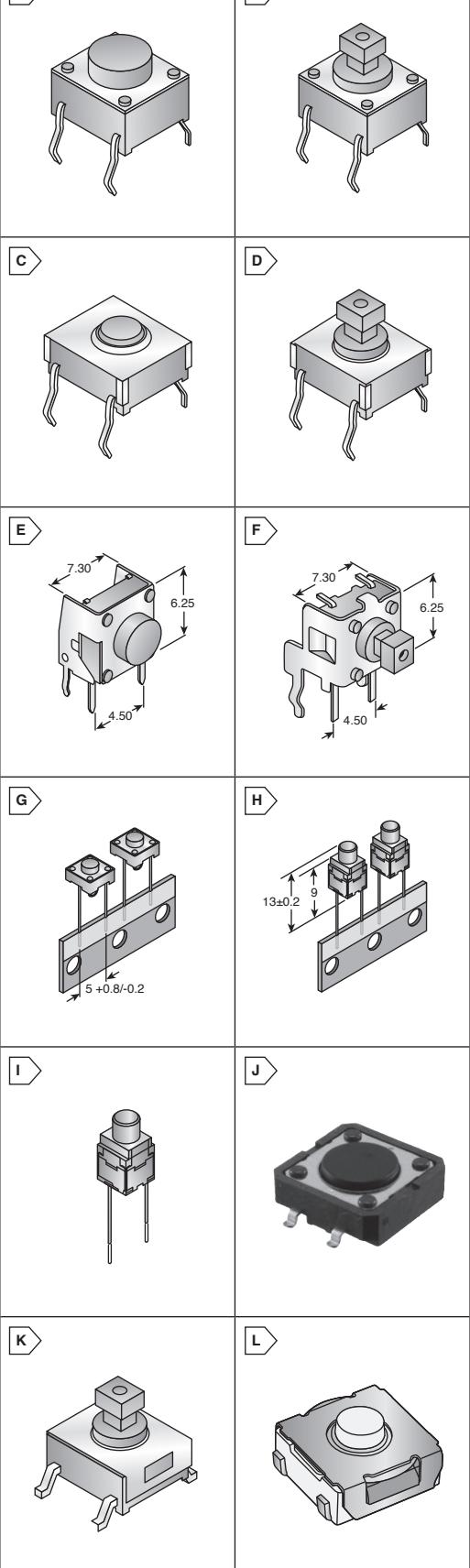
\* Full reel is 1000 \*\* Full reel is 4000 † Full reel is 4200

### Features:

- Miniature, space-saving tactile switch provides easy mounting

For quantities greater than listed, call for quote.

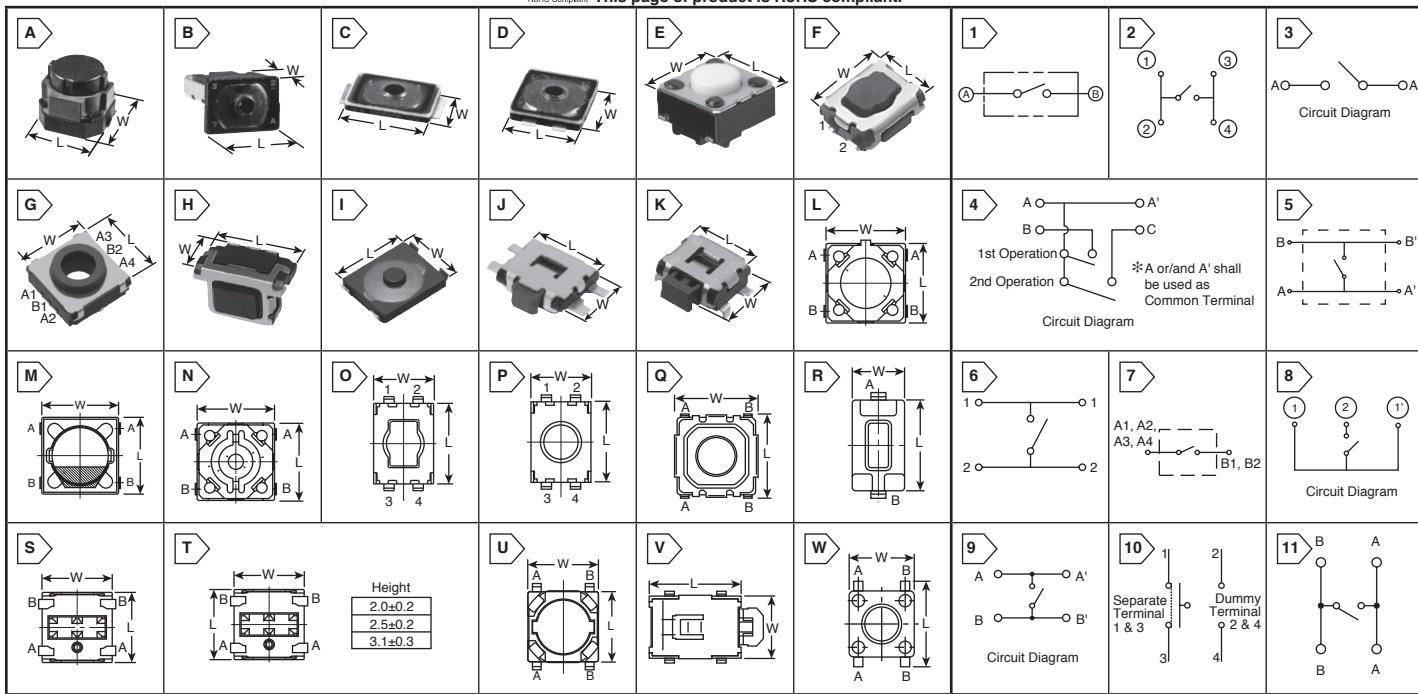
MOUSER STOCK NO.	Omron Part No.	Fig.	Size (mm)	Plunger	Switch Height (mm)	Operating Force (gF)	Ground Terminal	Price Each			
								1	25	50	100
<b>Standard Type, Thru-Hole</b>											
653-B3F-1006	B3F-1006	A	6x6	Flat	4.30	50	No	.68	.57	.51	.47
653-B3F-1000	B3F-1000	A	6x6	Flat	4.30	100	No	.24	.235	.222	.217
653-B3F-1100	B3F-1100	A	6x6	Flat	4.30	100	Yes	.32	.306	.274	.251
653-B3F-1002	B3F-1002	A	6x6	Flat	4.30	150	No	.34	.329	.321	.316
653-B3F-1102	B3F-1102	A	6x6	Flat	4.30	150	Yes	.33	.288	.258	.238
653-B3F-1005	B3F-1005	A	6x6	Flat	4.30	260	No	.33	.298	.266	.244
653-B3F-1020	B3F-1020	A	6x6	Flat	5.00	100	No	.34	.313	.272	.248
653-B3F-1120	B3F-1120	A	6x6	Flat	5.00	100	Yes	.35	.315	.28	.252
653-B3F-1022	B3F-1022	A	6x6	Flat	5.00	150	No	.27	.256	.222	.206
653-B3F-1122	B3F-1122	A	6x6	Flat	5.00	150	Yes	.36	.316	.281	.257
653-B3F-1025	B3F-1025	A	6x6	Flat	5.00	260	No	.38	.337	.302	.277
653-B3F-1060	B3F-1060	A	6x6	Flat	7.00	100	No	.32	.289	.257	.244
653-B3F-1062	B3F-1062	A	6x6	Flat	7.00	150	No	.53	.526	.503	.468
653-B3F-1070	B3F-1070	A	6x6	Flat	9.50	100	No	.35	.307	.277	.258
653-B3F-1072	B3F-1072	A	6x6	Flat	9.50	150	No	.29	.286	.282	.28
653-B3F-1050	B3F-1050	B	6x6	Projected	7.30	100	No	.29	.272	.251	.229
653-B3F-1150	B3F-1150	B	6x6	Projected	7.30	100	Yes	.33	.297	.268	.239
653-B3F-1052	B3F-1052	B	6x6	Projected	7.30	150	No	.29	.272	.251	.247
653-B3F-1152	B3F-1152	B	6x6	Projected	7.30	150	Yes	.33	.298	.265	.238
653-B3F-1055	B3F-1055	B	6x6	Projected	7.30	260	No	.47	.362	.342	.329
653-B3F-4000	B3F-4000	C	12x12	Flat	4.30	130	No	.41	.375	.346	.34
653-B3F-4005	B3F-4005	C	12x12	Flat	4.30	260	No	.41	.375	.299	.287
653-B3F-4050	B3F-4050	D	12x12	Projected	7.30	130	No	.41	.375	.346	.315
653-B3F-4150	B3F-4150	D	12x12	Projected	7.30	130	Yes	.49	.451	.416	.379
653-B3F-4055	B3F-4055	D	12x12	Projected	7.30	260	No	.41	.375	.346	.315
653-B3F-4155	B3F-4155	D	12x12	Projected	7.30	260	Yes	.46	.425	.392	.386
<b>Vertical Type, Thru-Hole</b>											
653-B3F-3100	B3F-3100	E	6x6	Flat	3.15	100	Yes	.47	.424	.376	.347
653-B3F-3102	B3F-3102	E	6x6	Flat	3.15	150	No	.46	.411	.366	.329
653-B3F-3105	B3F-3105	E	6x6	Flat	3.15	260	Yes	.58	.525	.466	.42
653-B3F-3120	B3F-3120	E	6x6	Flat	3.85	100	Yes	.41	.375	.346	.315
653-B3F-3122	B3F-3122	E	6x6	Flat	3.85	150	No	.41	.374	.346	.319
653-B3F-3125	B3F-3125	E	6x6	Flat	3.85	260	Yes	.58	.525	.466	.42
653-B3F-3150	B3F-3150	F	6x6	Projected	6.15	100	Yes	.38	.353	.326	.301
653-B3F-3152	B3F-3152	F	6x6	Projected	6.15	150	Yes	.41	.374	.346	.319
653-B3F-3155	B3F-3155	F	6x6	Projected	6.15	260	Yes	.52	.457	.41	.377
<b>Gold-Plated, Thru-Hole</b>											
653-B3F-1002-G	B3F-1002-G	A	6x6	Flat	4.30	180	No	2.98	2.68	2.38	2.14
653-B3F-1022-G	B3F-1022-G	A	6x6	Flat	5.00	180	No	2.98	2.68	2.38	2.14
<b>Long Service Life, Thru-Hole</b>											
653-B3F-5000	B3F-5000	C	12x12	Flat	4.30	130	No	.58	.507	.453	.416
653-B3F-5050	B3F-5050	C	12x12	Flat	7.30	130	No	.52	.494	.463	.417
653-B3F-5150	B3F-5150	D	12x12	Projected	7.30	130	No	.50	.485	.47	.463
<b>High-Reliability, Gold-Plated Contact, Thru-Hole</b>											
653-B3F-5001	B3F-5001	C	12x12	Flat	4.30	130	No	2.91	2.58	2.24	2.13
653-B3F-5051	B3F-5051	D	12x12	Projected	7.30	130	No	2.80	2.45	2.19	2.01
<b>Taped Radial (Auto Insertion), Thru-Hole, Full Reel is 1000</b>											
653-B3F-6000	B3F-6000	G	6x6	Flat	4.30	100	No	.35	.328	.307	.273
653-B3F-60023	B3F-6002	G	6x6	Flat	4.30	150	No	.43	.38	.342	.314
653-B3F-60223	B3F-6022	G	6x6	Flat	5.00	150	No	.34	.319	.294	.269
653-B3F-60503	B3F-6050	H	6x6	Projected	7.30	100	No	.48	.421	.377	.346
<b>Sealed, Thru-Hole</b>											
653-B3W-1000	B3W-1000	A	6x6	Flat	4.30	160	No	.52	.511	.454	.409
653-B3W-1002	B3W-1002	A	6x6	Flat	4.30	230	No	.45	.416	.384	.35
653-B3W-1050	B3W-1050	B	6x6	Projected	7.30	160	No	.50	.461	.422	.39
653-B3W-1052	B3W-1052	B	6x6	Projected	7.30	230	No	.56	.545	.53	.507
653-B3W-4000	B3W-4000	A	12x12	Flat	4.30	200	No	.57	.559	.545	.519
653-B3W-4100	B3W-4100	A	12x12	Flat	4.30	200	Yes	.65	.574	.51	.459
653-B3W-4005	B3W-4005	A	12x12	Flat	4.30	350	No	.65	.588	.523	.46
653-B3W-4050	B3W-4050	B	12x12	Projected	7.30	200	No	.57	.525	.484	.441
653-B3W-4055	B3W-4055	B	12x12	Projected	7.30	350	No	.57	.525	.484	.441
653-B3W-4155	B3W-4155	B	12x12	Projected	7.30	350	Yes	.68	.608	.54	.486
<b>Double-Sealed, Thru-Hole</b>											
653-B3WN-6002	B3WN-6002	I	8x8	Projected	13.00	200	No	.55	.504	.474	.422
<b>Standard Type, SMD</b>											
653-B3FS-1000	B3FS-1000	J	6x6	Flat	3.10	100	No	.49	.455	.423	.381
653-B3FS-1002	B3FS-1002	J	6x6	Flat	3.10	150	No	.57	.55	.527	.479
653-B3FS-1010	B3FS-1010	J	6x6	Flat	4.30	100	No	.64	.568	.508	.466
653-B3FS-1012	B3FS-1012	J	6x6	Flat	4.30	150	No	.65	.589	.524	.471
653-B3FS-1050	B3FS-1050	K	6x6	Projected	7.30	100	No	2.25	2.02	1.79	1.61
653-B3FS-1052	B3FS-1052	K	6x6	Projected	7.30	150	No	2.12	1.90	1.69	1.52
<b>Standard Type, SMD, Embossed Tape Packaging, Full Reel is 3000</b>											
653-B3FS-1000P	B3FS-1000P	J	6x6	Flat	3.10	100	No	.59	.528	.469	.422
653-B3FS-1002P	B3FS-1002P	J	6x6	Flat	3.10	150	No	.55	.496	.432	.388
653-B3FS-4002P	B3FS-4002P	J	12x12	Flat	4.30	150	No	1.32	1.05	1.00	.95
<b>For High-Density Packaging, SMD</b>											
653-B3S-1000	B3S-1000	J	6x6	Flat	4.30	160	No	.58	.536	.494	.45
653-B3S-1100	B3S-1100	J	6x6	Flat	4.30	160	Yes	.69	.62	.551	.496
653-B3S-1002	B3S-1002	J	6x6	Flat	4.30	230	No	.58	.536	.494	.45
653-B3S-1102	B3S-1102	J	6x6	Flat	4.30	230	Yes	.69	.62	.551	.496
<b>For High-Density Packaging, SMD, Embossed Tape Packaging, Full Reel is 3000</b>											
653-B3S-1000P	B3S-1000P	J	6x6	Flat	4.30	160	No	.60	.552	.51	.463
* 653-B3S-1100P	B3S-1100P	J	6x6	Flat	4.30	160	Yes	.63	.56	.52	.47
653-B3S-1002P	B3S-1002P	J	6x6	Flat	4.30	230	No	.70	.647	.594	.548
* 653-B3S-1102P	B3S-1102P	J	6x6	Flat	4.30	230	Yes	.65	.587	.522	.469
<b>Sealed, SMD</b>											
653-B3SN-3012	B3SN-3012	L	6x6	Flat	3.10	160	No	.92	.911	.81	.728
653-B3SN-3112	B3SN-3112	L	6x6	Flat	3.10	160	Yes	.81	.742	.685	.623
<b>Sealed, SMD, Embossed Tape Packaging, Full Reel is 3000</b>											
653-B3SN-3012P	B3SN-3012P	L	6x6	Flat	3.10	160	No	.87	.79	.734	.67
653-B3SN-3112P	B3SN-3112P	L	6x6	Flat	3.10	160	Yes	.87	.796	.735	.67
** 653-B3SL-1002P	B3SL-1002P	L	6x6	Flat	3.40	200	No	.68	.643	.568	.513
† 653-B3SL-1022P	B3SL-1022P	L	6x6	Flat	5.10	200	No	.65	.581	.549	.494



# PANASONIC Tactile Switches

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Panasonic



## Panasonic Tactile Switches

### SMD LIGHT TOUCH SWITCHES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Dimensions: mm			Operating Force	Travel (mm)	Price Each	
			L	W	H			1	10
667-EVP-ASAC1A	EVP-ASAC1A	A1	6.0	6.1	5.0	1.6N	1.3	.70	.53
667-EVP-ASBC1A	EVP-ASBC1A	A1	6.0	6.1	5.0	2.0N	1.3	.70	.53
667-EVP-ASDC1A	EVP-ASDC1A	A1	6.0	6.1	5.0	2.5N	1.3	.70	.53
667-EVP-ASEC1A	EVP-ASEC1A	A1	6.0	6.1	5.0	3.0N	1.3	.70	.53
667-EVP-ASF1C1	EVP-ASF1C1	A1	6.0	6.1	5.0	3.5N	1.3	.70	.53
667-EVP-AVAA1A	EVP-AVAA1A	B2	2.8	2.3	1.95	1.6N	.13	.78	.59
667-EVP-AWBA2A	EVP-AWBA2A	C3	3.0	2.0	.60	1.6N	.13	.78	.59
667-EVP-AWCA2A	EVP-AWCA2A	C3	3.0	2.0	.60	2.4N	.13	.78	.59
667-EVP-AWEA2A	EVP-AWEA2A	C3	3.0	2.0	.60	3.3N	.15	.78	.59
667-EVP-AXBA1A	EVP-AXBA1A	D4	3.0	2.0	.60	0.7/2.0N	.07/.16	.91	.72
667-EVP-Q2201W	EVQ-Q2201W	E5	6.5	6.0	2.5	1.0N	0.3	.39	.273
667-EVP-Q2202W	EVQ-Q2202W	E5	6.5	6.0	2.5	3.5N	.25	.39	.273
667-EVP-Q2203W	EVQ-Q2203W	E5	6.5	6.0	3.1	3.5N	.25	.39	.273
667-EVP-Q2B01W	EVQ-Q2B01W	E5	6.5	6.0	2.0	0.5N	0.2	.39	.273
667-EVP-Q2B02W	EVQ-Q2B02W	E5	6.5	6.0	2.5	0.5N	0.2	.39	.273
667-EVP-Q2D01W	EVQ-Q2D01W	E5	6.5	6.0	2.5	0.5N	0.2	.39	.273
667-EVP-Q2D02W	EVQ-Q2D02W	E5	6.5	6.0	2.5	0.5N	0.2	.39	.273
667-EVP-Q2D03W	EVQ-Q2D03W	E5	6.5	6.0	3.1	0.5N	0.2	.39	.273
667-EVP-Q2F01W	EVQ-Q2F01W	E5	6.5	6.0	2.0	1.0N	0.3	.39	.273
667-EVP-Q2F02W	EVQ-Q2F02W	E5	6.5	6.0	2.5	1.0N	0.3	.39	.273
667-EVP-Q2F03W	EVQ-Q2F03W	E5	6.5	6.0	3.1	1.0N	0.3	.39	.273
667-EVP-Q2H01W	EVQ-Q2H01W	E5	6.5	6.0	2.0	1.0N	0.3	.39	.273
667-EVP-Q2H02W	EVQ-Q2H02W	E5	6.5	6.0	2.5	1.0N	0.3	.39	.273
667-EVP-Q2H03W	EVQ-Q2H03W	E5	6.5	6.0	3.1	1.0N	0.3	.39	.273
667-EVP-Q2K01W	EVQ-Q2K01W	E5	6.5	6.0	2.0	1.3N	.25	.39	.273
667-EVP-Q2K02W	EVQ-Q2K02W	E5	6.5	6.0	2.5	1.3N	.25	.39	.273
667-EVP-Q2M01W	EVQ-Q2M01W	E5	6.5	6.0	2.0	1.3N	.25	.39	.273
667-EVP-Q2M02W	EVQ-Q2M02W	E5	6.5	6.0	2.5	1.3N	.25	.39	.273
667-EVP-Q2M03W	EVQ-Q2M03W	E5	6.5	6.0	3.1	1.3N	.25	.39	.273
667-EVP-Q2P01W	EVQ-Q2P01W	E5	6.5	6.0	2.0	1.6N	.25	.39	.273
667-EVP-Q2S01W	EVQ-Q2S01W	E5	6.5	6.0	2.0	1.6N	.25	.39	.273
667-EVP-Q2S02W	EVQ-Q2S02W	E5	6.5	6.0	2.5	1.6N	.25	.39	.273
667-EVP-Q2S03W	EVQ-Q2S03W	E5	6.5	6.0	3.1	1.6N	.25	.39	.273
667-EVP-Q2U01W	EVQ-Q2U01W	E5	6.5	6.0	2.0	2.6N	.25	.39	.273
667-EVP-Q2U02W	EVQ-Q2U02W	E5	6.5	6.0	2.5	2.6N	.25	.39	.273
667-EVP-Q2W02W	EVQ-Q2W02W	E5	6.5	6.0	2.5	2.6N	.25	.39	.273
667-EVP-Q2W03W	EVQ-Q2W03W	E5	6.5	6.0	3.1	2.6N	.25	.39	.273
667-EVP-Q2Y01W	EVQ-Q2Y01W	E5	6.5	6.0	2.0	3.5N	.25	.39	.273
667-EVP-Q2Y02W	EVQ-Q2Y02W	E5	6.5	6.0	2.5	3.5N	.25	.39	.273

### LIGHT TOUCH SUBMINIATURE TACTILE SWITCHES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Dimensions: mm			Operating Force	Travel (mm)	Price Each	
			L	W	H			1	10
667-EVP-AA002K	EVP-AA002K	F6	3.5	2.9	1.7	1.0N	0.15±0.1	1.00	.794
667-EVP-AA202K	EVP-AA202K	F6	3.5	2.9	1.7	1.6N	0.15±0.1	1.00	.794
667-EVP-AA402W	EVP-AA402W	F6	3.5	2.9	1.7	2.4N	0.15±0.1	1.00	.794
667-EVP-AA602W	EVP-AA602W	F6	3.5	2.9	1.7	3.5N	0.15±0.1	1.00	.794
667-EVP-ADK04K	EVP-ADK04K	G7	9.8	10.15	4.7	4N	1.0±0.15	1.62	1.32
667-EVP-AEBC2A	EVP-AEBC2A	H8	4.5	2.5	2.9	1.6N	0.15	1.09	.866
667-EVP-AFB70	EVP-AFB70	I9	3.0	2.6	0.7	2.4N	0.15	1.05	.83
667-EVP-ANDA1A	EVP-ANDA1A	J6	3.5	2.9	1.2	2.2N	0.2	.86	.68

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### SMD LOW PROFILE TACTILE SWITCHES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Dimensions: mm			Operating Force	Travel (mm)	Price Each	
			L	W	H			1	10
667-EVQ-9P701K	EVQ-9P701K	K6	3.5	2.9	1.35	1.6N	0.2±0.05	.85	.64
667-EVQ-P40B3M	EVQ-P40B3M	K6	3.5	2.9	1.35	1.0N	0.25	.99	.784
667-EVQ-P42B3M	EVQ-P42B3M	K6	4.7	3.5	3.00	1.6N	0.25	.99	.784
667-EVQ-P44B3M	EVQ-P44B3M	K6	4.7	3.5	3.00	2.4N	0.25±0.15	.99	.784
667-EVQ-P6P6B40	EVQ-P6P6B40	L10	4.0	4.0	0.43	1.6N	0.2	.47	.356
667-EVQ-P6BDB5	EVQ-P6BDB5	M10	4.0	4.0	0.35	1.6N	0.2	.44	.312
667-EVQ-P6LB55	EVQ-P6LB55	N10	4.0	4.0	0.58	1.6N	0.2	.47	.338
667-EVQ-9P6B40	EVQ-9P6B40	L10	4.0	4.0	0.43	2.4N	0.2	.47	.356
667-EVQ-P4202M	EVQ-P4202M	K6	4.7	3.5	2.10	2.4N	0.7	.82	.651
667-EVQ-P2402W	EVQ-P2402W	O10	4.7	3.5	2.50	2.4N	0.7	.82	.651
667-EVQ-P2602W	EVQ-P2602W	O10	4.7	3.5	2.50	3.5N	0.7	.82	.651
667-EVQ-P2H02B	EVQ-P2H02B	P10	4.7	3.5	2.50	2.5N	0.7	.92	.733
667-EVQ-P2K02Q	EVQ-P2K02Q	P10	4.7	3.5	2.50	3.5N	0.7	.82	.651
667-EVQ-P2T02W	EVQ-P2T02W	O8	4.7	3.5	2.50	2.4N	0.7	.92	.733
667-EVQ-P4HB3B	EVQ-P4HB3B	O6	4.7	3.5	3.00	2.5N	0.70±0.2	1.01	.804
667-EVQ-P4KB3Q	EVQ-P4KB3Q	O6	4.7	3.5	3.00	3.5N	0.70±0.2	1.01	.804
667-EVQ-P4MB3K	EVQ-P4MB3K	O6	4.7	3.5	3.00	5.0N	0.70±0.3	1.01	.804
667-EVQ-PLHA15	EVQ-PLHA15	Q10	4.9	4.9	1.50	1.6N	0.25	.64	.485
667-EVQ-PLMA15	EVQ-PLMA15	Q10	4.9	4.9	1.50	2.6N	0.25	.83	.627
667-EVQ-PE104K	EVQ-PE104K	R11	6.0	3.5	4.30	1.0N	0.25	.72	.542
667-EVQ-PNQ04M	EVQ-PNQ04M	R11	6.0	3.5	4.30	1.6N	0.25	.72	.542
667-EVQ-P0N02B	EVQ-P0N02B	S10	6.0	6.0	2.50	0.6N	0.25	.46	.33
667-EVQ-P0P02B	EVQ-P0P02B	S10	6.0	6.0	2.50	0.6N	0.25	.46	.33
667-EVQ-P0Q02Q	EVQ-P0Q02Q	S10	6.0	6.0	2.50	1.0N	0.25	.46	.33
667-EVQ-P0S02Q	EVQ-P0S02Q	S10	6.0	6.0	2.50	1.0N	0.25	.46	.33
667-EVQ-P2B03W	EVQ-P2B03W	T10	6.0	6.0	3.10	0.5N	0.25	.39	.273
667-EVQ-Q2K03W	EVQ-Q2K03W	T10	6.0	6.0	3.10	1.3N	0.25	.39	.273
667-EVQ-Q2P02W	EVQ-Q2P02W	T10	6.0	6.0	2.50	1.6N	0.25	.39	.273
667-EVQ-Q2U03W	EVQ-Q2U03W	T10	6.0	6.0	3.10	2.6N	0.25	.39	.273
667-EVQ-Q2Y03W	EVQ-Q2Y03W	T10	6.0	6.0	3.10	3.5N	0.25	.39	.273
667-EVQ-P1D05M	EVQ-P1D05M	U10	6.0	6.0	5.00	2.5N	1.3	.92	.733
667-EVQ-P1K05M	EVQ-P1K05M	U10	6.0	6.0	5.00	2.2N	1.3	.92	.733
667-EVQ-9P105M	EVQ-9P105M	U10	6.0	6.0	5.00	3.5N	1.3	.92	.733
667-EVQ-PVW05K	EVQ-PVW05K	K6	6.0	6.1	5.00	3.5N	1.30-0.30	.67	.508
667-EVQ-PSH02K	EVQ-PSH02K	V10	6.1	4.0	1.80	2.2N	0.3	.71	.535

### THRU-HOLE TACTILE SWITCHES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Dimensions: mm			Operating Force	Travel (mm)	Price Each	
			L	W	H			1	10
667-EVQ-PAC04M	EVQ-PAC04M	W11	6.0	6.0	4.30	1.0N	0.25	.27	.19
667-EVQ-PAC07K	EVQ-PAC07K	W11	6.0	6.0	7.00	1.0N	0.25	.27	.19
667-EVQ-PAC09K	EVQ-PAC09K	W11	6.0	6.0	9.50	1.0N	0.25	.27	.19
667-EVQ-PAD04M	EVQ-PAD04M	W11	6.0	6.0	4.30	1.3N	0.25	.27	.19
667-EVQ-PAD05R	EVQ-PAD05R	W11	6.0	6.0	5.00	1.3N	0.25	.27	.19
667-EVQ-PAE04M	EVQ-PAE04M	W11	6.0	6.0	4.30	1.6N	0.25	.27	.205
667-EVQ-PAE05R	EVQ-PAE05R	W11	6.0	6.0	5.00	1.6N	0.25	.27	.19
667-EVQ-PAE09									

# Tactile Switches and Key Caps

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## APEM SEALED TACTILE SWITCHES

- Dielectric withstanding voltage: 250VAC
- Contact Form: SPST-NO

- Contact Resistance: 100mΩ Max.
- Operating Force: 160g

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Apem Part No.	Fig.	Termination Type	Height (mm)	Price Each			
					1	25	100	500
642-MJTP1119	MJTP1119	A	Thru-hole	5	.65	.57	.492	.479
642-MJTP1129	MJTP1129	B	Thru-hole	4.35	.77	.682	.589	.574
642-MJTPSJW69N	MJTPSJW69N	C	SMT	3.7	.94	.825	.609	.526
642-MJTPSJW66N	MJTPSJW66N	D	SMT	3.1	.62	.594	.566	.532
642-MJTPSMW	MJTPSMW	E	SMT	3.1	.52	.494	.388	.368
642-MJTPSHWA	MJTPSHWA	F	Thru-hole	2.3	.75	.749	.705	.663
642-MJTPSHWB	MJTPSHWB	F	Thru-hole	3.7	.63	.599	.47	.446

## CHERRY TACTILE KEYSWITCHES

- Switching Current: 10mA AC/DC max. 10μA DC Min.
- Switching Voltage: 12VAC/DC
- Standard force

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cherry Part No.	Fig.	Description	Actuator Travel (mm)	Price Each			
					1	10	100	500
540-ML1A-11JW	ML1A-11JW	G	Tactile, pcb mnt, integrated jumper wire	3.0-0.5	1.10	1.02	.907	.833
540-MX1A-C1NN	MX1A-C1NN	H	Soft tactile, face plate mount	4.0-0.4	1.23	1.15	1.01	.935
540-MX1A-E1NN	MX1A-E1NN	H	Click tactile, face plate mount	4.0-0.4	1.23	1.15	1.01	.935
540-MX1A-C1NW	MX1A-C1NW	H	Soft tactile, pcb mount	4.0-0.4	1.23	1.15	1.01	.935
540-MX1A-E1NW	MX1A-E1NW	H	Click tactile, pcb mount	4.0-0.4	1.12	1.05	.925	.85
540-MX1A-11NN	MX1A-11NN	H	Linear, face plate mount	4.0-0.4	.85	.798	.703	.646
540-MX1A-11NW	MX1A-11NW	H	Linear, pcb mount	4.0-0.4	.81	.756	.666	.612

## OMRON B3AL SERIES: LONG-STROKE TACTILE SWITCHES

### Specifications:

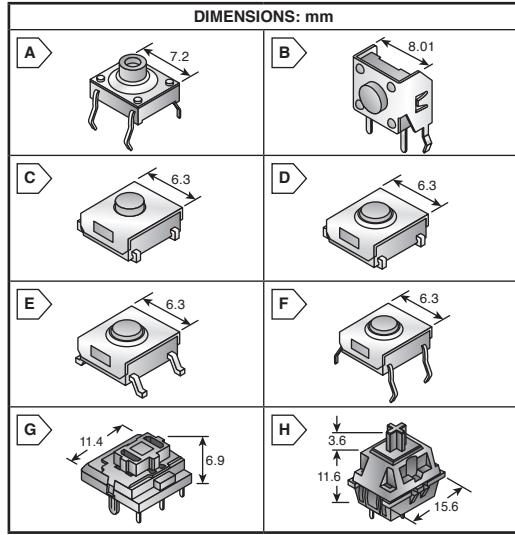
- Contact form: SPST-NO
- Switching capacity: 1-50mA @ 5-16VDC (resistive load)
- Dielectric strength: 20VAC, 50/60Hz for 1 Min.

### Features:

- Miniature, space-saving tactile switch provides long service life and easy mounting
- Ideal for applications such as audio and measuring instruments

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Operating Force (N)	Releasing Force (N) (Min.)	Color of Button	Price Each			
					1	25	50	100
653-B3AL-1000P	B3AL-1000P	1.96	0.24	Red	1.79	1.61	1.43	
653-B3AL-1002P	B3AL-1002P	3.00	0.60	Black	1.79	1.61	1.43	
653-B3AL-1003P	B3AL-1003P	3.50	0.70	White (milky white)	1.79	1.61	1.43	



## OMRON B3U SERIES: ULTRA-SMALL TACTILE SWITCHES

### Specifications:

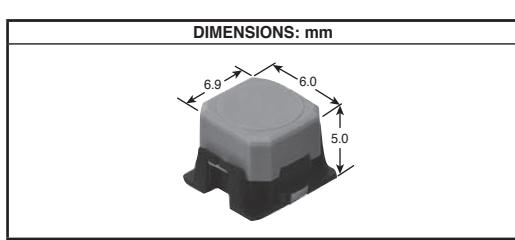
- Contact form: SPST-NO
- Switching capacity: 1-50mA @ 5-12VDC (resistive load)
- Contact resistance: 100mΩ Min. (@ 100VDC)

### Features:

- Dust-proof construction provides high reliability in dusty environments
- Ideal for high-density mounting

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig. O.F.	Ground Terminal	Actuation	Locating Pin	Price Each				
						1	25	50	100	
653-B3U-1000P	B3U-1000P	A	153g	No	Top	Without boss	1.03	.922	.824	.746
653-B3U-1000P-B	B3U-1000P-B	A	153g	No	Top	With boss	1.03	.922	.824	.746
653-B3U-100P	B3U-1100P	B	153g	Yes	Top	Without boss	1.03	.922	.82	.746
653-B3U-1100P-B	B3U-1100P-B	B	153g	Yes	Top	With boss	1.03	.922	.824	.746
653-B3U-3000P	B3U-3000P	C	162g	No	Side	Without boss	1.03	.922	.824	.746
653-B3U-3000P-B	B3U-3000P-B	C	162g	No	Side	With boss	1.03	.927	.824	.741
653-B3U-3100P	B3U-3100P	D	162g	Yes	Side	Without boss	1.03	.927	.824	.741
653-B3U-3100P-B	B3U-3100P-B	D	162g	Yes	Side	With boss	1.03	.927	.824	.741



## OMRON B32 SERIES: KEY CAPS FOR MECHANICAL KEYSWITCHES

- Key top designed especially for projected-plunger type B3F, B3FS, and B3W switches

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	For Use With	Size (mm)	Color	Price Each				Full Reel Quantity	Price Per Piece
					1	25	50	100		
653-B32-1000	B32-1000	6mm Keyswitches	4 x 4	Light gray	.25	.227	.213	.193	2,000	.15
653-B32-1010	B32-1010	6mm Keyswitches	4 x 4	Black	.23	.221	.202	.189	2,000	.15
653-B32-1020	B32-1020	6mm Keyswitches	4 x 4	Orange	.29	.261	.232	.209	1,000	.166
653-B32-1030	B32-1030	6mm Keyswitches	4 x 4	Yellow	.23	.216	.199	.183	2,000	.143
653-B32-1040	B32-1040	6mm Keyswitches	4 x 4	Blue	.25	.226	.214	.202	2,000	.155
653-B32-1050	B32-1050	6mm Keyswitches	4 x 4	Green	.22	.21	.19	.18	1,000	.158
653-B32-1060	B32-1060	6mm Keyswitches	4 x 4	White	.25	.228	.214	.204	2,000	.149
653-B32-1080	B32-1080	6mm Keyswitches	4 x 4	Red	.25	.228	.214	.204	2,000	.149
653-B32-2010	B32-2010	6mm Keyswitches	6 dia.	Black	.84	.758	.671	.62	1,000	.459
653-B32-1200	B32-1200	12mm Keyswitches	9 x 9	Light gray	.20	.20	.183	.171	2,000	.142
653-B32-1210	B32-1210	12mm Keyswitches	9 x 9	Black	.23	.221	.212	.194	2,000	.148
653-B32-1230	B32-1230	12mm Keyswitches	9 x 9	Yellow	.28	.261	.232	.209	2,000	.161
653-B32-1240	B32-1240	12mm Keyswitches	9 x 9	Blue	.25	.227	.213	.193	2,000	.15
653-B32-1260	B32-1260	12mm Keyswitches	9 x 9	White	.20	.196	.19	.184	2,000	.152
653-B32-1270	B32-1270	12mm Keyswitches	9 x 9	Light green	.29	.261	.232	.209	1,000	.165
653-B32-1280	B32-1280	12mm Keyswitches	9 x 9	Red	.27	.246	.219	.197	2,000	.149
653-B32-1300	B32-1300	12mm Keyswitches	12 x 12	Light gray	.25	.228	.214	.194	2,000	.149
653-B32-1310	B32-1310	12mm Keyswitches	12 x 12	Black	.25	.221	.212	.199	2,000	.146
653-B32-1320	B32-1320	12mm Keyswitches	12 x 12	Orange	.30	.275	.244	.22	1,000	.175
653-B32-1340	B32-1340	12mm Keyswitches	12 x 12	Blue	.28	.272	.267	.261	2,000	.151
653-B32-1350	B32-1350	12mm Keyswitches	12 x 12	Green	.29	.261	.232	.209	1,000	.166
653-B32-1360	B32-1360	12mm Keyswitches	12 x 12	White	.25	.228	.214	.194	2,000	.145
653-B32-1380	B32-1380	12mm Keyswitches	12 x 12	Red	.25	.228	.214	.194	2,000	.161
653-B32-1600	B32-1600	12mm Keyswitches	9.5 dia.	Light gray	.41	.366	.337	.316	1,000	.232
653-B32-1610	B32-1610	12mm Keyswitches	9.5 dia.	Black	.39	.316	.301	.273	2,000	.222
653-B32-1620	B32-1620	12mm Keyswitches	9.5 dia.	Orange	.38	.358	.322	.296	1,000	.232
653-B32-1630	B32-1630	12mm Keyswitches	9.5 dia.	Yellow	.38	.358	.322	.296	2,000	.232

# Detection Switches

 This page of product is RoHS compliant.

## ALPS COMPACT TWO-WAY, TWO-STEP DETECTOR SWITCHES

### Features:

- Poles: 1
- Operating Temperature: -10°C to +60°C

### Specifications:

- FP-TV
- DVD Player
- Camera
- PC & Peripherals
- Personal Radio
- Healthcare
- Mobile Phone & Peripherals

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Contact Rating	Total Travel (mm)	Operating Force	Termination Style	Price Each			
							1	25	50	100
688-SSCQ110100	SSCQ110100	A	100V	3.73	0.35N	Solder Lug	1.76	1.58	1.47	1.42
688-SSCQ120102	SSCQ120102	A	100V	3.73	0.35N	PCB	1.76	1.58	1.47	1.42

## ALPS COMPACT TWO-WAY DETECTOR SWITCH

### Features:

- Right and left detection
- Double-sided sliding contact

### Specifications:

- Rating: 1mA @ 5VDC
- Operating force: 350gf

### Applications:

- For switching modes and zoom operation of cameras
- Detection mechanism in DVD players, digital camcorders

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	ON Start Position	Location Lug	Price Each				Pkg. Qty.	Price Per Piece
					1	50	100	500		
688-SSCM120100	SSCM120100	B	3.58mm	Without	.71	.614	.512	.462	3000	.315

## ALPS COMPACT LONG LIFE DETECTOR SWITCHES

### Features:

- SMD types are reflow solderable, on tape and reel

### Specifications:

- Rating: 100mA @ 12VDC
- Operating force: 35gf

### Applications:

- Detection of insertion of media such as DVDs, CDs

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	ON Starting Position	Total Travel Position	Price Each				Reel Qty.	Price Per Piece
					1	50	100	500		
688-SPPB530601	SPPB530601	C	8.05mm	6.10mm	.67	.57	.52	.462	600	.24

## SMD Mount - Vertical Operating Direction

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	ON Starting Position	Total Travel Position	Price Each				Reel Qty.	Price Per Piece
					1	50	100	500		
688-SPPB530701	SPPB530701	D	8.05mm	6.10mm	.67	.57	.53	.51	1500	.47
688-SPPB630101	SPPB630101	E	3.70mm	1.70mm	.98	.839	.765	.677	1300	.647
688-SPPB640201	SPPB640201	F	3.70mm	1.70mm	.67	.57	.52	.48	1300	.36

## SMD Mount - Horizontal Operating Direction

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	ON Starting Position	Total Travel Position	Price Each				Reel Qty.	Price Per Piece
					1	50	100	500		
688-SPPB512300	SPPB512300	G	8.05mm	6.10mm	.67	.57	.32	.25	4000	.185

## PCB Mount - Vertical Operating Direction

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Mounting Style	Terminal Style	Price Each				Reel Qty.	Price Per Piece
					1	50	100	500		
688-SSCF110100	SSCF110100	H	PCB	Snap-in	1.06	.946	.791	.734		
688-SSCF210100	SSCF210100	I	Screw	Snap-in	1.05	.95	.78	.74		
688-SSCF310100	SSCF310100	J	PCB with hook	Snap-in	1.04	.947	.78	.74		
688-SSCF210300	SSCF210300	K	Screw	Solder/leads	1.05	.95	.78	.74		

## C&K DS SERIES: DETECT SWITCHES



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Rating	Operating Force	Price Each				Reel Qty.	Price Per Piece
					1	25	100	250		
611-DS-0200530	DS-02005	L	0.1A @ 30VDC	30gf	.90	.816	.748	.595		
611-DS-040-02	DS-040-02	M	0.1A @ 16VDC	30gf	.58	.528	.484	.385		
611-DS-180RT	DS-180 RT	N	1mA @ 5VDC	60gf	1.11	1.00	.919	.731		

## C&K JCH SERIES: MICROMINIATURE SEALED SMT DETECT SWITCH

For quantities greater than listed, call for quote.

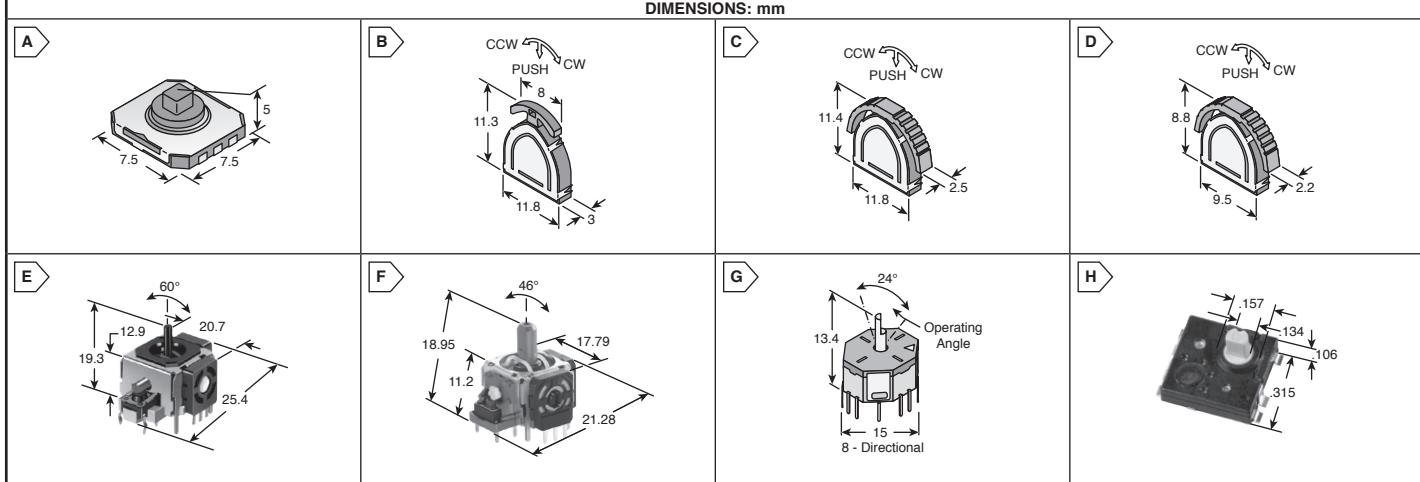
MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Rating	Total Travel Position	Operation Direction	Price Each				Reel Qty.	Price Per Piece
						1	10	25	50		
611-JCH1AQNP	JCH1AQNP	O	1mA @ 5V	1.85mm	Horizontal	3.13	2.99	2.75	2.63	2500	.250

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# Directional Switches

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DIMENSIONS: mm



## ALPS 4-DIRECTIONAL SWITCHES WITH CENTER PUSH

### Features:

- Octagonal shape contributes to smaller mounting space
- Reflow solderable
- Tape and reel packaging
- Rating: 50mA @ 12VDC
- 4-directional/center push travel: 0.25mm/0.15mm
- Portable audio devices
- Digital cameras and video cameras
- Cellular phones and PDA's

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Oper. Force Dir./Cntr Push	Guide Bosses	Operating Life	Price Each			
						1	25	50	100
688-SKRHAB	SKRHABE10	A	1.23N/2.35N	Yes	200,000	2.45	1.89	1.71	1.41
688-SKRHAD	SKRHADED10	A	1.2N/2.35N	Yes	1,000,000	5.38	3.77	3.10	2.42

## ALPS HORIZONTAL TYPE SEESAW AND PUSH OPERATION SWITCHES

### Features:

- Single knob allows CW, CCW, and push operations
- Lever Color: Black except for SLLB120200 and SLLB220200 which are gray
- Tape and reel packaging
- Rating: 10mA @ 5VDC
- Lever/Push function operating force: 0.65±0.3N/2±1N
- Operating life: 100,000 cycles
- For selecting menus of PDA's, mobile phones, laptop computers, and electronic organizers
- For selecting menus of remote controllers

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Location Lug	Push-On Switch	Push Operating Travel	Price Each			
						1	25	50	100
688-SLLB120100	SLLB120100	B	Yes	Yes	0.85mm	2.28	2.09	1.91	1.69
688-SLLB120200	SLLB120200	C	Yes	Yes	0.85mm	1.85	1.70	1.56	1.37
688-SLLB120300	SLLB120300	C	Yes	Yes	0.85mm	2.27	2.09	1.91	1.68
688-SLLB510100	SLLB510100	D	Yes	No	0.7mm	4.40	4.05	3.70	3.26
688-SLLB510200	SLLB510200	D	No	No	0.7mm	2.38	2.19	2.00	1.76

## ALPS STICK CONTROLLERS

### Features:

- Ideal for fingertip operation
- Compact design
- Lever return mechanism
- Resistance taper: 0B
- Total resistance: 10KW
- Game and remote controllers

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Center Push	Shaft Material	Push Ratings	Push Travel	Push Operating Force	Rated Power	Price Each			
									1	25	50	100
688-RKJXK122400Y	RKJXK122400Y	E	Yes	Metal	50mA @ 12VDC	0.5(+0.5, -0.4)mm	5.2±2.6N	0.0125W	7.54	6.93	6.33	5.57
688-RKJXV1224005	RKJXV1224005	F	Yes	Resin	50mA @ 12VDC	0.4(+0.5, -0.3)mm	7.4±3N	0.0125W	1.87	1.70	1.63	1.56

## ALPS 8-DIRECTIONAL SWITCH WITH CENTER PUSH

### Features:

- Compact, low profile
- Uniform operating force in any direction
- Rating: 10mA @ 5VDC
- Operating life: RKJXL=100,000 cycles; RKJXS=500,000 cycles
- Controlling cursors in car navigation systems
- Control of office and AV equipment

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Operating Force		Operating Angle (Lever)	Travel (Push)	Price Each			
			Direction	Center Push			1	25	50	100
688-RKJXL100401V	RKJXL100401V	G	10±7mN·m	4.5±1N	12±3°	0.2mm	4.90	4.51	4.11	3.62

For quantities greater than listed, call for quote.

## C&K TPA SERIES MULTIDIIRECTION SMT NAVIGATION SWITCH

### Features:

- One touch, 5 way switching
- Distinctive tactile feel for scanning and select functions
- Normally open momentary contacts
- Push down to select possible in any position
- Optional pegs for improved mechanical strength and easier PCB positioning

### Applications:

- Electronic devices requiring direct control on LCD display
- MP3 player
- Bluetooth Headset
- Digital cameras
- GPS navigation systems
- Home entertainment systems
- Security

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Navigation Select		Actuation Force	Contact Material	Termination	Price Each			
			1	25				1	25	50	100
611-TPA511GLFS	TPA511GLFS	H	Scanning 4 directions with selection	1.8N scanning, 4N section	0.2mm	Silver	Gulling	1.70	1.60	1.53	1.42

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# Encoders

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## AVAGO OPTICAL ENCODERS

### Single Turn Optical Absolute Encoders

MOUSER STOCK NO.	Avago Part No.	Fig.	No. of Channels	Resolution (CPR)	Signal Frequency	Supply Voltage	LED Current	Phase Error (Typ.)	Price Each			
									1	10	100	
630-AEAT-9000-1GSH0	AEAT-9000-1GSH0	A	2	2048	500kHz	6V	94mA	5°e	70.19	65.80	58.49	
630-AEAT-9000-1GSH1	AEAT-9000-1GSH1	A	2	2048	500kHz	5V	94mA	5°e	62.49	56.49	51.19	
Codewheel Description												
630-HEDG-9000-H13	HEDG-9000-H13	B	For use with AEAT-9000 series encoders, made from glass, 17.5 mm optical radius						35.57	34.64	29.58	

### Reflective Optical Encoders - Surface Mount

MOUSER STOCK NO.	Avago Part No.	Fig.	No. of Channels	Resolution (LPI)	Pulse Width Error (Ch A, Ch B)(typ)	Phase Error (typ)	Max RPM	Count Frequency	Supply Voltage (V)	LED Current (mA)	Price Each			
											1	10	100	500
630-AEDR-8000-1K2	AEDR-8000-1K2	C	2	75	15, 25°e	12°e	9000	30kHz Typ.	5.0	15	13.44	12.44	10.27	9.30
630-AEDR-8300-1K2	AEDR-8300-1K2	D	2	75	15, 25°e	12°e	9000	30kHz Typ.	5.0	15	8.04	7.36	6.02	5.30
630-AEDR-8300-1Q2	AEDR-8300-1Q2	D	2	180	16°e	10°e	9000	30kHz Typ.	5.0	15	8.04	7.36	6.02	5.30
630-AEDR-8300-1W2	AEDR-8300-1W2	D	2	212	16°e	10°e	9000	60kHz Max.	3.3/5.0	15	8.04	7.36	6.02	5.30

### Reflective Incremental Encoder - Surface Mount

MOUSER STOCK NO.	Avago Part No.	Fig.	No. of Channels	Resolution (LPI)	Pulse Width Error (Ch A, Ch B)(typ)	Phase Error (typ)	Max RPM	Count Frequency	Supply Voltage	LED Current	Price Each			
											1	10	100	500
630-AEDR-8500-102	AEDR-8500-102	E	3	304	15°e	9°e	-	56kHz typ	7V	15mA	17.92	16.26	13.69	12.41

### Reflective Optical Encoders - Miniature Panel Mount

MOUSER STOCK NO.	Avago Part No.	Fig.	Shaft Diameter	Shaft Feel	Shaft Length	Resolution (CPR)	Price Each			
							1	10	100	500

#### Pins Front with Bracket

630-HRPG-ASCA-54F	HRPG-ASCA#54F	F	6mm	Smooth	12.7mm	120	30.90	30.09	25.69	22.44
630-HRPG-AD16-56F	HRPG-AD16#56F	F	6mm D-cut	Detented	12.7mm	16	30.90	30.09	25.69	22.44
630-HRPG-AD32-19F	HRPG-AD32#19F	F	0.25in D-cut	Detented	0.80in	32	30.90	30.09	25.69	22.44

#### Pins Rear with Bracket

630-HRPG-ASCA-54R	HRPG-ASCA#54R	G	6mm	Smooth	12.7mm	120	30.90	30.09	25.69	22.44
630-HRPG-ASCA-14R	HRPG-ASCA#14R	G	0.25in	Smooth	0.50in	120	30.90	30.09	25.69	22.44

#### Cable Connector

630-HRPG-AD32-53C	HRPG-AD32#53C	H	6mm D-cut	Detented	7.6mm	32	30.90	30.09	25.69	22.44
630-HRPG-ASCA-14C	HRPG-ASCA#14C	H	0.25in	Smooth	0.50in	120	30.90	30.09	25.69	22.44
630-HRPG-AD32-17C	HRPG-AD32#17C	H	0.25in	Detented	0.80in	32	30.90	30.09	25.69	22.44

MOUSER STOCK NO.	Avago Part No.	Fig.	No. of Channels	Resolution (CPR)	Count Frequency	Max. RPM	Rise Time	Fall Time	Price Each			
									1	10	100	500
630-HEDS-9000-U00	HEDS-9000#U00	I	2	2048	100kHz	> 12000	200	50	25.82	25.14	21.47	18.75
630-HEDS-9040-B00	HEDS-9040#B00	I	3	1000	100kHz	> 12000	200	50	26.02	25.34	21.64	18.90
630-HEDS-9100-A00	HEDS-9100#A00	I	2	500	100kHz	> 12000	200	50	25.82	25.14	21.47	18.75
630-HEDS-9100-B00	HEDS-9100#B00	I	2	1000	100kHz	> 12000	200	50	25.82	25.14	21.47	18.75
630-HEDS-9100-E00	HEDS-9100#E00	I	2	200	100kHz	> 12000	200	50	25.82	25.14	21.47	18.75
630-HEDS-9140-A00	HEDS-9140#A00	I	3	500	100kHz	> 12000	200	50	29.07	28.30	24.17	21.11
630-HEDS-9140-H00	HEDS-9140#H00	I	3	512	100kHz	> 12000	200	50	29.07	28.30	24.17	21.11

### C&K TSW SERIES: 3 OR 7 FUNCTION TACT AND SCROLL WHEEL

MOUSER STOCK NO.	C&K Part No.	Fig.	No. of Circuits	Actuation Force	Push Act. Force	Price Each			
						1	25	50	100
611-TSWA-3N-C-LFS	TSW-A-3N-C-LFS	J	3	Max. 60gf - cm	220g±50g	2.41	2.14	1.85	1.76
611-TSWA-3N-CB11LFS	TSW-A-3N-CB11LFS	J	3	Max. 60gf - cm	220g±50g	4.49	4.14	3.96	1.76
611-TSWA-3N-CD23LFS	TSW-A-3N-CD23 LFS	J	3	Max. 60gf - cm	220g±50g	3.38	3.22	2.60	1.76
611-TSWB-3N-C-LFS	TSW-B-3N-C-LFS	J	5	Max. 50gf - cm	Max 300g	5.59	5.17	5.03	4.61
611-TSWB-3N-CB22LFS	TSW-B-3N-CB22 LFS	J	5	Max. 50gf - cm	Max 300g	5.43	5.00	4.88	4.19

For quantities greater than listed, call for quote.										
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MOUSER STOCK NO.	CUI Part No.	Fig.	Rating	No. of Detents	Output Code	Price Each					
						1	10	25	50		
490-C14D32P-A3	C14D32P-A3	K	50mA/12VDC	32	Yes	ø0.5mm holes	ø6.35 mm (1/4")	17.21	16.64	16.07	15.26

For quantities greater than listed, call for quote.										
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MOUSER STOCK NO.	Panasonic Part No.	Fig.	Rating	No. of Detents	Output Code	Price Each			
						1	10	100	1000
667-EVQ-V5C00116E	EVQ-V5C00116E	M	1mA/10Vdc	16	50±20mN·m	3.08	2.38	2.09	1.59

For quantities greater than listed, call for quote.										
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MOUSER STOCK NO.	Panasonic Part No.	Fig.	Rating	No. of Detents	Output Code	Price Each			
						1	10	100	1000
667-EVQ-V5C00116B	EVQ-V5C00116B	N	1mA/10Vdc	30	18 mN·m	3.11	2.61	2.49	1.80

For quantities greater than listed, call for quote.</										

# ALPS Encoders

**ALPS**

## SDDE SERIES: POWER SWITCH WITH ENCODER

- Two shafts are combined  
Center shaft : Push switch (Unlatching)  
Outside shaft : Encoder
- Zero standby power consumption is available by auto-off function with relay movement due to built-in both AC and DC contact in the push switch

- Both pulse and absolute output are available for the installed encoder
- Applications include Dryer, Micro wave oven, IH cooking heater, and Washing machine

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Current Rating	Voltage (V)	Style	Price Each			
						1	25	50	100
688-SDDE1C0101	SDDE1C0101	A	20mA	12	SMD/SMT	4.69	4.22	3.75	3.56

## EC35A/EC35AH SERIES: LOW PROFILE RING TYPE ENCODER

- 2-phase incremental type encoder for general use
- Low-profile design with a 4.5mm body height
- Devices such as switches and LEDs can be mounted into its center therefore contributing to the final set's flexibility of design
- Good operation feeling and less shaft wobble

- Applications include volume control and function change for car AV equipment and navigation systems; temperature control for HVACs; menu selection for home appliances such as washing machines and microwave ovens; and other applications

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Actual Length	Detent Torque	No. of Detents	Price Each			
						1	25	50	100
688-EC35AH260502	EC35AH260502	B	25mm	30±15mN·m	30	4.63	4.16	3.70	3.52
688-EC35AH120401	EC35AH120401	B	15mm	18±7mN·m	18	4.63	4.16	3.70	3.52
688-EC35A1520402	EC35A1520402	B	20mm	18±7mN·m	30	4.63	4.16	3.70	3.52

## EC05E SERIES: 5MM SMD HOLLOW SHAFT ENCODER

- Rating: 0.5mA @ 5VDC
- Operating Life: 100,000 cycles
- Tape and reel packaging

- Applications include level controls for MDs and CDs, controls for TVs and monitors, etc.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Rating	Detent Torque	Res.	No. of Detents	Price Each			
							1	25	50	100
688-EC05E1220401	EC05E1220401	C	0.5mA @ 5VDC	1.6±1.3 mN·m	12	12	1.85	1.58	1.37	1.19

## EC09E SERIES: 9MM METAL SHAFT ENCODERS

- Rating: 10mA @ 5VDC
- Operating Life: 15,000 cycles
- Incremental type

- Detent torque: 0±5mN·m
- Applications include level controls for MDs and CDs, controls for TVs and monitors, etc.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Push-On Switch	Travel of Push-On Switch	Res.	No. of Detents	Price Each			
							1	25	50	100
688-EC09E1524404	EC09E1524404	D	With	1.5mm	15	30	6.06	5.19	4.33	3.89
688-EC09E1524405	EC09E1524405	D	With	0.5mm	15	30	5.81	4.98	4.15	3.54

## EC10E SERIES: 10MM HOLLOW SHAFT ENCODERS

- Rating: 0.5mA @ 5VDC
- Operating life: 100,000 cycles
- Incremental type
- Applications include controls for PC input devices (e.g., mouse), AV devices, and communication devices

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Dimensions "H"	Detent Torque	Res.	No. of Detents	Price Each			
							1	25	50	100
688-EC10E1220505	EC10E1220505	E	7mm	5±3mN·m	12	24	1.11	.959	.799	.469
688-EC10E1220501	EC10E1220501	E	9mm	5±3mN·m	12	24	1.12	.96	.80	.48

## EC11 SERIES: 11MM METAL SHAFT ENCODERS

- Rating: 10mA @ 5VDC
- Operating life: 15,000 cycles
- Incremental type
- High precision
- Applications include controls for MDs and CDs, controls for TVs and monitors, etc.

For quantities greater than listed, call for quote.

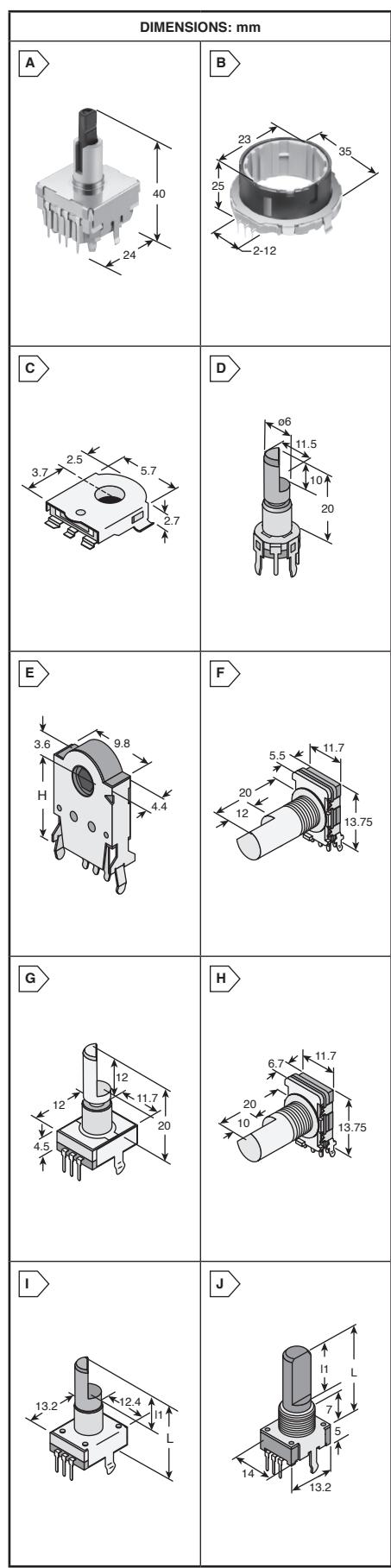
MOUSER STOCK NO.	Alps Part No.	Fig.	Push-On Switch	Switch Travel	Res.	No. of Detents	Price Each			
							1	25	50	100
688-EC11B15202AA	EC11B15202AA	F	Without	---	15	30	1.19	1.15	1.10	1.08
688-EC11E1530401	EC11E1530401	G	Without	---	15	0	5.25	4.50	3.90	2.56
688-EC11E1820402	EC11E1820402	G	Without	---	18	36	4.36	3.74	3.24	2.07
688-EC11B15242AF	EC11B15242AF	H	With	1.5mm	15	30	5.82	4.99	4.32	3.74
688-EC11E15244B2	EC11E15244B2	G	With	1.5mm	15	30	6.90	5.86	5.10	3.17
688-EC11E18244A5	EC11E18244A5	G	With	1.5mm	18	36	5.61	4.81	4.17	2.70
688-EC11E09244AQ	EC11E09244AQ	G	With	1.5mm	18	9	5.61	4.81	4.17	2.72

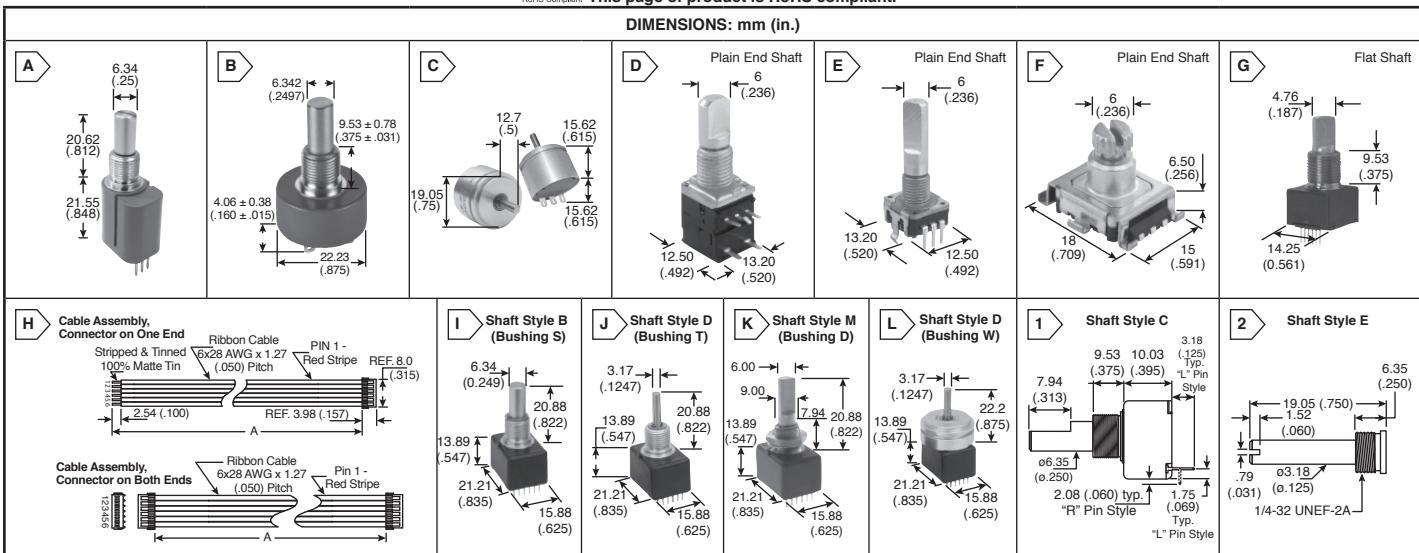
## EC12E SERIES: 12MM INSULATED SHAFT ENCODERS

- Rating: 0.1A @ 12VDC
- Operating Life: 30,000 cycles
- Incremental type
- High precision
- Applications include level controls for MDs and CDs, controls for TVs and monitors, etc.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Dimensions L (11) mm	Push-On Switch	Res.	No. of Detents	Price Each			
							1	25	50	100
688-EC12E24204A8	EC12E24204A8	I	15 (7)	Without	24	24	.70	.603	.583	.562
688-EC12E24204A9	EC12E24204A9	I	25 (12)	Without	24	24	.80	.775	.744	.723
688-EC12E24204A2	EC12E24204A2	I	10 (7)	Without	24	24	.82	.709	.681	.652
688-EC12E1220405	EC12E1220405	I	25 (12)	Without	12	12	1.32	1.13	.98	.547
688-EC12E1220406	EC12E1220406	I	20 (7)	Without	12	12	.71	.613	.53	.321
688-EC12E1220407	EC12E1220407	I	15 (7)	Without	12	12	1.32	1.13	.98	.593
688-EC12E2420802	EC12E2420802	J	20 (7)	Without	24	24	1.17	1.05	.981	.951
688-EC12E2420801	EC12E2420801	J	25 (12)	Without	24	24	.94	.87	.70	.56





## AMM20B MULTITURN MAGNETIC POSITION SENSOR

### Features:

- Non-contacting magnetic technology
- Highly resistant to vibration/shock
- Highly resistant to fluid/dust ingress
- Programmable at factory for zero position
- Highly repeatable

MOUSER STOCK NO.	Bourns Part No.	Fig.	Shaft Type	Shaft Length	Supply Voltage	Price Each
			1/16	5	38.60	33.33
652-AMM20B5A1CLAS380	AMM20B5A1CLASL380	A	B	13/16	5	38.60 33.33

## AMS22B NON-CONTACTING ANALOG ROTARY POSITION SENSOR

### Features:

- Non-contacting magnetic technology
- Highly resistant to vibration/shock
- Highly resistant to fluid/dust ingress
- Programmable at factory for zero position
- Robust design for industrial applications
- Highly repeatable

MOUSER STOCK NO.	Bourns Part No.	Fig.	Shaft Type	Shaft Length	Voltage Rating	Price Each
			1/16	5	42.02	36.67
652-AMS22BBHASL334N	AMS22B5A1BHSL334N	B	B	7/8	5V	42.02
652-AMS22BBLFL334S	AMS22B5A1BLFL334S	B	B	7/8	5V	42.33
652-AMS22BBLASL334S	AMS22B5A1BLASL334S	B	B	7/8	5V	42.34
652-AMS22B5A1BLHBR334	AMS22U5A1BHBR334	C	10	0.50%	59.57	52.11

## AMS22U ANALOG ROTARY POSITION SENSOR

### Features:

- Non-contacting magnetic technology
- Highly resistant to vibration/shock
- Highly resistant to fluid/dust ingress
- Programmable at factory for zero position
- Robust design for industrial applications
- Highly repeatable

MOUSER STOCK NO.	Bourns Part No.	Fig.	Resistance (kΩ)	Linearity	Price Each
			1	10	
652-AMS22U5A1BHBR334	AMS22U5A1BHBR334	C	10	0.50%	59.57 52.11

## 9MM INCREMENTAL ENCODERS

### PEC09 Series

#### Features:

- Push switch option
- Compact, rugged design
- High reliability
- Metal bushing/shaft

MOUSER STOCK NO.	Bourns Part No.	Fig.	Switch	Detents	Price Each		
					1	10	100
652-PEC092020FS0015	PEC09-2020F-S0015	D	Y	0	2.93	2.42	1.79
652-PEC092025KN0015	PEC09-2025K-N0015	D	N	0	1.89	1.56	1.15
652-PEC092120FS0012	PEC09-2120F-S0012	D	Y	12	2.93	2.42	1.92
652-PEC092125KN0012	PEC09-2125K-N0012	D	N	12	1.89	1.56	1.15
652-PEC092220FS0012	PEC09-2220F-S0012	D	Y	24	2.93	2.42	1.88
652-PEC092225KN0012	PEC09-2225K-N0012	D	N	24	1.89	1.56	1.15
652-PEC092320FS0015	PEC09-2320F-S0015	D	Y	30	2.93	2.42	1.88
652-PEC092325KN0015	PEC09-2325K-N0015	D	N	30	1.89	1.56	1.21

## 12MM INCREMENTAL ENCODERS

### PEC11 & PEC11S Series

#### Features:

- Push switch option
- Compact, rugged design
- High reliability
- Metal bushing/shaft

MOUSER STOCK NO.	Bourns Part No.	Fig.	Switch	Detents	Price Each		
					1	10	100
<b>PEC11 Series</b>							
652-PEC11L4220FS0015	PEC11L-4220F-S0015	E	Y	30	1.81	1.49	1.16
652-PEC11L4125KN0020	PEC11L-4125K-N0020	E	N	20	1.73	1.43	1.13
<b>PEC11S Series SMD</b>							
652-PEC11S9213KS0015	PEC11S-9213K-S0015	F	Y	2	2.34	1.93	1.43
652-PEC11S9215KH0015	PEC11S-9215K-H0015	F	Y	2	2.48	2.04	1.62
652-PEC11S9215KN0015	PEC11S-9215K-N0015	F	N	2	2.18	1.80	1.33
652-PEC11S9220FS0015	PEC11S-9220F-S0015	F	Y	2	2.34	1.93	1.53
652-PEC11S9220KS0015	PEC11S-9220K-S0015	F	Y	2	2.34	1.93	1.43
652-PEC11S929K-H0015	PEC11S-929K-H0015	F	Y	2	2.48	2.04	1.62
652-PEC11S929K-N0015	PEC11S-929K-N0015	F	N	2	2.18	1.80	1.43
652-PEC11S929K-S0015	PEC11S-929K-S0015	F	Y	2	2.34	2.00	1.50

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## DIMENSIONS: mm (in.)

MOUSER STOCK NO.	Bourns Part No.	Fig.	Shaft Type	Shaft Length	Supply Voltage	Price Each
			1/16	5	38.60	33.33
652-EM14A0D-C24-L08N	EM14A0D-C24-L008N	G1	C	8	24.64	23.27
652-EM14A0D-C24-L32N	EM14A0D-C24-L032N	G1	C	32	24.64	23.27
652-EM14A0D-C24-L64N	EM14A0D-C24-L064N	G1	C	64	24.64	23.27
652-EM14C0D-E24-L16S	EM14C0D-E24-L016S	G2	E	16	26.31	24.84
652-EM14C0D-E24-L32S	EM14C0D-E24-L032S	G2	E	32	26.31	24.84
652-EM14C0D-E24-L64S	EM14C0D-E24-L064S	G2	E	64	26.31	24.84

## 14MM ROTARY OPTICAL ENCODER WITH SWITCH

### Features:

- HCMOS, CMOS and TTL compatible
- Compact package size
- High rotational cycle life
- Standard or high force push switch option
- Optional detent

MOUSER STOCK NO.	Bourns Part No.	Fig.	Pulses/Rev.	Price Each		
			1	10	100	
652-EM14A0D-C24-L08N	EM14A0D-C24-L008N	G1	C	8	24.64	23.27
652-EM14A0D-C24-L32N	EM14A0D-C24-L032N	G1	C	32	24.64	23.27
652-EM14A0D-C24-L64N	EM14A0D-C24-L064N	G1	C	64	24.64	23.27
652-EM14C0D-E24-L16S	EM14C0D-E24-L016S	G2	E	16	26.31	24.84
652-EM14C0D-E24-L32S	EM14C0D-E24-L032S	G2	E	32	26.31	24.84
652-EM14C0D-E24-L64S	EM14C0D-E24-L064S	G2	E	64	26.31	24.84

## CABLE ASSEMBLIES FOR EM14MM

MOUSER STOCK NO.	Bourns Part No.	Fig.	Description	"A" Dim.	Price Each	
					1	10
652-H-290-1	H-290-1	H	6" Cable with Female Connector (0.050"/1.27mm pitch centers in-line) on both ends	152.4 ± 5.0 (6.0 ± 1.97)	8.82	7.87
652-H-290-2	H-290-2	H	12" Cable with Female Connector (0.050"/1.27mm pitch centers in-line) and stripped/tinned leads	304.8 ± 5.0 (12.0 ± 1.97)	6.27	5.89
652-H-290-3	H-290-3	H	12" Cable with Female Connector (0.050"/1.27mm pitch centers in-line) on both ends	152.4 ± 5.0 (6.0 ± 1.97)	9.15	8.17
652-H-290-4	H-290-4	H	6" Cable with Female Connector (0.050"/1.27mm pitch centers in-line) and stripped/tinned leads	304.8 ± 5.0 (12.0 ± 1.97)	5.80	5.45

## EMS22A NON-CONTACTING ABSOLUTE ENCODER

MOUSER STOCK NO.	Bourns Part No.	Fig.	Shaft Type	Shaft Length	Supply Voltage (VDC)	Price Each	
						1	10
652-EMS22A30-C28-LS6	EMS22A30-C28-LS6	I	C	7/8	3.3	37.80	35.70
652-EMS22A30-C28-MS6	EMS22A30-C28-MS6	I	C	7/8	3.3	37.80	35.70
652-EMS22A50-B28-LS6	EMS22A50-B28-LS6	I	B	7/8	5	37.80	35.70
652-EMS22A50-C20-LS6	EMS22A50-C20-LS6	I	C	7/8	5	37.80	35.70
652-EMS22A50-D16-LT6	EMS22A50-D16-LT6	J	D	1/2	5	48.43	45.74
652-EMS22A50-D28-LT6	EMS22A50-D28-LT6	J	D	7/8	5	48.43	45.74
652-EMS22A50-M25-LD6	EMS22A50-M25-LD6	K	M	25mm	5	37.53	35.44
652-EMS22D31-B28-LS2	EMS22D31-B28-LS2	I	B	7/8	3.3	37.80	35.70
652-EMS22D31-D28-LT2	EMS22D31-D28-LT2	J	D	7/8	3.3	48.43	45.74
652-EMS22D51-B28-LS5	EMS22D51-B28-LS5	I	B	7/8	5	37.80	35.70
652-EMS22D51-D28-LT5	EMS22D51-D28-LT5	J	D	7/8	5	48.43	45.74
652-EMS22P50-B28-LS6	EMS22P50-B28-LS6	I	B	7/8	5	37.80	35.70
652-EMS22P50-D28-LT6	EMS22P50-D28-LT6	J	D	7/8	5	48.43	45.74
652-EMS22Q31-B28-LS3	EMS22Q31-B28-LS3	I	B	7/8	3.3	37.80	35.70
652-EMS22Q31-B28-LS4	EMS22Q31-B28-LS4	I	B	7/8	3.3	37.80	35.70
652-EMS22Q33-D28-LT4	EMS22Q33-D28-LT4	J	D	7/8	3.3	48.43	45.74
652-EMS22Q51-B28-LS4	EMS22Q51-B28-LS4	I	B	7/8	5	39.86	37.65
652-EMS22Q51-C28-LS4	EMS22Q51-C28-LS4	I	C	7/8	5	37.80	35.70
652-EMS22Q51-D28-LT4	EMS22Q51-D28-LT4	J	D	7/8	5	37.53	35.44
652-EMS22Q51-D28-LW4	EMS22Q51-D28-LW4	L	D	7/8	5	52.78	49.84

# ALCOSWITCH Pushbutton Switches

**TE** Authorized  
connectivity Distributor

## BLUE SERIES PUSHBUTTON SWITCH

### Features:

- Miniature snap acting pushbutton
- Tactile and audible feedback
- Wire lug or PC board terminals
- Single Pole - Double Throw Configuration (Pole-Throw)
- Contact Rating = 0.4VA

### Applications:

- Industrial equipment
- Medical equipment
- Instrumentation
- Communication equipment
- Control equipment

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alcoswitch Part No.	Fig.	Contact Form	Switch Function	Terminal	Price Each		
						1	25	50
506-MPS1004DPC	MPS1004DPC	A	SPDT	On/On	PC	17.21	16.08	14.59

## MSP3/MSPS SERIES: PANEL MOUNT PUSHBUTTON SWITCHES

### Specifications:

- Actuator material: Thermoplastic
- Contact material: Silver plate over copper alloy
- Terminal material: Silver plate
- Case material: Thermoplastic
- Contact rating: MSP = 3A @ 125 VAC; MSPS = 0.5A @ 125VAC
- Operating force: Single pole = 7-14oz.
- Double pole = 14-25oz.
- Contact timing: Break-before-make
- Contact resistance: 100mΩ max.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alcoswitch Part No.	Fig.	Contact Form	Switch Function	Cap Color	Price Each		
						1	25	50
506-MSP103B04	MSP103B04	B	SPST	Normally Closed	Black	5.91	5.29	5.02
506-MSP103C004	MSP103C004	B	SPST	Normally Open	Black	5.87	5.31	4.69
506-MSPS103B	MSPS103B	C	SPST	Normally Closed	Black	2.12	1.93	1.77
506-MSPS103C	MSPS103C	C	SPST	Normally Open	Red	2.72	2.42	2.25
506-MSPS103C0	MSPS103C0	C	SPST	Normally Open	Black	2.18	1.80	1.65

## MSPM SERIES: HERMETICALLY SEALED PUSHBUTTON SWITCHES

### Specifications:

- Actuator material: Polyamide
- Contact material: Gold
- Case material: Steel
- Contact rating: 1.0VA
- Operating force: 4-7oz.
- Life expectancy: 5 million cycles @ 0.1VA
- Contact resistance: 100mΩ max.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alcoswitch Part No.	Fig.	Contact Form	Switch Function	Cap Color	Mount Type	Price Each		
							1	25	50
506-MSMP101C104	MSMP101C104	D	SPST	Normally Open	Red	Lug Pin	27.69	25.36	23.05
506-MSMP101C204	MSMP101C204	E	SPST	Normally Open	Red	Lug Pin	39.41	33.87	31.10

### Accessories for MSPM

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alcoswitch Part No.	Fig.	Description			Price Each		
						1	25	50
506-BP1440004	BP1440004	F	Black 1/4-40 boot seal for MSPM			4.82	4.41	4.18
506-BPA1440004	BPA1440004	G	Black 1/4-40 boot seal for MSPM			5.13	4.33	4.10
506-1825618-1	1825618-1	H	Black 1/4-40 seal adapter for MSPM			6.82	6.55	6.43
506-C22004	C22004	I	Black snapfit cap for MSPM			.51	.47	.43
506-C23004	C23004	J	Black snapfit cap for MSPM			1.06	.98	.87
506-C23204	C23204	J	Red snapfit cap for MSPM			1.06	.96	.92
506-C23504	C23504	J	Green snapfit cap for MSPM			1.11	.98	.85
506-G12A	G12A	K	Clear aluminum plain finish button guard for C220			2.05	1.93	1.76
506-G12B	G12B	K	Black aluminum plain finish button guard for C220			1.40	1.29	1.24
506-G12KA	G12KA	L	Clear aluminum knurled finish button guard for C220			1.25	1.15	1.11
506-G12KB	G12KB	L	Black aluminum knurled finish button guard for C220			1.89	1.52	1.46

## TP SERIES: TINY PUSHBUTTON SWITCHES

### Specifications:

- Actuator material: Nylon
- Contact material: Gold over nickel barrier
- Terminal material: Tin lead plate
- Terminal seal: Epoxy
- Operating force: 50-400 grams
- Contact rating: 0.4VA @ 20VDC
- Contact timing: Break-before-make
- Contact resistance: 20mΩ max.
- Case: LCP, black UL94V-0

### PC Mount

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alcoswitch Part No.	Fig.	Contact Form	Actuator Type/Color	Price Each		
					1	25	50
506-TP11CGPC004	TP11CGPC004	M	SPST N.O. Mom	Square/Black	3.31	2.95	2.83
506-TP11CGPC204	TP11CGPC204	M	SPST N.O. Mom	Square/Red	4.84	4.29	4.09
506-TPA11CGPC004	TPA11CGPC004	N	SPST N.O. Mom	Round/Black	3.55	3.10	2.95

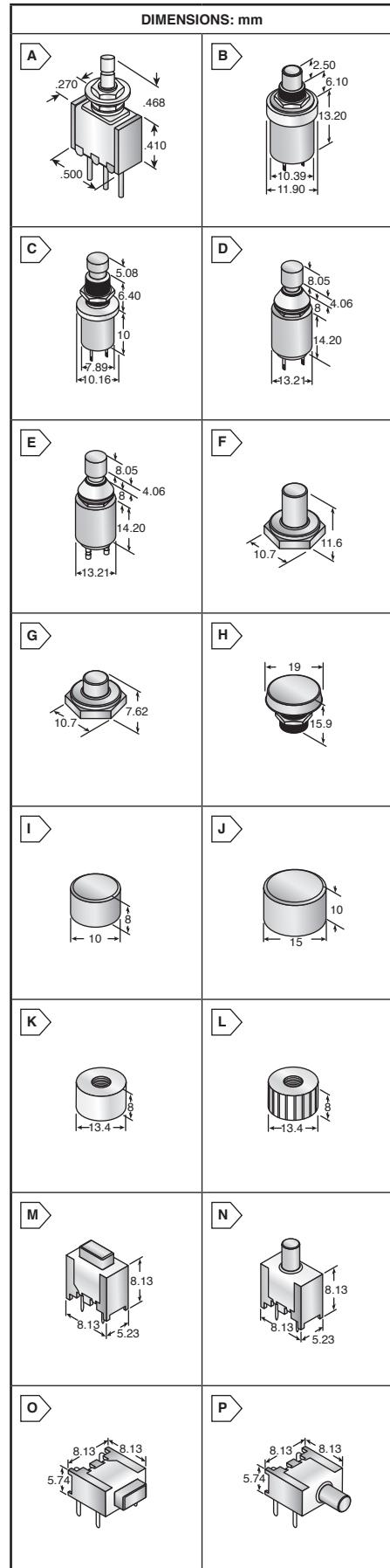
### Right Angle Mount

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alcoswitch Part No.	Fig.	Contact Form	Actuator Type/Color	Price Each		
					1	25	50
506-TP11CGR004	TP11CGR004	O	SPST N.O. Mom	Square/Black	3.00	2.82	2.74
506-TP11CGR204	TP11CGR204	O	SPST N.O. Mom	Square/Red	4.90	4.31	4.11
506-TPA11CGR204	TPA11CGR204	P	SPST N.O. Mom	Round/Black	3.83	3.40	3.23
506-TPA11CGR004	TPA11CGR004	P	SPST N.O. Mom	Round/Black	5.45	4.51	4.33

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1879

# APEM Pushbutton Switches



## MHPS SERIES MINI KEY PUSHBUTTON SWITCHES

### Specifications:

- DPDT
- Maintained action
- Non-shorting contacts
- Contact rating: 100mA @ 30VDC
- Dielectric withstanding voltage: 500VAC for 1 minute
- Contact resistance: 100mΩ max.

### Materials:

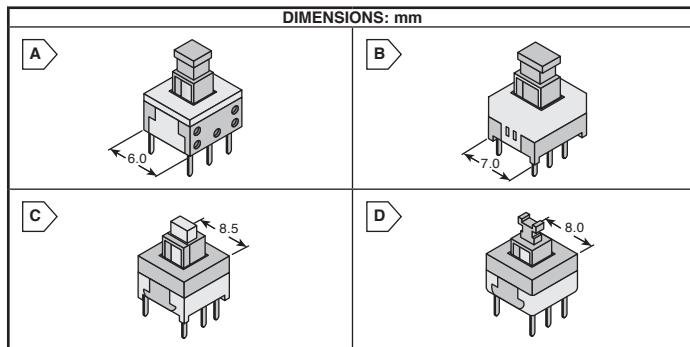
- Case: PBT (model MHPS2266 only -Type 6/6 nylon)
- Cover: Acetal (model MHPS2266 only - Type 6/6 nylon)
- Actuator: Acetal
- Terminals: silver plated brass

RoHS Compliant

## I2 SERIES SEALED PUSHBUTTON SWITCHES

### Specifications:

- Rear mounting for easier installation
- Latching action metals models
- Fixed or variable panel thickness
- Flat actuator for optional marking



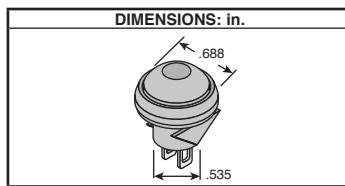
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Apem Part No.	Fig.	Height (mm)	Force (grms)	Price Each			
					1	25	100	500
642-MHPS2266	MHPS2266	A	14	140	1.03	.978	.936	.862
642-MHPS2273	MHPS2273	B	16	140	.60	.579	.535	.501
642-MHPS2283	MHPS2283	C	17.5	180	.57	.549	.507	.475
642-MHPS2285	MHPS2285	D	11	180	.59	.59	.545	.511

## IB SERIES SEALED MINIATURE PUSHBUTTON SWITCHES

### Specifications:

- Contact ratings: 400mA @ 32VAC, 100mA @ 50VAC, or 125mA @ 125VAC
- Operating temp. range: -40°C to +85°C
- Contact resistance: 50mΩ max.
- Solder terminals



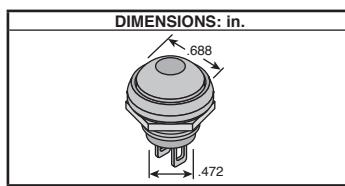
For quantities of 1000 and up, call for quote.

MOUSER STOCK NO.	Apem Part No.	Function ( ) Momentary	Color	Price Each			
				1	25	100	500
642-IBR3SAD2	IBR3SAD2	Off-(On)	Black	9.11	8.33	7.01	6.46
642-IBR3SAD3	IBR3SAD3	Off-(On)	Green	10.09	9.24	7.76	7.15
642-IBR3SAD5	IBR3SAD5	Off-(On)	Yellow	12.81	11.73	9.85	9.09
642-IBR3SAD6	IBR3SAD6	Off-(On)	Red	12.18	11.19	9.39	8.65

## IS SERIES SEALED MINIATURE PUSHBUTTON SWITCHES

### Specifications:

- Contact ratings: 400mA @ 32VAC, 100mA @ 50VAC, or 125mA @ 125VAC
- Operating temp. range: -40°C to +85°C
- Contact resistance: 50mΩ max.
- Solder terminals



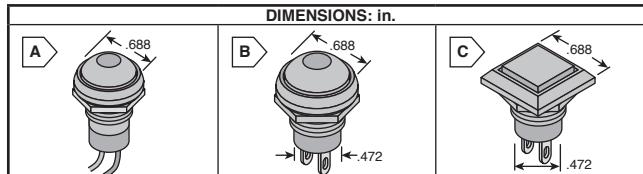
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Apem Part No.	Function ( ) Momentary	Color	Price Each			
				1	25	100	500
642-ISR3SAD2	ISR3SAD2	Off-(On)	Black	10.51	8.45	6.76	5.48
642-ISR3SAD3	ISR3SAD3	Off-(On)	Green	11.92	10.87	9.11	8.08
642-ISR3SAD5	ISR3SAD5	Off-(On)	Yellow	11.56	10.60	9.67	9.04
642-ISR3SAD6	ISR3SAD6	Off-(On)	Red	17.68	16.19	14.71	13.24

## IP SERIES PUSHBUTTON SWITCHES FOR HARSH ENVIRONMENTS

### Specifications:

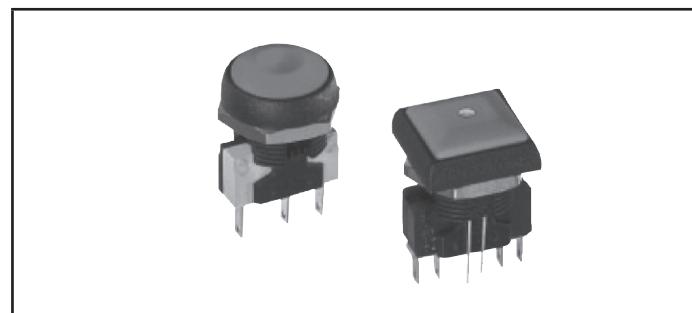
- Contact ratings: 500mA@48VAC, 200mA@50VAC, or 200mA@250VAC
- Operating temp. range: -40°C to +125°C
- Contact resistance: 50 mΩ max.
- Solder terminals



## IR SERIES SEALED PUSHBUTTON SWITCHES

### Specifications:

- Screw version up to 4A
- Tactile feedback
- Sealed to IP67
- Illuminated or non-illuminated
- Flat round actuator for optional marking



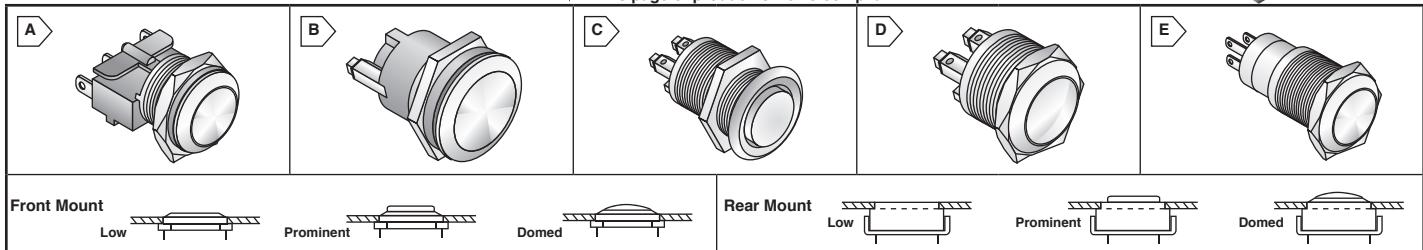
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Apem Part No.	Function ( ) Momentary	Color	Price Each			
				1	25	100	500
642-IRR1S422LOS	IRR1S422LOS	On-Off		33.47	30.56	30.07	25.71
642-IRR3S422000	IRR3S422000	Off-(On)		20.33	17.21	16.70	14.67
642-IRR3V222000	IRR3V222000	Off-(On)		25.94	23.68	23.31	19.92
642-IRR3F422000	IRR3F422000	Off-(On)		23.15	21.16	20.83	17.86
642-IRR3F462000	IRR3F462000	Off-(On)		23.15	21.16	20.83	17.86
642-IRR3V262000	IRR3V262000	Off-(On)		25.94	23.68	23.31	19.92
642-IRR8Z222LOS	IRR8Z222LOS	On-Mom		37.34	34.09	33.55	28.68

# BULGIN Pushbutton Switches



RoHS Compliant This page of product is RoHS compliant.



## VANDAL-RESISTANT SWITCHES

### Specifications:

- Contact Resistance: <15mΩ
- Stainless Steel Manufacturing
- Insulation Resistance: >1000MΩ
- Termination: Solder Lug or Screw Terminal

\*117-MP0033 internally sealed against ingress of water and dust.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Bulgin Part No.	Fig.	Button Profile	Bezel Dia. (mm)	Type	Circuit	Rating	Mounting	Front Panel Sealing	Price Each			
										1	25	50	100
117-MP0031	MP0031	A	Low	21.5	SPCO	On-(On)	5A/250VAC	Front Panel	IP66	20.94	19.76	18.57	15.50
117-MP0037	MP0037	B	Low	21.5	SPMB	Off-(On)	1A/50VAC	Front Panel	IP68	13.91	13.10	12.27	11.46
117-MP0027	MP0027	A	Low	28	SPCO	On-(On)	5A/250VAC	Front Panel	None	21.02	17.63	15.92	14.74
117-MP0038	MP0038	A	Low	28	SPCO	On-(On)	5A/250VAC	Front Panel	IP66	22.23	19.45	17.93	16.52
117-MP0031/3	MP0031/3	A	Domed	21.5	SPCO	On-(On)	5A/250VAC	Front Panel	IP66	24.90	22.87	20.32	16.97
117-MP0037/3	MP0037/3	B	Domed	21.5	SPMB	Off-(On)	1A/50VAC	Front Panel	IP68	16.04	14.51	13.46	12.55
117-MP0038/3	MP0038/3	A	Domed	28	SPCO	On-(On)	5A/250VAC	Front Panel	IP66	27.26	22.37	20.34	18.58
117-MP0031/2	MP0031/2	A	Prominent	21.5	SPCO	On-(On)	5A/250VAC	Front Panel	IP66	18.57	17.01	15.70	14.59
117-MP0037/2	MP0037/2	B	Prominent	21.5	SPMB	Off-(On)	1A/50VAC	Front Panel	IP68	18.01	16.04	15.01	12.52
117-MP0027/2	MP0027/2	A	Prominent	28	SPCO	On-(On)	5A/250VAC	Front Panel	None	27.54	25.30	22.50	18.77
117-MP0038/2	MP0038/2	A	Prominent	28	SPCO	On-(On)	5A/250VAC	Front Panel	IP66	27.26	23.25	21.40	18.59
117-MP0013	MP0013	C	Proud	22	SPMB	Off-(On)	1A/50VAC	Front Panel	None	9.51	8.79	8.03	7.06
117-MP0033	MP0033	C	Proud	22	SPMB	Off-(On)	1A/50VAC	Front Panel	*	15.51	14.72	13.79	11.51

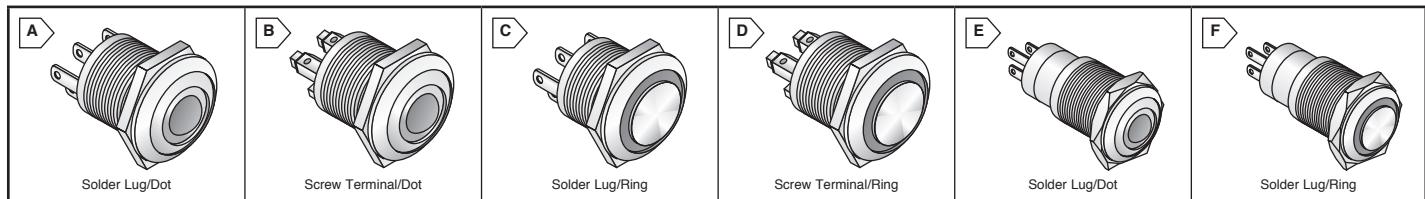
## 16MM NON-ILLUMINATED PUSHBUTTON SWITCHES

### Specifications:

- Contact Resistance: 50mΩ @ 1A, 2VDC
- Dielectric Strength: >2.0K VAC
- 16mm dia. Mounting Hole
- Stainless Steel Manufacturing

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Bulgin Part No.	Fig.	Button Profile	Bezel Dia. (mm)	Type	Circuit	Rating	Mounting	Front Panel Sealing	Price Each			
										1	25	50	100
117-MP0042/1	MP0042/1	D	Low	18	SPMB	Off-(On)	2A/48VDC	Front Panel	None	9.78	9.27	8.98	8.50
117-MP0045/1DONN000	MP0045/1DONN000	E	Low	18	DPCO	On-(On)	3A/250VAC	Front Panel	None	12.41	11.60	11.17	10.65
117-MP0045/1EONN000	MP0045/1EONN000	E	Low	18	DPCO	On-On	3A/250VAC	Front Panel	None	14.10	13.48	12.97	12.27
117-MP0042/2	MP0042/2	D	Domed	18	SPMB	Off-(On)	2A/48VDC	Front Panel	None	9.08	8.82	8.56	7.81
117-MP0042/3	MP0042/3	D	Prominent	18	SPMB	Off-(On)	2A/48VDC	Front Panel	None	9.08	8.81	8.55	8.09
117-MP0045/3DONN000	MP0045/3DONN000	E	Prominent	18	DPCO	On-(On)	3A/250VAC	Front Panel	None	13.48	12.30	11.83	11.29
117-MP0045/3EONN000	MP0045/3EONN000	E	Prominent	18	DPCO	On-On	3A/250VAC	Front Panel	None	14.10	13.48	12.97	12.27



## ILLUMINATED VANDAL-RESISTANT SWITCHES

### Specifications:

- Contact Resistance: <100mΩ
- Operating Temperature: -30°C to +70°C
- Insulation Resistance: >1000MΩ
- Mechanical Operations: 750,000 min
- Electrical Operations: 35,000 min

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Bulgin Part No.	Fig.	Button Profile	Bezel Dia. (mm)	Type	Circuit	Rating	Mounting	Front Panel Sealing	Price Each			
										1	25	50	100
117-MP1001/28/GN	MP1001/28/GN	A	Green/Dot	22	SPMB	Off-(On)	50mA/24VDC	Front Panel	IP66	28.66	26.33	23.40	19.53
117-MP1001/28/RD	MP1001/28/RD	A	Red/Dot	22	SPMB	Off-(On)	50mA/24VDC	Front Panel	IP66	28.66	23.80	21.51	19.53
117-MP1001/TERM/BL	MP1001/TERM/BL	B	Blue/Dot	22	SPMB	Off-(On)	50mA/24VDC	Front Panel	IP66	25.55	22.79	21.28	19.66
117-MP1002/28/BL	MP1002/28/BL	B	Blue/Ring	22	SPMB	Off-(On)	50mA/24VDC	Front Panel	IP66	30.25	27.77	24.68	20.62
117-MP1002/28/GN	MP1002/28/GN	C	Green/Ring	22	SPMB	Off-(On)	50mA/24VDC	Front Panel	IP66	27.26	25.06	21.08	18.58
117-MP1002/28/RD	MP1002/28/RD	C	Red/Ring	22	SPMB	Off-(On)	50mA/24VDC	Front Panel	IP66	27.23	22.30	20.52	18.58
117-MP1002/TERM/BL	MP1002/TERM/BL	D	Blue/Ring	22	SPMB	Off-(On)	50mA/24VDC	Front Panel	IP66	32.72	30.06	26.72	22.30
117-MP1002/TERM/GN	MP1002/TERM/GN	D	Green/Ring	22	SPMB	Off-(On)	50mA/24VDC	Front Panel	IP66	28.13	23.02	21.20	19.19
117-MP1002/TERM/RD	MP1002/TERM/RD	D	Red/Ring	22	SPMB	Off-(On)	50mA/24VDC	Front Panel	IP66	25.32	23.02	21.10	19.19

## 16MM ILLUMINATED PUSHBUTTON SWITCHES

### Specifications:

- Contact Resistance: 50mΩ @ 1A, 2VDC
- 16mm dia. Mounting Hole
- Mechanical Operations: 200,000 min
- Electrical Operations: 30,000 min

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Bulgin Part No.	Fig.	Button Profile	Bezel Dia. (mm)	Type	Circuit	Rating	Mounting	Front Panel Sealing	Price Each			
										1	25	50	100
117-MP0045/1D1RD012	MP0045/1D1RD012	E	Red/Dot	18	DPCO	On-(On)	3A/250VAC	Front Panel	None	17.01	15.91	14.97	14.38
117-MP0045/1D1GN012	MP0045/1D1GN012	E	Green/Dot	18	DPCO	On-(On)	3A/250VAC	Front Panel	None	17.01	15.91	14.97	14.38
117-MP0045/1D1BL012	MP0045/1D1BL012	E	Blue/Dot	18	DPCO	On-(On)	3A/250VAC	Front Panel	None	16.19	15.48	14.89	14.07
117-MP0045/1E1RD012	MP0045/1E1RD012	E	Red/Dot	18	DPCO	On-On	3A/250VAC	Front Panel	None	15.38	14.39	13.85	13.21
117-MP0045/1E1GN012	MP0045/1E1GN012	E	Green/Dot	18	DPCO	On-On	3A/250VAC	Front Panel	None	17.03	16.28	15.67	14.81
117-MP0045/1E1BL012	MP0045/1E1BL012	E	Blue/Dot	18	DPCO	On-On	3A/250VAC	Front Panel	None	16.23	15.52	14.93	14.13
117-MP0045/1D2RD012	MP0045/1D2RD012	F	Red/Ring	18	DPCO	On-(On)	3A/250VAC	Front Panel	None	15.80	14.77	14.20	13.55
117-MP0045/1D2GN012	MP0045/1D2GN012	F	Green/Ring	18	DPCO	On-(On)	3A/250VAC	Front Panel	None	16.58	14.77	14.20	13.55
117-MP0045/1D2BL012	MP0045/1D2BL012	F	Blue/Ring	18	DPCO	On-(On)	3A/250VAC	Front Panel	None	16.19	14.77	14.21	13.55
117-MP0045/1E2RD012	MP0045/1E2RD012	F	Red/Ring	18	DPCO	On-On	3A/250VAC	Front Panel	None	16.07	14.76	14.19	13.54
117-MP0045/1E2GN012	MP0045/1E2GN012	F	Green/Ring	18	DPCO	On-On	3A/250VAC	Front Panel	None	16.63	15.53	14.96	14.26
117-MP0045/1E2BL012	MP0045/1E2BL012	F	Blue/Ring	18	DPCO	On-On	3A/250VAC	Front Panel	None	16.63	15.55	14.98	14.29

# C&K Pushbutton Switches

RoHS Compliant

This page of product is RoHS compliant.



## AP SERIES INDUSTRIAL PUSHBUTTON SWITCHES

### Features:

- IP67 sealed
- Sealed against dirt and fluids, UV tolerant
- 1,000,000 life cycle
- Illumination / non-illumination
- Multiple colored caps
- Threaded or snap-in mounting
- SPST, normally open
- Termination styles: solder lug, PC terminals (non-illuminated only), or 12<sup>th</sup> wire leads (22 AWG)
- Caps can not be removed and don't spin after installation. Caps available in different colors and dome, concave, or extended dome.
- 2N and 4N operating force options

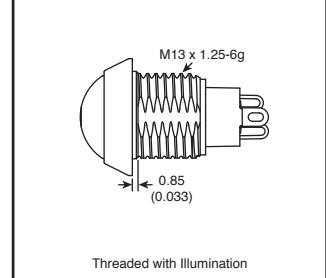
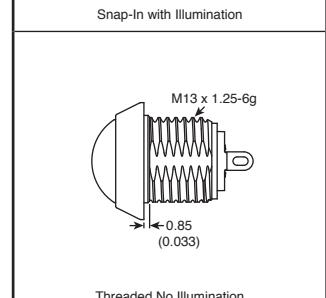
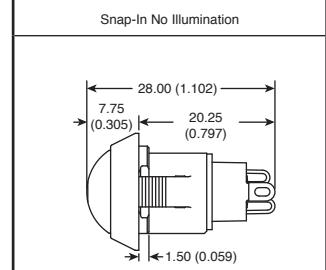
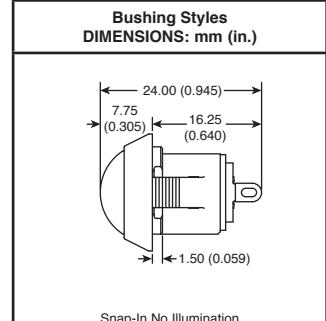
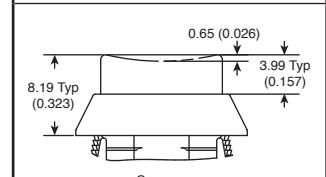
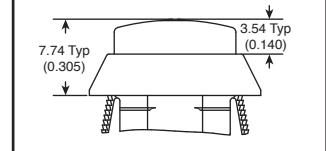
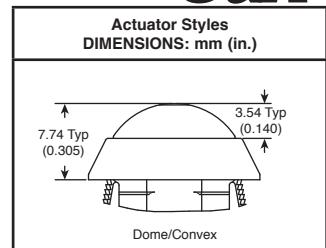
### Applications:

- Harsh environments
- Off-Road transportation
- Automotive
- Marine
- Industrial
- Medical
- Transportation
- Joystick control modules, grips
- Gaming
- Food & Beverage
- Military
- Anywhere there are industrial/agricultural chemicals present (bases, hydrocarbons, various oils and fuels)

### Non-Illuminated Industrial Pushbutton Switches

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Operating Force	Actuator Style	Actuator Color	Termination	Price Each			
						1	25	50	100
<b>Snap-In</b>									
611-AP2C300SZBE	AP2C300SZBE	2N	Concave	No Cap	Solder Lug	11.27	9.80	8.16	7.87
611-AP4C300SZBE	AP4C300SZBE	4N	Concave	No Cap	Solder Lug	11.60	10.08	8.40	8.09
611-AP2D200SZBE	AP2D200SZBE	2N	Dome/Convex	Black	Solder Lug	9.71	9.32	8.61	8.34
611-AP2D300SZBE	AP2D300SZBE	2N	Dome/Convex	Red	Solder Lug	9.52	8.57	8.10	7.86
611-AP4D200SZBE	AP4D200SZBE	4N	Dome/Convex	Black	Solder Lug	11.11	9.66	8.52	8.38
611-AP4D300SZBE	AP4D300SZBE	4N	Dome/Convex	Red	Solder Lug	9.52	8.57	8.10	7.86
611-AP2E200SWBE	AP2E200SWBE	2N	Extended Dome	Black	Wire Lead	14.10	12.49	11.53	10.67
611-AP2E200SZBE	AP2E200SZBE	2N	Extended Dome	Black	Solder Lug	11.54	10.04	8.36	8.07
611-AP2E300SZBE	AP2E300SZBE	2N	Extended Dome	Red	Solder Lug	11.27	9.80	8.16	7.87
611-AP4E200SWBE	AP4E200SWBE	4N	Extended Dome	Black	Wire Lead	14.10	12.49	11.53	10.67
611-AP4E200SZBE	AP4E200SZBE	4N	Extended Dome	Black	Solder Lug	9.84	8.85	8.36	8.12
611-AP4E300SZBE	AP4E300SZBE	4N	Extended Dome	Red	Solder Lug	11.60	10.08	8.40	8.09
611-AP2N000SZBE	AP2N000SZBE	2N	None	No Cap	Solder Lug	12.77	11.61	8.01	7.71
611-AP4N000SWBE	AP4N000SWBE	4N	None	No Cap	Wire Lead	16.43	13.86	12.57	9.61
<b>Threaded</b>									
611-AP2C300TZBE	AP2C300TZBE	2N	Concave	No Cap	Solder Lug	11.78	10.43	8.91	8.91
611-AP4C300TZBE	AP4C300TZBE	4N	Concave	No Cap	Solder Lug	11.47	10.15	8.68	8.28
611-AP2D200TZBE	AP2D200TZBE	2N	Dome/Convex	Black	Solder Lug	10.08	8.93	8.57	8.32
611-AP2D300TZBE	AP2D300TZBE	2N	Dome/Convex	Red	Solder Lug	10.14	9.12	8.62	8.36
611-AP2D200TWBE	AP2D200TWBE	2N	Dome/Convex	Black	Wire Lead	12.43	11.62	10.81	10.26
611-AP4D200TZBE	AP4D200TZBE	4N	Dome/Convex	Black	Solder Lug	10.39	9.36	8.83	8.57
611-AP4D300TZBE	AP4D300TZBE	4N	Dome/Convex	Red	Solder Lug	10.14	9.12	8.62	8.36
611-AP4D200TWBE	AP4D200TWBE	4N	Dome/Convex	Black	Wire Lead	14.70	13.03	12.02	11.13
611-AP2E200TZBE	AP2E200TZBE	2N	Extended Dome	Black	Solder Lug	10.45	9.40	8.89	8.62
611-AP2E300TZBE	AP2E300TZBE	2N	Extended Dome	Red	Solder Lug	15.76	12.83	8.91	8.32
611-AP2E200TWBE	AP2E200TWBE	2N	Extended Dome	Black	Wire Lead	12.52	12.14	10.87	10.71
611-AP4E200TZBE	AP4E200TZBE	4N	Extended Dome	Black	Solder Lug	10.46	9.41	8.89	8.62
611-AP4E300TZBE	AP4E300TZBE	4N	Extended Dome	Red	Solder Lug	10.21	9.19	8.68	8.43
611-AP4E200TWBE	AP4E200TWBE	4N	Extended Dome	Black	Wire Lead	12.16	11.36	10.56	10.39
611-AP2N000TZBE	AP2N000TZBE	2N	None	No Cap	Solder Lug	12.94	11.77	8.20	7.91
611-AP4N000TZBE	AP4N000TZBE	4N	None	No Cap	Solder Lug	14.82	11.29	8.09	7.94



### Illuminated Industrial Pushbutton Switches

Option Code	Illumination Type	Typical Intensity		Peak Wavelength	Vf Forward Voltage
		Min.	Max.		
02	LED Bi-Color: Red (Green)	10	20	635/565	2.0
03	LED Red	4	8	700	2.0
06	LED Green	35	50	565	2.0
07	LED Super Blue	800	1500	470	3.8

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Operating Force	Actuator Style	Actuator Color	LED Color	Termination	Price Each			
							1	25	50	100
<b>Snap-In</b>										
611-AP2D202SZBE	AP2D202SZBE	2N	Dome/Convex	Black	Red(Green)	Solder Lug	11.48	10.17	8.69	8.60
611-AP4D202SZBE	AP4D202SZBE	4N	Dome/Convex	Black	Red(Green)	Solder Lug	11.48	10.17	8.69	8.29
611-AP2D207SZBE	AP2D207SZBE	2N	Dome/Convex	Black	Super Blue	Solder Lug	14.18	12.57	10.74	10.70
611-AP4D207SZBE	AP4D207SZBE	4N	Dome/Convex	Black	Super Blue	Solder Lug	14.18	12.57	10.74	10.44
611-AP2E206SZBE	AP2E206SZBE	4N	Extended Dome	Black	Green	Solder Lug	15.04	13.23	10.70	10.39
611-AP2E202SZBE	AP2E202SZBE	2N	Extended Dome	Black	Red(Green)	Solder Lug	11.56	10.25	8.76	8.75
611-AP4E202SZBE	AP4E202SZBE	4N	Extended Dome	Black	Red(Green)	Solder Lug	11.88	10.54	9.00	8.69
611-AP2E207SZBE	AP2E207SZBE	2N	Extended Dome	Black	Super Blue	Solder Lug	14.27	12.64	10.81	10.80
611-AP4E207SZBE	AP4E207SZBE	4N	Extended Dome	Black	Super Blue	Solder Lug	14.27	12.64	10.81	10.80
611-AP2N006SZBE	AP2N006SZBE	2N	None	No Cap	Green	Solder Lug	12.11	11.14	8.44	7.99
611-AP4N006SZBE	AP4N006SZBE	4N	None	No Cap	Green	Solder Lug	12.11	11.14	8.44	7.99
611-AP2N003SZBE	AP2N003SZBE	2N	None	No Cap	Red	Solder Lug	12.02	10.74	8.38	7.98
611-AP4N003SZBE	AP4N003SZBE	4N	None	No Cap	Red	Solder Lug	12.02	10.74	8.38	7.98
611-AP2N002SZBE	AP2N002SZBE	2N	None	No Cap	Red(Green)	Solder Lug	15.04	13.23	8.21	8.07
611-AP2N007SZBE	AP2N007SZBE	2N	None	No Cap	Super Blue	Solder Lug	16.97	14.38	10.26	10.04
611-AP4N007SZBE	AP4N007SZBE	4N	None	No Cap	Super Blue	Solder Lug	16.97	14.38	10.26	10.04
611-AP4N007SWBE	AP4N007SWBE	4N	None	No Cap	Super Blue	Wire Lead	19.58	18.01	16.57	12.16
<b>Threaded</b>										
611-AP2D202TZBE	AP2D202TZBE	2N	Dome/Convex	Black	Red(Green)	Solder Lug	12.50	11.08	9.47	9.47
611-AP4D202TZBE	AP4D202TZBE	4N	Dome/Convex	Black	Red(Green)	Solder Lug	10.84	9.76	9.21	8.94
611-AP2D207TZBE	AP2D207TZBE	2N	Dome/Convex	Black	Super Blue	Solder Lug	15.21	13.46	11.17	10.86
611-AP4D207TZBE	AP4D207TZBE	4N	Dome/Convex	Black	Super Blue	Solder Lug	14.88	13.17	10.93	10.63
611-AP2E202TZBE	AP2E202TZBE	2N	Extended Dome	Black	Red(Green)	Solder Lug	10.92	9.82	9.28	9.01
611-AP4E202TZBE	AP4E202TZBE	4N	Extended Dome	Black	Red(Green)	Solder Lug	10.92	9.82	9.28	9.01
611-AP2E207TZBE	AP2E207TZBE	2N	Extended Dome	Black	Super Blue	Solder Lug	14.96	13.25	11.00	10.69
611-AP4E207TZBE	AP4E207TZBE	4N	Extended Dome	Black	Super Blue	Solder Lug	15.27	13.53	11.23	10.91
611-AP2N006TZBE	AP2N006TZBE	2N	None	No Cap	Green	Solder Lug	15.04	13.23	8.48	8.22
611-AP4N006TZBE	AP4N006TZBE	4N	None	No Cap	Green	Solder Lug	15.04	13.23	8.48	8.32
611-AP2N003TZBE	AP2N003TZBE	2N	None	No Cap	Red	Solder Lug	15.04	13.23	8.42	8.22
611-AP2N002TZBE	AP2N002TZBE	2N	None	No Cap	Red(Green)	Solder Lug	16.44	13.86	8.73	8.58
611-AP4N002TZBE	AP4N002TZBE	4N	None	No Cap	Red(Green)	Solder Lug	16.44	13.86	8.73	8.58
611-AP2N007TZBE	AP2N007TZBE	2N	None	No Cap	Super Blue	Solder Lug	21.30	17.18	10.78	10.51
611-AP4N007TZBE	AP4N007TZBE	4N	None	No Cap	Super Blue	Solder Lug	21.30	17.18	10.78	10.59

# C&K Pushbutton Switches

 This page of product is RoHS compliant.



## ELUM SERIES: RIGHT ANGLE ILLUMINATED LATCHING PUSHBUTTON SWITCHES

### Specifications:

- Fixed contacts and terminals: Stainless steel, silver plated with gold flash (STD)
- Movable contacts: Copper alloy, silver plated with gold flash (STD)
- Base: Glass filled LCP (UL94V-0)
- Actuator: Glass filled nylon 4/6 (UL94V-0)
- Cover: Stainless steel
- Maximum power: 3.5VA

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Mfr. Mfr. Part No.	Fig.	Contact Form	Illumination	Contact Material	Price Each			
						1	25	50	100
<b>Right-Angle Surface Mount</b>									
611-ELUMEESAQ2C12ST	A	SPDT	Red (Green)	Q	6.45	5.83	5.68	5.52	
611-ELUMEESAQ6C22ST	A	SPDT	Green	Q	6.10	5.52	5.37	5.23	
611-ELUMEESAQC02ST	A	SPDT	None	Q	4.25	4.04	3.85	3.66	
611-ELUMOASAQ2C12ST	B	SPDT	Red (Green)	Q	6.02	5.45	5.31	5.16	
611-ELUMOASAQ7C22ST	B	SPDT	Blue	Q	4.68	4.08	3.82	3.53	
611-ELUMOASAQC02ST	B	SPDT	None	Q	4.05	3.86	3.68	3.49	
<b>Right-Angle PC Thru-Hole</b>									
611-ELUMEETHQ2C12	A	SPDT	Red (Green)	Q	5.21	4.72	4.59	4.47	
611-ELUMEETHQ3C12	A	SPDT	Red	Q	4.88	4.31	4.30	4.18	
611-ELUMEETHQ6C12	A	SPDT	Green	Q	4.88	4.49	4.30	4.18	
611-ELUMEETHQ6C22	A	SPDT	Green	Q	5.22	4.75	4.60	4.48	
611-ELUMEETHQ7C12	A	SPDT	Blue	Q	5.07	4.47	4.47	4.35	
611-ELUMEETHQ7C22	A	SPDT	Blue	Q	5.42	4.97	4.77	4.65	
611-ELUMEETHQ0C2	A	SPDT	None	Q	4.41	3.96	3.73	3.63	
611-ELUMOATHQ2C12	B	SPDT	Red (Green)	Q	6.01	5.78	5.25	3.01	
611-ELUMOATHQ3C12	B	SPDT	Red	Q	4.82	4.44	4.24	4.13	
611-ELUMOATHQ6C12	B	SPDT	Green	Q	4.67	4.27	4.11	4.00	
611-ELUMOATHQ6C22ST	B	SPDT	Green	Q	6.09	5.25	5.10	4.76	
611-ELUMOATHQ7C12	B	SPDT	Blue	Q	5.01	4.54	4.41	4.30	
611-ELUMOATHQ7C22	B	SPDT	Blue	Q	6.01	5.50	4.81	3.57	
611-ELUMOATHQ0C2	B	SPDT	None	Q	4.31	3.89	3.64	3.54	

## F SERIES: PUSHBUTTON SWITCHES

### Specifications:

- Switching power: F module Max. AC/DC: Silver: 50VA/15W, Gold: 1VA/300mW
- Switching voltage: F module Max. AC/DC: Silver: 125/30V, Gold 50/30V
- Switching current: F module Max. AC/DC: Silver: 0.5A/0.5A, Gold: 0.04A/0.01A

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Illumination	Contact Material	Price Each				
						1	25	50	100	
<b>611-F2UEE</b>										
611-F2UEEAU	F2UEEAU	C	2PDT	Push-Push	Silver	1.66	1.48	1.40	1.37	
611-F2UOA	F2UOA	D	2PDT	Momentary	Gold	4.24	3.89	3.65	3.55	
611-FLT2UEETB	FLT2UEETB	D	2PDT	Push-Push	Silver	1.43	1.38	1.32	1.30	
611-F4UEEE	F4UEEE	C	4PDT	Push-Push	Silver	2.59	2.33	1.95	1.90	
611-F8UEEE	F8UEEE	D	8PDT	Push-Push	Silver	2.88	2.84	2.43	2.37	
611-F4UEEAU	F4UEEAU	D	4PDT	Push-Push	Gold	7.45	6.75	6.54	6.17	
611-F4UOA	F4UOA	D	4PDT	Momentary	Silver	2.47	2.39	2.29	2.22	
611-100100-2019	-	-	2PDT	Push-Push	Silver	10.80	10.06	9.58	8.95	
611-100100-4004	100100-4004	-	4PDT	Push-Push	Silver	9.21	8.58	8.16	7.63	
611-100100-7152	100100-7152	-	Central	Mt PB	Silver	7.70	7.18	6.83	6.38	
611-170100-2506	170100-2506	-	Alternate	Push-Push	Silver	22.81	21.26	20.23	18.92	

## PN SERIES: ALTERNATE & MOMENTARY ACTION PUSHBUTTON SWITCHES

### Specifications:

- Contact rating: 0.2A @ 30V DC max
- Electrical life: 10,000 make-and-break cycles at full load
- Mechanical life: 10,000 on/off cycles
- Operating/storage temp.: -10°C to 60°C

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Mfr. Mfr. Part No.	Fig.	Contact Arrangement	Mechanical Function	Operating Force	Price Each			
						1	25	50	100
<b>611-PN11SHNA03QE</b>									
611-PN12SHNA03QE	E	SPDT	Momentary	230g	1.14	.961	.936	.91	
611-PN12SBSA03QE	E	SPDT	Locking	230g	1.15	1.04	1.02	.994	
611-PN11SBSA03QE	F	SPDT	Momentary	120g	1.17	.995	.968	.942	
611-PN21LENA03QE	F	DPDT	Momentary	120g	1.76	1.56	1.39	1.34	
611-PN21LENQ03QE	F	DPDT	Momentary	300g	1.32	1.11	1.09	1.06	
611-PN21SJNA03QE	F	DPDT	Momentary	330g	1.34	1.12	1.10	1.07	
611-PN22LENA03QE	F	DPDT	Locking	300g	1.43	1.20	1.17	1.14	
611-PN22SJNA03QE	F	DPDT	Locking	330g	1.41	1.19	1.16	1.13	
611-PN41LENA02QE	G	4PDT	Momentary	300g	1.58	1.33	1.30	1.27	
611-PN42LENA02QE	G	4PDT	Locking	300g	1.76	1.48	1.44	1.41	

## PS SERIES: MINIATURE PUSHBUTTON SWITCHES

### Features:

- 10,000 to 20,000 cycles



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Actuator	Supply Voltage	Price Each				
						1	25	100	250	
<b>611-PS-12G01</b>										
611-PS12G03	PS-12G01	H	SPDT	Round	14VDC	3.04	2.70	2.50	2.43	
611-PS-2206-LNS	PS-2206-L NS	I	SPDT	Round	14.5VDC	1.39	1.27	1.21	1.13	
611-PS-2214-LNSPA	PS-2214-L NS PA	J	SPDT	Plunger with Cap	30VDC	1.01	.90	.832	.81	
611-PS-2214-LNSPA	PS-2214-L NS PA	K	DPDT	Square	30VDC	1.01	.90	.832	.81	

## PWR SERIES: POWER PUSHBUTTON SWITCHES

### Features/Benefits:

- Movable contact with redundant high power contact points to form a momentary, SPST, double break switch
- Rubber actuator provides sealing and tactile feel
- Small SMT packaging allows applications to integrate power and signal switch on same PCB
- IP65 • UL 61058

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Illumination	Contact Material	Price Each				
						1	25	100	250	
<b>611-PWR70Q1SR</b>										
611-PWR70Q2SR	PWR70Q1SR	L	SPST	None	Polyphenylene Sulfide (PPS)	3.89	3.46	3.20	3.11	
611-PWR70Q2SR	PWR70Q2SR	L	SPST	None	Polyphenylene Sulfide (PPS)	3.89	3.46	3.20	3.11	

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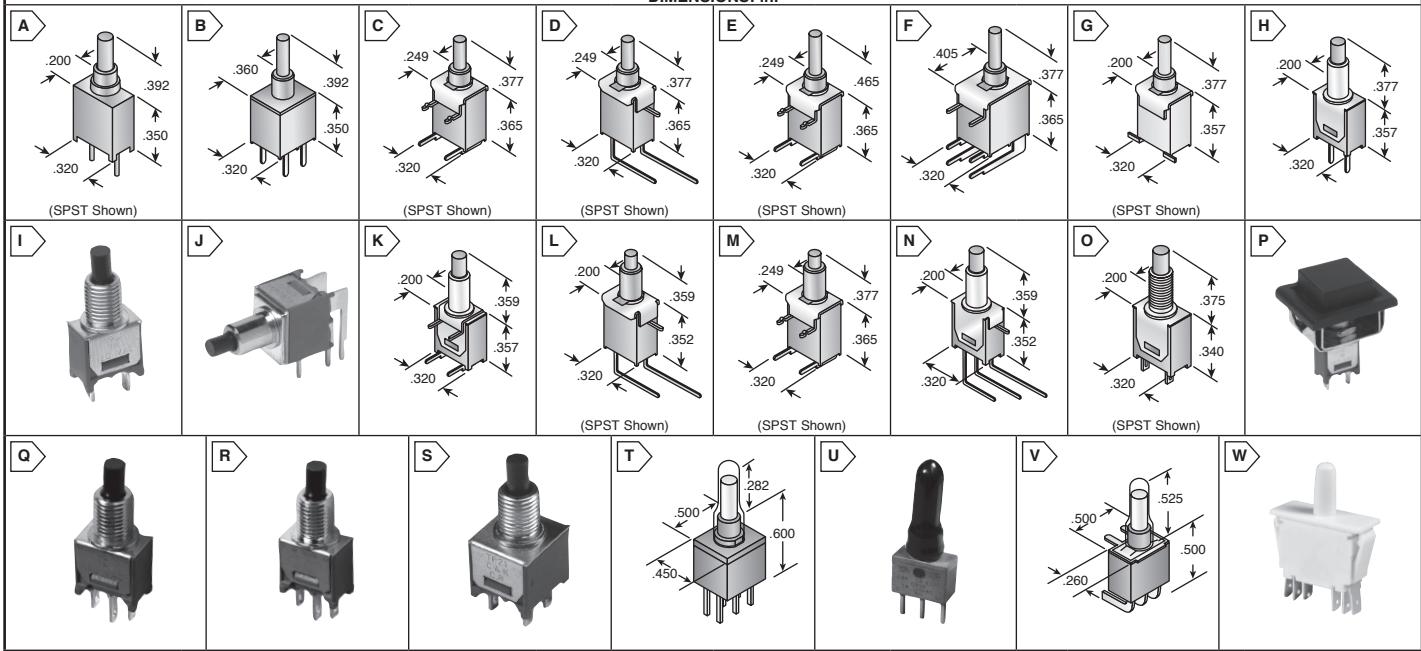
1883

C&K  
Pushbutton Switches

# C&K Pushbutton Switches

**C&K**

DIMENSIONS: in.



## SEALED TINY PUSHBUTTON SWITCHES

• Plunger material: Thermoplastic polyester or glass filled nylon (UL94V-0) with o-ring seal

• IP67 degree of protection

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit ( ) = Momentary	Power Rating	Price Each		
						1	25	50
<b>PC Thru-Hole</b>								
611-EP11-003	EP11SD1CBE	A	SPST	(On)-Off	0.4VA	3.89	3.76	3.52
611-EP12-003	EP12SD1CBE	A	SPDT	(On)-On	0.4VA	4.82	4.73	4.47
611-EP21-003	EP21SD1CBE	B	DPST	(On)-Off	0.4VA	7.24	6.56	6.36
<b>Right-Angle PC Thru-Hole</b>								
611-EP11-001	EP11SD1A1BE	C	SPST	(On)-Off	0.4VA	4.11	3.98	3.81
611-EP11-002	EP11SD1AVBE	D	SPST	(On)-Off	0.4VA	4.30	4.16	3.98
611-EP12-001	EP12SD1A1BE	C	SPDT	(On)-On	0.4VA	5.23	5.00	4.77
611-EP12-011	EP12SD1AVBE	D	SPDT	(On)-On	0.4VA	5.42	5.24	5.02
611-EP11S2D1A1BE	EP11S2D1A1BE	E	SPST	Off-(On)	0.4VA	8.71	6.90	4.36
611-EP21-001	EP21SD1A1BE	F	DPST	(On)-Off	0.4VA	8.02	7.83	7.05
<b>Right-Angle Surface Mount</b>								
611-EP11-004	EP11SD1SAKE	G	SPST	(On)-Off	0.4VA	4.83	4.59	4.38
611-EP11-004P	EP11SD1SAPE	G	SPST	(On)-Off	0.4VA	4.38	4.18	4.05

## TINY PUSHBUTTON SWITCHES

• Subminiature size capable of switching up to 1A

• Plunger material: Thermoplastic polyester (UL94V-0)

For quantities greater than listed, call for quote.

<b>PC Thru-Hole</b>								
611-TP11-005	TP11SH9CBE	H	SPST	(On)-Off	0.4VA	3.66	3.49	3.39
611-TP11LTCQE	TP11LTCQE	I	SPST	Off-(On)	1A	4.58	4.49	4.40
611-TP11SHCBE	TP11SHCBE	H	SPST	Off-(On)	0.4VA	4.26	4.21	4.15
611-TP11SHCQE	TP11SHCQE	H	SPST	Off-(On)	1A	4.11	4.06	4.01
611-TP12SHCBE	TP12SHCBE	H	SPDT	(On)-Off	0.4VA	7.62	7.11	5.30
611-TP21SH9CBE	TP21SH9CBE	J	DPST	Off-(On)	0.4VA	15.89	14.44	12.85
<b>Right-Angle PC Thru-Hole</b>								
611-TP11-006	TP11SH8A1BE	K	SPST	(On)-Off	0.4VA	5.11	4.96	4.83
611-TP11-004	TP11SH9A1BE	K	SPST	Off-(On)	0.4VA	4.56	4.50	4.44
611-TP12-007	TP12SH8A1QE	K	SPDT	(On)-On	1A	6.01	5.84	5.62
611-TP11SH8AGE	TP11SH8AGE	K	SPST	(On)-Off	1A	6.96	6.58	4.70
611-TP11SH8A1QE	TP11SH8A1QE	K	SPST	(On)-Off	1A	4.27	4.02	3.61
611-TP11SH8AVBE	TP11SH8AVBE	K	SPST	Off-(On)	0.4VA	5.11	4.96	4.83
611-TP11-009	TP11SH9AVBE	L	SPST	Off-(On)	0.4VA	5.11	4.96	4.83
611-TP12-006	TP12SH8A1BE	M	SPDT	(On)-On	0.4VA	5.74	5.66	5.59
611-TP12-004	TP12SH9A1BE	M	SPDT	(On)-On	0.4VA	9.66	8.94	8.47
611-TP12-008	TP12SH8A1VE	N	SPDT	(On)-On	0.4VA	5.74	5.66	5.59
611-TP21SH8A1BE	TP21SH8A1BE	J	DPST	Off-(On)	0.4VA	15.10	13.10	7.36
<b>Solder Lug</b>								
611-TP11-002	TP11SHZQE	O	SPST	Off-(On)	1A	3.40	3.20	3.07
611-TP11J1ZQE22	TP11J1ZQE22	P	SPST	Off-(On)	1A	4.70	4.64	4.58
611-TP11SHZBE	TP11SHZBE	O	SPST	Off-(On)	0.4VA	4.18	4.13	4.08
611-TP12-002	TP12SHZQE	Q	SPDT	Off-(On)	1A	5.18	5.11	5.05
611-TP12-002	TP12SHZBE	R	SPDT	Off-(On)	0.4VA	6.95	6.35	5.29
611-TP21-002	TP21SHZQE	R	DPST	Off-(On)	1A	7.93	7.83	7.73
611-TP21-002	TP21SHZBE	S	DPST	Off-(On)	0.4VA	14.13	10.94	8.06

## SEALED SNAP-ACTING PUSHBUTTON SWITCHES

• Vinyl splashproof boot supplied standard

For quantities greater than listed, call for quote.

<b>PC Thru-Hole</b>								
611-E221-001	E221SD1CGE	T	DPDT	On-(On)	0.4VA	12.39	12.01	10.54
611-E121-001	E121SD1CGE	U	SPDT	On-(On)	0.4VA	7.90	7.66	6.94
<b>Right-Angle PC Thru-Hole</b>								
611-E121-002	E121SD1AGE	V	SPDT	On-(On)	0.4VA	7.77	7.65	7.37
611-E125-004	E125SD1A1BE	V	SPDT	On-(On)	0.4VA	6.13	5.84	5.40

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1884

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(800) 346-6873

## INTERLOCK PUSHBUTTON SWITCHES

### Features:

- Snap-in mounting
- Reliable snap action mechanism
- Latch or momentary
- RoHS compliant
- Halogen free material

### Specifications:

- Single pole double throw / Double pole double throw
- Snap in style
- Dielectric Strength: 1500V (50-60 Hz @ sea level)
- Insulation Resistance: 100MΩ min.
- Initial Contact Resistance: 30Ω
- Operating Temperature: -40°C to +85°C

- Applications:**
- Interlock switch
  - Detection switch
  - Circuit interrupt

### SPDT

• Dimensions mm (LxWxH): 31.75 x 17.3 x 26.6

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Actuator	Terminals	Actuator Size (mm)	Price Each		
						1	25	50
<b>10A Current</b>								
611-DS1D6A1Q1	DS1D6AQ1	W	Short Button	4.8x0.5	11.45	4.21	3.47	3.30
611-DS1D6A2Q	DS1D6AQ2	W	Short Button	4.8x0.8	11.45	4.21	3.47	3.30
611-DS1D6A3Q	DS1D6AQ3	W	Short Button	6.3x0.8	11.45	4.21	3.47	3.30
611-DS1D6BQ1	DS1D6BQ1	W	Long Button	4.8x0.5	22.25	4.34	3.57	3.40
611-DS1D6BQ2	DS1D6BQ2	W	Long Button	4.8x0.8	22.25	4.34	3.57	3.40
611-DS1D6BQ3	DS1D6BQ3	W	Long Button	6.3x0.8	22.25	4.34	3.57	3.40
611-DS1D6CQ1	DS1D6CQ1	W	PullOut Button	4.8x0.5	19.3	4.59	3.78	3.60
611-DS1D6CQ2	DS1D6CQ2	W	PullOut Button	4.8x0.8	19.3	4.59	3.78	3.60
611-DS1D6CQ3	DS1D6CQ3	W	PullOut Button	6.3x0.8	19.3	4.59	3.78	3.60
<b>0.1A Current</b>								
611-DS1F5A1Q1	DS1F5AQ1	W	Short Button	4.8x0.5	11.45	6.28	4.77	4.64
611-DS1F5A2Q	DS1F5AQ2	W	Short Button	4.8x0.8	11.45	6.28	4.77	4.64
611-DS1F5A3Q	DS1F5AQ3	W	Short Button	6.3x0.8	11.45	6.28	4.77	4.64
611-DS1F5BQ1	DS1F5BQ1	W	Long Button	4.8x0.5	22.25	6.40	4.86	4.74
611-DS1F5BQ2	DS1F5BQ2	W	Long Button	4.8x0.8	22.25	6.40	4.86	4.74
611-DS1F5BQ3	DS1F5BQ3	W	Long Button	6.3x0.8	22.25	6.40	4.86	4.74
611-DS1F5CQ1	DS1F5CQ1	W	PullOut Button	4.8x0.5	19.3	6.65	5.05	4.92
611-DS1F5CQ2	DS1F5CQ2	W	PullOut Button	4.8x0.8	19.3	6.65	5.05	4.92
611-DS1F5CQ3	DS1F5CQ3	W	PullOut Button	6.3x0.8	19.3	6.65	5.05	4.92

### DPDT

• Dimensions mm (LxWxH): 39.9 x 17.3 x 26.6

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Actuator	Terminals	Actuator Size (mm)	Price Each		
						1	25	50
<b>10A Current</b>								
611-DS2D6A1Q1	DS2D6AQ1	W	Short Button	4.8x0.5	11.45	9.08	6.90	6.72
611-DS2D6A2Q	DS2D6AQ2	W	Short Button	4.8x0.8	11.45	9.08	6.90	6.72
611-DS2D6A3Q	DS2D6AQ3	W	Short Button	6.3x0.8	11.45	9.08	6.90	6.72
611-DS2D6BQ2	DS2D6BQ2	W	Long Button	4.8x0.8	22.25	9.23	7.01	6.83
611-DS2D6BQ3	DS2D6BQ3	W	Long Button	6.3x0.8	22.25	9.23	7.01	6.83
611-DS2D6CQ1	DS2D6CQ1	W	PullOut Button	4.8x0.5	19.3	9.48	7.20	7.01
611-DS2D6CQ2	DS2D6CQ2	W	PullOut Button	4.8x0.8	19.3	9.48	7.20	7.01
611-DS2D6CQ3	DS2D6CQ3	W	PullOut Button	6.3x0.8	19.3	9.48	7.20	7.01
<b>0.1A Current</b>								
611-DS2F5A1Q1	DS2F5AQ1	W	Short Button	4.8x0.5	11.45	11.49	8.44	7.97
611-DS2F5A2Q	DS2F5AQ2	W	Short Button	4.8x0.8	11.45	11.49	8.44	7.97
611-DS2F5A3Q	DS2F5AQ3	W	Short Button	6.3x0.8	11.45	11.49	8.44	7.97
611-DS2F5BQ1	DS2F5BQ1	W	Long Button	4.8x0.5	22.25	11.61	8.53	8.06
611-DS2F5BQ2	DS2F5BQ2	W	Long Button	4.8x0.8	22.25	11.61	8.53	8.06
611-DS2F5BQ3	DS2F5BQ3	W	Long Button	6.3x0.8	22.25	11.61	8.53	8.06
611-DS2F5CQ1	DS2F5CQ1	W	PullOut Button	4.8x0.5	19.3	11.86	8.71	8.23
611-DS2F5CQ2	DS2F5CQ2	W	PullOut Button	4.8x0.8	19.3	11.86	8.71	8.23
611-DS2F5CQ3	DS2F5CQ3	W	PullOut Button	6.3x0.8	19.3	11.86	8.71	8.23

# C&K Pushbutton Switches

**C&K**

## KS SERIES SINGLE POLE KEY SWITCHES

### Features:

- Positive tactile feel
- Variety of cap colors
- LED support available

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Cap Color	Contact Form	Circuit	Total Height	Price Each		
							1	25	50
611-KS11R001	KS11R22CQD	A	Red	SPST-NO	Off-Mom	Silver	1.42	1.34	1.27

## PVA SERIES SHORT STROKE KEY SWITCHES

### Features:

- Compact design
- Short stroke to latch
- Wide variety of actuator heights and styles
- Adapted for medium power applications

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Mechanical Function	Total Height	Price Each		
						1	25	50
611-PVA1EEH1	PVA1EEH1	B	DPST	Push-push	17.5 mm	.99	.744	
611-PVA2EEH1	PVA2EEH1	B	DPDT	Push-push	17.5 mm	1.16	1.06	

## 8020 SERIES: SNAP-ACTING MOMENTARY PUSHBUTTON SWITCHES

### Features:

- Positive tactile feel
- Epoxy sealed

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit ( ) = Momentary	Contact Material	Price Each			
						1	25	50	100
<b>PC Thru-Hole</b>									
611-8121-222	8121SHCGE	C	SPDT	On-(On)	Gold	7.16	6.92	6.79	6.41
611-8125-222	8125SHCBE	C	SPDT	On-(On)	Gold	5.01	4.86	4.64	4.51
611-U811SH9CGE	U811SH9CGE	D	SPDT	On-(On)	Silver	9.18	8.56	6.79	6.45
<b>Right-Angle PC Thru-Hole</b>									
611-8121-231	8121SD9AGE	E	SPDT	On-(On)	Gold over Silver	7.63	7.44	7.23	6.83
611-8121-290	8121SD9AV2GE	F	SPDT	On-(On)	Gold over Silver	8.40	7.58	7.37	6.96
611-8125-232	8125SD9AV2BE	F	SPDT	On-(On)	Gold	5.94	5.45	5.23	5.09
611-8121SHAV2GE	8121SHAV2GE	F	SPDT	On-(On)	Gold over Silver	9.20	8.76	7.37	7.24
<b>Solder Lug</b>									
611-8121-221	8121SHZGE	G	SPDT	On-(On)	Gold over Silver	7.05	6.94	6.67	6.30
611-8125-231	8125SD9ABE	E	SPDT	On-(On)	Gold	5.50	5.29	5.09	4.95
611-8125-241	8125SHZGE	G	SPDT	On-(On)	Gold	4.85	4.55	4.34	3.96
611-8121-211	8121J81ZGE22	H	SPDT	On-(On)	Gold over Silver	8.02	7.85	7.61	7.18
611-8125-211	8125J81ZBE22	H	SPDT	On-(On)	Gold	5.91	5.75	5.37	5.22
611-8221-211	8221J81ZGE22	H	DPDT	On-(On)	Gold over Silver	12.48	11.20	10.61	10.30
611-8121-211	8121J81ZGE22	G	SPDT	On-(On)	Gold over Nickel	8.02	7.85	7.61	7.18
611-8121-311	8121J83ZGE22	I	SPDT	On-(On)	Gold over Silver	8.02	7.37	7.25	7.08
611-8221J83ZGE22	8221J83ZGE22	J	SPDT	On-(On)	Gold over Silver	12.48	11.37	10.61	10.30
<b>V-Bracket</b>									
611-8121-236	8121SD9V3GE	K	SPDT	On-(On)	Gold over Silver	8.27	7.40	7.26	6.86
611-8125-223	8125SD3V3BE	K	SPDT	On-(On)	Gold	5.81	5.32	5.12	4.98

## 8060 SERIES: ALTERNATE ACTION PUSHBUTTON SWITCHES

### Features:

- Epoxy sealed
- Long electrical life (50,000 cycles @ full load)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit ( ) = Momentary	Contact Material	Price Each			
						1	25	50	100
<b>Right-Angle PC Thru-Hole</b>									
611-8168-221	8168SH9ABE2	L	SPDT	On-(On)	Gold	6.32	5.64	5.55	5.24
611-8161SH9ABE2	8161SH9ABE2	L	SPST	On-On	Gold	6.32	5.77	5.55	5.24
611-8161S1H9ABE2	8161S1H9ABE2	L	SPDT	On-On	Gold	7.06	6.59	5.55	5.38
<b>Solder Lug</b>									
611-8161-201	8161SHZQE2	M	SPDT	On-On	Silver	5.45	5.04	4.37	4.14
611-8168-203	8168LHZQE2	M	SPDT	On-(On)	Silver	5.72	5.64	5.04	4.91
611-8168-202	8168SHZGE2	M	SPDT	On-(On)	Gold over Silver	6.25	6.06	5.51	5.37
611-8168-201	8168SHZQE2	M	SPDT	On-(On)	Silver	5.45	5.08	4.82	4.70
611-8261-201	8261SHZQE2	M	DPDT	On-On	Silver	9.60	8.62	8.43	7.96
611-8261S1HZQE2	8261S1HZQE2	M	DPDT	On-On	Black	12.01	11.20	8.43	8.34

## 8500 SERIES: SUBMINIATURE PUSHBUTTON SWITCHES

### Features:

- Reliable contact design
- Epoxy Sealed

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit ( ) = Momentary	Contact Material	Price Each			
						1	25	50	100
<b>PC Thru-Hole</b>									
611-8531-251	8531MCQE2	N	SPST	(On)-Off	Silver	4.06	3.95	3.77	3.67
611-8533-251	8533MCQE2	N	SPST	On-(Off)	Silver	4.45	4.45	4.34	4.28
<b>Solder Lug</b>									
611-8531-252	8531MZQE2	O	SPST	(On)-Off	Silver	4.13	3.93	3.71	3.46
611-8531SZQE2	8531SZQE2	O	SPST	Off-(On)	Silver	4.43	4.00	3.74	3.64
611-8531TCQE2	8531TCQE2	O	SPST	Off-(On)	Silver	5.09	4.86	4.49	4.36
611-8532-252	8532MZQE2	P	SPST	(On)-Off	Silver	4.38	4.25	4.15	4.04
611-8532T1ZQE2	8532T1ZQE2	L	SPDT	On-On	Gold	4.96	4.73	4.37	4.25
611-8551-252	8551MZQE2	P	SPST	(On)-Off	Silver	4.38	4.25	4.15	4.04
611-8532-261	8532T1ZBE2	Q	SPST	(On)-Off	Gold	5.08	4.66	4.48	4.36
611-8552TZQE2	8552TZQE2	R	SPST	Off-(On)	Silver	6.06	5.77	5.32	5.05

## 8600 SERIES: MICROMINIATURE PUSHBUTTON SWITCHES

### Features:

- Ideal for applications where space is limited
- Hardware included: nut, brass or nickel plated

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit ( ) = Momentary	Contact Material	Price Each			
						1	25	50	100
<b>PC Thru-Hole</b>									
611-8631-261	8631CQD2	S	SPST	(On)-Off	Silver	4.82	4.44	4.24	4.13
611-8632-261	8632CQD2	T	SPST	(On)-Off	Silver	4.82	4.47	4.24	4.13
<b>Solder Lug</b>									
611-8631-252	8631ZQD2	U	SPST	(On)-Off	Silver	4.47	4.36	4.03	3.92
611-8631ZBD2	8631ZBD2	U	SPST	Off-(On)	Gold	4.57	4.40	4.23	3.97
611-8632ZBD2	8632ZBD2	U	SPST	(On)-Off	Gold	4.80	4.40	4.23	4.12
611-8632-252	8632ZQD2	V	SPST	(On)-Off	Silver	4.47	4.36	4.14	4.02

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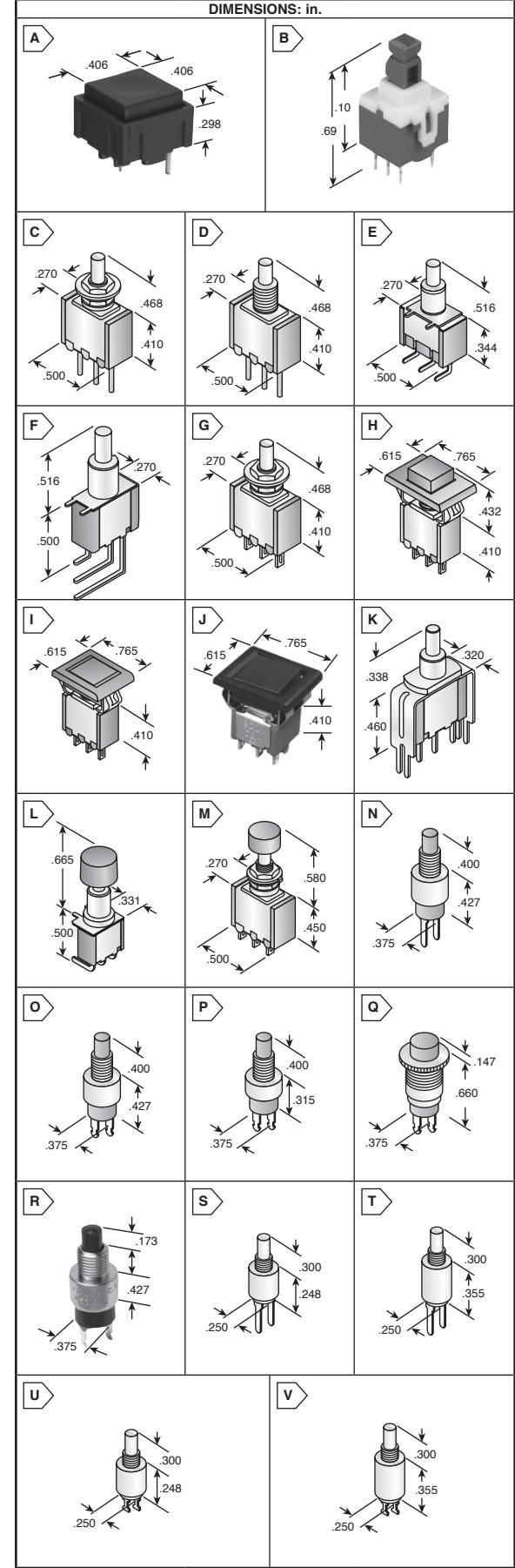
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1885

**C&K**  
Pushbutton Switches



# E-SWITCH Pushbutton Switches

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**E-SWITCH®**

## LP1/LP4 SERIES ILLUMINATED PUSHBUTTONS

### Features:

- Panel Mount
- Multiple illuminated options
- Aesthetic look

### Applications:

- Computer Servers/peripherals
- Performance Audio
- Instrumentation
- Telecommunications/networking

LED Specifications	Blue	Red	Green
Forward Current (mA)	20mA	20mA	20mA
Forward Voltage@20mA	3.4-4.0 VDC	1.5-2.4 VDC	2.0-2.4 VDC
Luminous Intensity	200 mcd@5mA	300 mcd	50 mcd

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Function Style	Circuit	Cap Size	LED	Price Each		
							1	10	25
612-LP10A1AB	LP10A1AB	A	Momentary	SPST	5.4mm	Blue	4.82	4.25	3.97
612-LP10A1AG	LP10A1AG	A	Momentary	SPST	5.4mm	Green	3.40	3.14	2.94
612-LP10A1AR	LP10A1AR	A	Momentary	SPST	5.4mm	Red	3.40	3.14	2.94

### Features:

- Latching and momentary options
- Illuminated
- Right angle and vertical mount options
- Multiple bezel and button designs

### Applications:

- Telecommunications
- Consumer Electronics
- Computer, servers, peripherals
- Audio/visual
- Medical

LED Specifications	Red
Forward Current (mA)	20mA
Forward Voltage@20mA	1.9-2.5 VDC
Luminous Intensity	200 mcd

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Function Style	Circuit	Cap Size	LED	Price Each		
							1	10	25
612-LP4EE1RBATR	LP4EE1RBATR	B	Latching	DPDT	Square w/Bezel	Red	4.12	3.66	3.48
612-LP4OA1PBCTR	LP4OA1PBCTR	C	Momentary	DPDT	Round w/Bezel	Red	3.58	3.18	3.02
612-LP4OA1PBCTR	LP4OA1PBCTR	D	Momentary	DPDT	Round w/o Bezel	Red	3.83	3.38	3.19

## 320 SERIES MOMENTARY PUSHBUTTON SWITCHES

### Specifications:

- Contact rating: 25mA
- Contact form: SPST
- Operating resistance: 50mΩ initially
- Voltage rating: 50VDC

- Travel: .7mm
- Contact form: SPST
- 320.02E1-1.09 has 15.88mm diameter cap
- 320.02E1-1.094 has 11.88mm square cap

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Cap Color	Price Each					
				1	10	25	50	100	250
612-320.02E1-1.08BK	320.02E1-1.08BLK	D	Black	2.52	2.32	2.18	2.13	1.69	1.59
612-320.02E1-1.08GY	320.02E1-1.08GRY	D	Gray	2.52	2.32	2.18	2.13	1.69	1.59
612-320.02E1-1.08RD	320.02E1-1.08RED	D	Red	2.52	2.32	2.18	2.13	1.69	1.59
612-320.02E1-1.08WT	320.02E1-1.08WHT	D	White	2.52	2.32	2.18	2.13	1.69	1.59
612-320.02E1-1.08BL	320.02E1-1.08BLU	D	Blue	2.52	2.32	2.18	2.13	1.69	1.59
612-320.02E1-1.08GN	320.02E1-1.08GRN	D	Green	2.91	2.69	2.52	2.46	1.96	1.85
612-320.02E1-1.09BK	320.02E1-1.09BLK	D	Black	2.89	2.67	2.50	2.44	1.94	1.83
612-320.02E1-1.09GY	320.02E1-1.09GRY	D	Gray	2.89	2.67	2.50	2.44	1.94	1.83
612-320.02E11094BK	320.02E1-1.094BLK	E	Black	1.97	1.82	1.71	1.67	1.33	1.25
612-320.02E11094GY	320.02E1-1.094GRY	E	Gray	1.97	1.82	1.71	1.67	1.33	1.25
612-320.01E1-1GRY	320.01E1-1GRY	E	Gray	1.63	1.53	1.47	1.41	1.35	1.07
612-320.01E1-1RED	320.01E1-1RED	E	Red	1.63	1.53	1.47	1.41	1.35	1.07
612-320.01E1-1BLU	320.01E1-1BLU	E	Blue	1.63	1.53	1.47	1.41	1.35	1.07
612-320.01E1-1GRN	320.01E1-1GRN	E	Green	1.63	1.53	1.47	1.41	1.35	1.07
612-320E1-1BLK	320E1-1BLK	F	Black	1.38	1.29	1.23	1.16	1.13	1.10
612-320E1-1GRY	320E1-1GRY	F	Gray	1.63	1.53	1.47	1.41	1.35	1.07
612-320E1-1RED	320E1-1RED	F	Red	1.63	1.53	1.47	1.41	1.35	1.07
612-320E1-1WHT	320E1-1WHT	F	White	1.63	1.53	1.47	1.41	1.35	1.07
612-320E1-1YEL	320E1-1YEL	F	Yellow	1.63	1.53	1.47	1.41	1.35	1.07
612-320E1-1BLU	320E1-1BLU	F	Blue	1.63	1.53	1.47	1.41	1.35	1.07
612-320E1-1GRN	320E1-1GRN	F	Green	1.63	1.53	1.47	1.41	1.35	1.07
612-320.21E1-1BLK	320.21E1-1BLK	G	Black	1.65	1.52	1.43	1.39	1.25	1.19

## TL SERIES PUSHBUTTON SWITCH

### Specifications:

- Contact rating: 0.1A/30VDC
- Contact resistance: 100mΩ Max.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Circuit Action	Contact Form	Price Each				
					1	10	25	50	100
612-TL4201EEYA	TL4201EEYA	H	Latching	4PDT	1.64	1.53	1.46	1.38	1.35

## P197/P227 SERIES POWER PUSHBUTTON SWITCHES

### Specifications:

- Contact rating: 7A @ 250VAC
- Mechanical configuration: latching

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Circuit Form	Termination	Bracket Type	Circuit Action	Price Each				
							1	10	25	50	100
612-P227EEB18	P227EEB18	I	DPDT	Panel Mount	Threaded	Latching	2.79	2.58	2.41	2.36	1.98

## Accessories

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Color	For Use With These Specific Pushbutton & Tactile Series	Price Each				
					1	10	25	50	100
612-1C-BK	1C-BLK	J	Black	MTH, TL1105JA, TL1105SP, TL2285, TL3301SP	.19	.187	.183	.18	.176
612-1C-GR	1C-DGR	J	Gray		.20	.195	.19	.186	.182
612-TAD-BLK	TAD-BLK	J	Black	320.02, 520.04, TA/LT, TL1100C, TL1100, P197, P227	.26	.247	.242	.237	.232
612-TAM-GRY	TAM-GRY	-	Gray	TL1100, P197, P227	.26	.247	.242	.237	.232
612-1R-BK	1R-BLK	K	Black	MTH, TL1105JA, TL1105SP, TL3301SP	.19	.187	.183	.18	.176
612-1R-RD	1R-RED	K	Red		.19	.187	.183	.18	.176
612-1R-WHT	1R-WHT	K	White		.19	.187	.183	.18	.176
612-TAG-BK	TAG-BLK	L	Black	320.02, 520.04, TA/LT, TL1100C, TL1100, P197, P227	.26	.247	.242	.237	.232
612-TAG-RD	TAG-RED	L	Red		.26	.247	.242	.237	.232
612-4J-BK	4J-BLK	M	Black	320.02, TL1100C, TL100	.14	.137	.134	.131	.128
612-4J-GR	4J-GRY	M	Gray		.14	.137	.134	.131	.128

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# E-SWITCH Pushbutton Switches

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## PS SERIES MOMENTARY PUSHBUTTON SWITCHES

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Contact Form	Contact Rating	Cap/Body Dim. "L"	Cap Color	Price Each				
							1	10	25	50	100
612-PS1040A-RED	PS1040A-RED	A	SPST	3A	14mm	Red	1.96	1.81	1.70	1.66	1.40
612-PS1040A-BLK	PS1040A-BLK	A	SPST	3A	14mm	Black	1.96	1.81	1.70	1.66	1.40
612-PS1057A-RED	PS1057A-RED	B	SPST	1A	14mm	Red	1.58	1.50	1.44	1.38	1.32
612-PS1057A-BLK	PS1057A-BLK	B	SPST	1A	14mm	Black	1.58	1.50	1.44	1.38	1.32

## RP SERIES PUSHBUTTON SWITCHES

With Plastic Bushing

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Contact Form	Contact Rating	Cap/Body Dim. "L"	Cap Color	Price Each				
							1	10	25	50	100
612-RP3502A-BLK	RP3502A-BLK	C	SPST-NO	1A	17mm	Black	2.08	1.92	1.80	1.76	1.32
612-RP3502A-RED	RP3502A-RED	C	SPST-NO	1A	17mm	Red	2.08	1.92	1.80	1.76	1.22
612-RP3502B-RED	RP3502B-RED	C	SPST-NC	1A	19.3mm	Red	2.36	2.17	2.04	1.99	1.38

With Metal Bushing

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Contact Form	Contact Rating	Cap/Body Dim. "L"	Cap Color	Price Each				
							1	10	25	50	100
612-RP3502MA-BLK	RP3502MA-BLK	D	SPST-NO	3A	17mm	Black	3.22	2.97	2.79	2.73	1.89
612-RP3502MA-GRN	RP3502MA-GRN	D	SPST-NO	3A	17mm	Green	3.22	2.97	2.79	2.73	1.89
612-RP3502MB-GRN	RP3502MB-GRN	D	SPST-NC	3A	19.3mm	Green	3.62	3.34	3.13	3.06	2.12
612-RP3502MA-YEL	RP3502MA-YEL	D	SPST-NO	3A	17mm	Yellow	3.22	2.97	2.79	2.73	1.89
612-RP3502MB-YEL	RP3502MB-YEL	D	SPST-NC	3A	19.3mm	Yellow	3.62	3.34	3.13	3.06	2.12
612-RP3502MA-RED	RP3502MA-RED	D	SPST-NO	3A	17mm	Red	3.22	2.97	2.79	2.73	1.89

With LED

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Contact Form	Contact Rating	Cap/Body Dim. "L"	Cap Color	Price Each				
							1	10	25	50	100
612-RP3508BL-RED	RP3508BL-RED	E	SPST	3A	20mm	Red	5.22	4.64	4.40	4.29	4.17
612-RP3508BL-GRN	RP3508BL-GRN	E	SPST	3A	20mm	Green	5.22	4.64	4.40	4.29	4.17
612-RP3508BL-YEL	RP3508BL-YEL	E	SPST	3A	20mm	Yellow	5.22	4.64	4.40	4.29	4.17

## PBH SERIES PUSHBUTTON SWITCHES

### Specifications:

- Contact rating: 100mA @ 30VDC
- Contact material: Silver
- Timing: non-shorting
- PC mount

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Contact Form	Contact Rating	Cap/Body Dim. "L"	Cap Color	Price Each				
							1	10	25	50	100
612-PBH2UOANAGX	PBH2UOANAGX	F	DPDT	Momentary	-	-	1.44	1.37	1.31	1.26	
612-PBH2UEENAGX	PBH2UEENAGX	F	DPDT	Latching	-	-	1.59	1.51	1.45	1.39	
612-PBH2UEEK	PBH2UEEKZXNAG1RBLK	F	DPDT	Latching	Black	2.16	1.99	1.87	1.83		
612-PBH4UEENA	PBH4UEENAGX	F	4PDT	Latching	-	-	1.82	1.73	1.66	1.59	
612-PBH6UEEN	PBH6UEENAG1DBLK	F	6PDT	Latching	Black	2.47	2.28	2.13	2.09		
612-PBMTH4UOANAGX	PBH4UOANAGX	F	4PDT	Momentary	-	-	1.66	1.58	1.51	1.45	
612-PBH4UEEK	PBH4UEEKZXNAG1SBLK	F	4PDT	Latching	Black	1.76	1.57	-	-	1.34	
612-PBH6UEENA	PBH6UEENAGVX	F	6PDT	Latching	-	-	2.10	1.89	-	-	1.61

\* Gold Plated Contact

## 5500 AND 5511 SERIES PUSHBUTTON SWITCHES

### Specifications:

- Contact rating: 12mA
- Operating force: <200gf
- Contact resistance: <50mΩ
- Contact material: gold plated copper alloy
- Voltage rating: 24VDC
- Contact form: SPDT

### 5500 Series

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Cap Style	Cap Color	LED(s) Color	Dimensions L x W x H	Price Each				
							1	10	25	50	100
612-5501M1X	5501M1X	G	Small	Black	None	17.1 x 12.3 x 14.3	3.05	2.84	2.70	2.57	2.50
612-5501M2X	5501M2X	G	Small	Gray	None	17.1 x 12.3 x 14.3	3.05	2.84	2.70	2.57	2.50
612-5501M5X	5501M5X	G	Small	Red	None	17.1 x 12.3 x 14.3	3.78	3.49	3.27	3.20	2.69
612-5501M11	5501M11	H	Small	Black	Red	17.1 x 12.3 x 14.3	3.98	3.71	3.53	3.35	3.27
612-5501M12	5501M12	H	Small	Black	Green	17.1 x 12.3 x 14.3	3.98	3.71	3.53	3.35	3.27
612-5501M21	5501M21	H	Small	Gray	Red	17.1 x 12.3 x 14.3	4.27	3.80	3.61	3.51	3.42

### 5511 Series

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Cap Style	Cap Color	LED(s) Color	Dimensions L x W x H	Price Each				
							1	10	25	50	100
612-5511M4X	5511M4X	G	Large	Blue	None	17.1 x 17.3 x 14.3	3.05	2.84	2.77	2.57	2.50
612-5511M11	5511M11	H	Large	Black	Red	17.1 x 17.3 x 14.3	3.98	3.71	3.53	3.35	3.27
612-5511M81	5511M81	H	Large	White	Red	17.1 x 17.3 x 14.3	3.98	3.71	3.53	3.35	3.27

## LP37 SERIES ILLUMINATED PUSHBUTTON SWITCHES

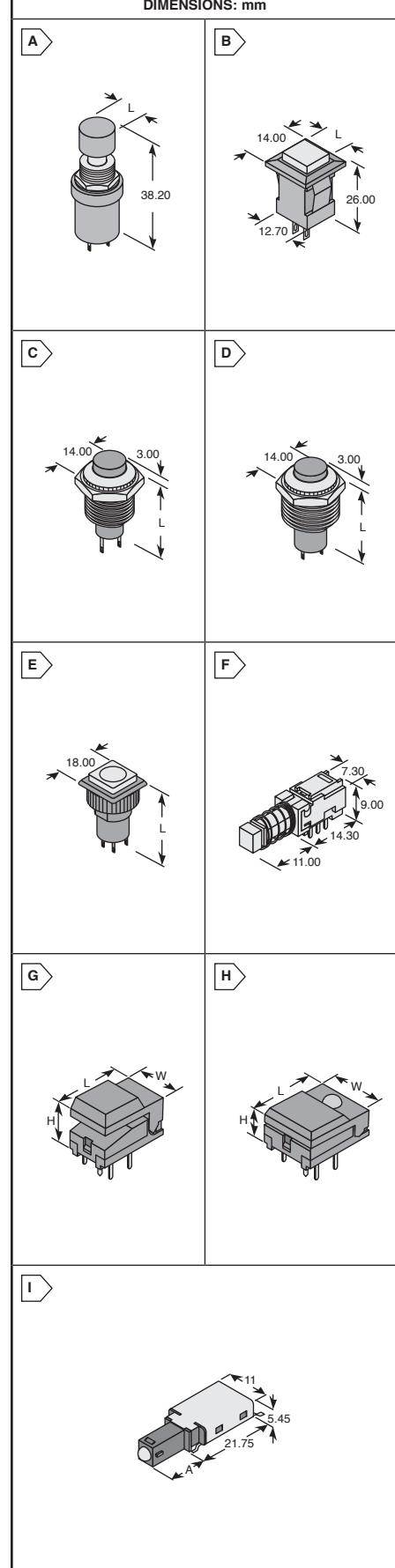
### Specifications:

- Contact Arrangement: SPDT
- Contact Rating: 20mVDC to 50VDC; 10mA to 250mA
- Force: 250-grams
- Insulation Resistance: 1000MW (Min @ 100VDC)

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Plunger (A)	LED Color	Circuit Action	Price Each				
						1	10	25	50	100
612-LP370ACGG	LP370ACGG	I	9.60mm	Green	Momentary	6.54	5.82	5.52	5.38	5.23
612-LP370ACGR	LP370ACGR	I	9.60mm	Red	Momentary	6.54	5.82	5.52	5.38	5.23

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# Pushbutton Switches

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## ITW Switches PUSHBUTTON SWITCHES

### Series 59 - Zinc Alloy Sealed

This rugged panel sealed pushbutton is made of a special high creep strength non-spark zinc alloy suitable for use in mining or other potentially explosive atmospheres where dust and moisture are problematic.

#### Specification:

- Switch function: Momentary
- Contact resistance: 50mΩ
- Dielectric strength: 1000VAC
- Current rating: 125mA @ 125VAC
- Panel mounting: 1.5mm - 3mm

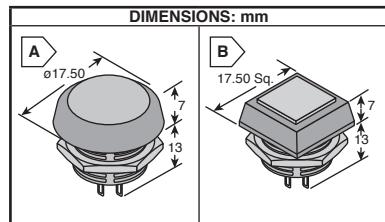
#### Features:

- Non-spark material
- Gold contacts
- Impact resistant
- Wide temp range: -55°C to +125°C
- Panel sealed to IP67
- Nut and sealing washer included
- 3 year warranty
- Wide temp range: -55°C to +125°C

#### Applications:

- Communications
- Instrumentation
- Data processing
- Process controls
- Transportation/material

MOUSER STOCK NO.	ITW Switches Part No.	Fig.	Bezel Style	Button Color	For quantities greater than listed, call for quote.				
					Price Each				
					1	10	25	50	
850-59-111	59-111	A	Round	Black	6.33	6.26	6.20	6.14	
850-59-112	59-112	A	Round	Red	10.36	9.86	9.37	8.87	
850-59-113	59-113	A	Round	Green	7.79	7.75	7.71	7.68	
850-59-211	59-211	B	Square	Black	9.09	8.66	8.23	7.79	
850-59-212	59-212	B	Square	Red	11.33	10.79	10.24	9.71	
850-59-213	59-213	B	Square	Green	10.40	9.90	9.40	8.91	
850-59-311	59-311	C	High Round	Black	11.31	10.77	10.23	9.69	
850-59-312	59-312	C	High Round	Red	10.29	9.80	9.31	8.82	
850-59-313	59-313	C	High Round	Green	10.29	9.80	9.31	8.82	



### Series 57 - Miniature Vandal Resistant Sealed

This rugged miniature, momentary action, sealed switch series is ideal for a variety of applications in harsh environments where durability is key.

#### Specification:

- Contact resistance: 50mΩ
- Switching power: 16VA AC
- Current rating: 125mA - 400mA
- Contact form: SDST

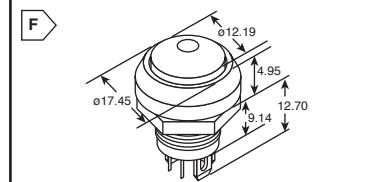
#### Features:

- Non-spark material
- Impact resistant
- Panel sealed to IP67
- 3 year warranty
- Gold plated palladium nickel contacts
- Wide temp range: -40°C to +125°C
- Nut and sealing washer included

#### Applications:

- Security access controls
- Computers
- Military/aerospace
- Transportation

MOUSER STOCK NO.	ITW Switches Part No.	Fig.	Lighted	LED Color	For quantities greater than listed, call for quote.				
					Price Each				
					1	10	25	50	
850-57-111	57-111	D	No	-	10.25	10.13	10.08	9.94	
850-57-112R	57-112R	E	Yes	Red	21.38	20.35	19.34	18.32	
850-57-112G	57-112G	E	Yes	Green	21.59	20.55	19.53	18.49	
850-57-112B	57-112B	E	Yes	Blue	37.07	34.14	32.19	31.35	



### Series 48 - Flex-Tech Miniature Sealed

This rugged multi-option sealed pushbutton series offers the utmost in choices for mounting style, colors, terminations, bezels, lighting and momentary or alternate-action switching.

#### Specifications:

- Circuit: SPST-NO-DB
- Panel thickness: .02-.12/1.5-3mm
- Operating force: 3N/306g
- Temperature index: -40°F to +185°F

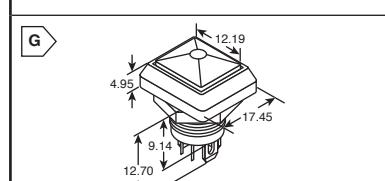
#### Features:

- Gold contacts
- Sealed to IP67
- Long life
- 3 year warranty
- Compact package size

#### Applications:

- Medical equipment
- Mass transportation
- Office equipment
- Industrial machinery
- Outdoor controls

MOUSER STOCK NO.	ITW Switch Part No.	Fig.	Switch Function	Switch Termination	Bezel Type	LED Color	Button Color	For quantities greater than listed, call for quote.				
								Price Each				
								1	10	25	50	
850-48-1-RB-N-RD-B	48-1-RB-N-RD-B	F	Momentary	Solder Tabs	Round, Black	None	Red	7.73	7.35	6.98	6.62	
850-48-1-RB-N-BK-B	48-1-RB-N-BK-B	F	Momentary	Solder Tabs	Round, Black	None	Black	7.73	7.35	6.98	6.62	
850-48-1-SB-N-RD-B	48-1-SB-N-RD-B	G	Momentary	Solder Tabs	Square, Black	None	Red	7.73	7.35	6.98	6.62	
850-48-1-SB-N-BK-B	48-1-SB-N-BK-B	G	Momentary	Solder Tabs	Square, Black	None	Black	7.73	7.35	6.98	6.62	
850-48-1-RC-N-CR-B	48-1-RC-N-CR-B	F	Momentary	Solder Tabs	Round, Chrome	None	Chrome	7.79	7.47	7.03	6.67	
850-48-1-RB-R-BK-B	48-1-RB-R-BK-B	F	Momentary	Solder Tabs	Round, Black	Red	8.80	8.38	7.97	7.54		
850-48-2-RB-N-RD-B	48-2-RB-N-RD-B	F	Maintained	Solder Tabs	Round, Black	None	Red	8.38	8.08	7.59	7.20	
850-48-2-RB-N-BK-B	48-2-RB-N-BK-B	F	Maintained	Solder Tabs	Round, Black	None	Black	8.38	7.99	7.59	7.20	
850-48-2-RC-N-CR-B	48-2-RC-N-CR-B	F	Maintained	Solder Tabs	Round, Chrome	None	Chrome	8.53	8.13	7.73	7.33	
850-48-2-RB-R-BK-B	48-2-RB-R-BK-B	F	Maintained	Solder Tabs	Round, Black	Red	9.57	9.13	8.66	8.20		
850-48-1-RB-N-YL-B	48-1-RB-N-YL-B	F	Momentary	Solder Tabs	Round, Black	None	Yellow	9.02	8.58	8.14	7.73	
850-48-1-RB-N-BL-B	48-1-RB-N-BL-B	F	Momentary	Solder Tabs	Round, Black	Blue	9.02	8.58	8.14	7.73		
850-48-1-RB-N-GR-B	48-1-RB-N-GR-B	F	Momentary	Solder Tabs	Round, Black	None	Green	9.02	8.58	8.14	7.73	



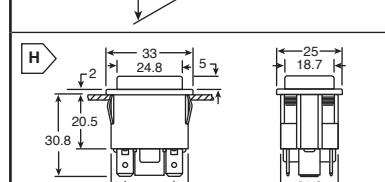
### MARQUARDT PUSHBUTTON SWITCHES

Termination: Quick Connect      External lamp terminal



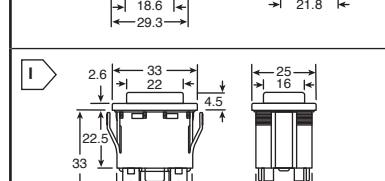
#### 1660 Series - Pushbutton Switches, IP40

MOUSER STOCK NO.	Marquardt Part No.	Fig.	Contact Form	Circuit	Contact Voltage	Lighting Voltage	Button Color/Style	For quantities greater than listed, call for quote.				
								Price Each				
								1	10	25	50	
979-1660.0201	1660.0201	H	DPST	ON/OFF	16A	230V	Orange	12.89	12.36	11.75	11.59	
979-1660.0202	1660.0202	H	DPST	ON/OFF	16A	230V	Green	13.40	12.86	12.19	12.05	
979-1660.0222	1660.0222	H	DPST	ON/OFF	12A	110V	Green	15.09	14.49	13.75	13.57	
*979-1660.3202	1660.3202	H	DPST	ON/OFF	16A	230V	Green	14.72	14.10	13.41	13.22	
979-1661.022	1661.022	H	DPST	ON/OFF	16A	-	Black	30.71	29.47	27.96	27.59	



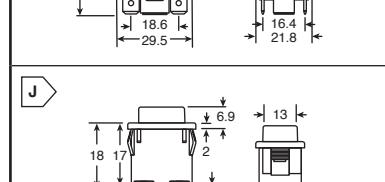
#### 1670 Series - Pushbutton Switches, IP54

MOUSER STOCK NO.	Marquardt Part No.	Fig.	Contact Form	Circuit	Contact Voltage	Lighting Voltage	Button Color/Style	For quantities greater than listed, call for quote.				
								Price Each				
								1	10	25	50	
979-1670.5201	1670.5201	I	DPST	ON/OFF	16A	230V	Orange	19.59	18.78	17.83	17.60	
979-1670.5202	1670.5202	I	DPST	ON/OFF	16A	230V	Green	19.59	18.79	17.82	17.60	
979-1671.5201	1671.5201	I	DPST	ON/OFF	16A	-	Black	17.77	17.04	16.17	15.97	



#### 1683 Series - Pushbutton Switches, IP40

MOUSER STOCK NO.	Marquardt Part No.	Fig.	Contact Form	Circuit	Contact Voltage	Lighting Voltage	Button Color/Style	For quantities greater than listed, call for quote.				
								Price Each				
								1	10	25	50	
979-1683.1101	1683.1101	J	SPST	ON/OFF	16A	-	Black	3.44	3.30	3.14	3.10	
979-1684.1101	1684.1101	J	DPST	ON/OFF	16A	-	Black	4.76	4.57	4.33	4.28	
979-1686.1101	1686.1101	J	SPST	ON/OFF	16A	230V	Red	4.69	4.50	4.27	4.21	



# NKK Pushbutton Switches

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## PROCESS SEALED PUSHBUTTON SWITCHES

### AB Series: Process Sealed Submini Pushbuttons

#### Specifications:

- Actuator: .213" length plunger
- .04VA max. @ 28 VAC/DC max.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit ( ) = Momentary	Terminal	Price Each			
					1	25	50	100
633-AB11AP	AB11AP	A	SPST Off-(On)	PCB Straight	<b>6.18</b>	4.27	3.68	3.58
633-AB15AP	AB15AP	A	SPDT On-(On)	PCB Straight	<b>5.18</b>	4.46	3.83	3.73
633-AB25AP	AB25AP	A	DPDT On-(On)	PCB Straight	<b>5.81</b>	4.99	4.30	4.18
633-AB15AH	AB15AH	B	SPDT On-(On)	PCB R/A	<b>5.16</b>	5.06	4.78	4.33

### Slip-On Caps for A Series

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Description	Price Each			
				1	25	50	100
633-AT475A	AT475A	C	.201" X .157", black	<b>.28</b>	.27	.26	.23
633-AT475B	AT475B	C	.201" X .157", white	<b>.29</b>	.26	.25	.24
633-AT475C	AT475C	C	.201" X .157", red	<b>.31</b>	.283	.244	.231
633-AT496A	AT496A	D	.295" X .157", black	<b>.32</b>	.28	.24	.23
633-AT496B	AT496B	D	.295" X .157", white	<b>.37</b>	.33	.30	.28
633-AT496C	AT496C	D	.295" X .157", red	<b>.45</b>	.425	.40	.375

### GB Series: Process Sealed Ultra-Mini Pushbuttons

#### Specifications:

- Actuator: .130" length plunger
- .04VA max. @ 28 VAC/DC max.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit ( ) = Momentary	Terminal	Price Each			
					1	25	50	100
633-GB15AP	GB15AP	E	SPDT On-(On)	PCB Straight	<b>5.20</b>	4.72	4.34	4.16
633-GB25AP	GB25AP	E	DPDT On-(On)	PCB Straight	<b>4.95</b>	4.78	4.63	4.05
633-GB15AH	GB15AH	F	SPDT On-(On)	PCB R/A	<b>6.07</b>	5.22	4.49	4.37

### Slip-On Caps for G Series

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Description	Price Each			
				1	25	50	100
633-AT4063A	AT4063A	G	.157" X .094", Black	<b>.43</b>	.36	.32	.29
633-AT4063B	AT4063B	G	.157" X .094", White	<b>.72</b>	.36	.32	.29
633-AT4063C	AT4063C	G	.157" X .094", Red	<b>.72</b>	.36	.32	.29

## FB SERIES: 0.5 AMP MOMENTARY PUSHBUTTONS

#### Specifications:

- Actuator: White plunge
- Contacts: Silver 500mA@125VAC



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit ( ) = Momentary	Terminal	Price Each			
					1	25	50	100
633-FB15ANEP2	FB15ANEP2	H	SPST Off-(On)	PC/Turret	<b>3.69</b>	3.16	3.01	2.62

### Slip-on Caps for FB Series

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Description	Price Each			
				1	25	50	100
633-AT475A	AT475A	C	.201" X .157", black	<b>.28</b>	.27	.26	.23
633-AT475B	AT475B	C	.201" X .157", white	<b>.29</b>	.26	.25	.24
633-AT475C	AT475C	C	.201" X .157", red	<b>.31</b>	.283	.244	.231
633-AT496A	AT496A	D	.295" X .157", black	<b>.32</b>	.28	.24	.23
633-AT496B	AT496B	D	.295" X .157", white	<b>.37</b>	.33	.30	.28
633-AT496C	AT496C	D	.295" X .157", red	<b>.45</b>	.425	.40	.375

## SB SERIES: 3 AMP MOMENTARY PUSHBUTTONS

#### Specifications:

- Actuator: Black plunger
- Contacts: Silver 3A @ 125VAC or 2A @ 30VDC



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit ( ) = Momentary	Terminal	Price Each			
					1	25	50	100
633-SB4011NOM	SB4011NOM	I	SPST Off-(On)	Solder Lug	<b>3.58</b>	3.45	3.31	2.94
633-SB4011NCM	SB4011NCM	I	SPST On-(Off)	Solder Lug	<b>4.56</b>	4.14	3.80	3.65

### Slip-on Caps for SB Series

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Description	Price Each			
				1	25	50	100
633-AT422A	AT422A	J	.394" X .236", black	<b>.41</b>	.37	.35	.34
633-AT422C	AT422C	J	.394" X .236", red	<b>.41</b>	.37	.36	.34

## ENVIRONMENTALLY SEALED PUSHBUTTON SWITCH

#### Specifications:

- Power rating: 6A @ 125VAC, 3A @ 250VAC, 6A @ 30VDC
- IP67 of IEC529
- UL94V-0 rated
- Wire leads: AWG 16 heat resistant PVC
- .520" dia. black cap

For quantities greater than listed, call for quote.

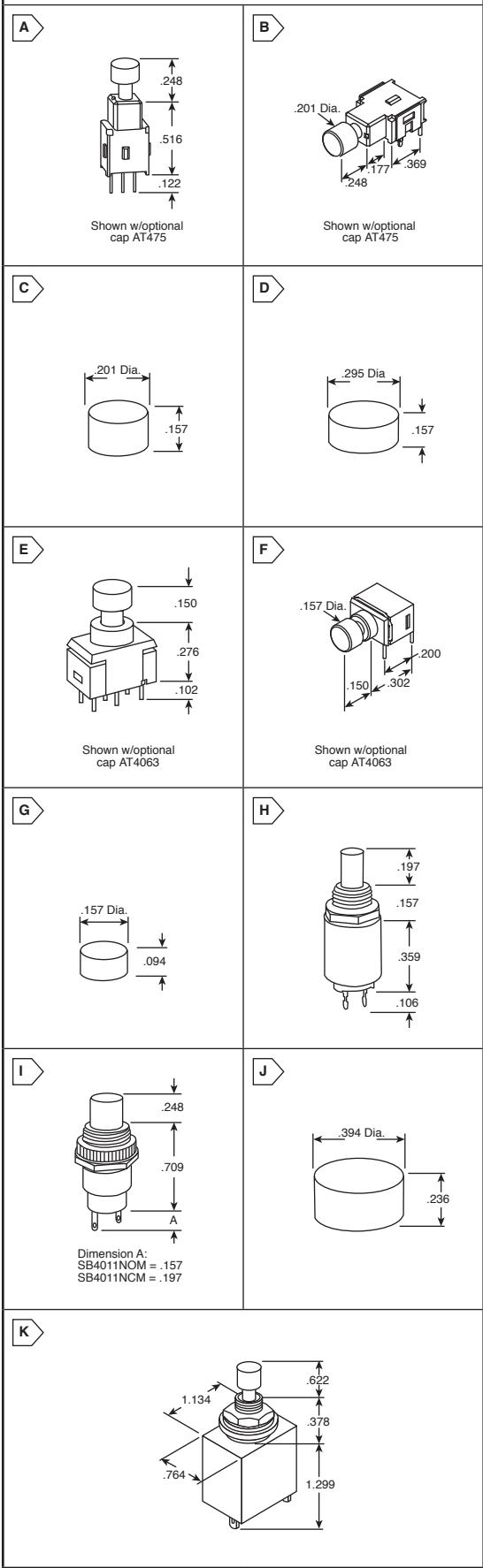
MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit ( ) = Momentary	Terminal	Price Each			
					1	25	50	100
633-WB15T	WB15T-DA	K	SPDT On-None-(On)	Screw lug	<b>23.54</b>	21.37	19.62	18.83

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DIMENSIONS: in.



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1889

# NKK Illuminated and Non-illuminated Pushbuttons



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## LP01 SERIES: SHORT BODY PUSHBUTTONS

### Features:

- Contact material: Silver
- Rating: 3A @ 125VAC/250VAC
- Solder lug
- Bushing or snap-in mounting
- Suited for lead free soldering
- Environmentally friendly components
- UL94V-0 housing and base
- Tamper proof caps

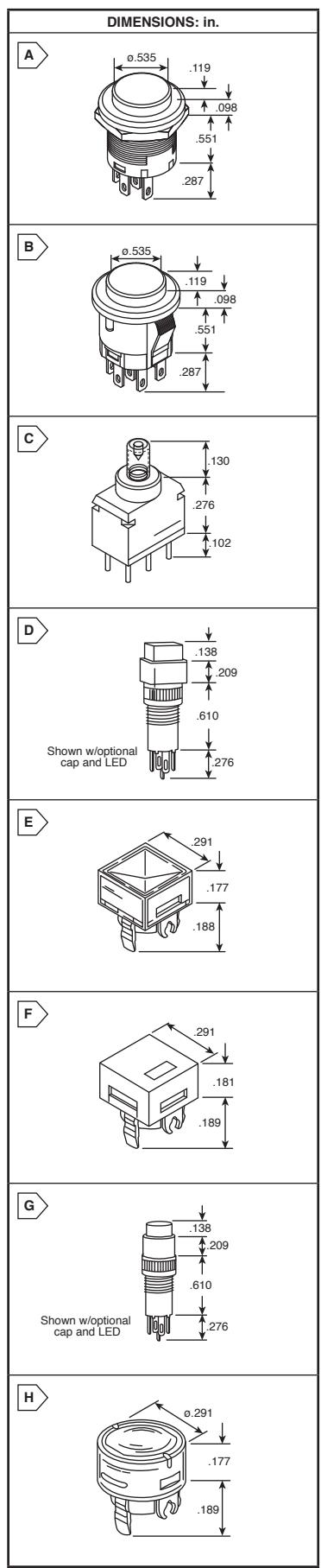
LED Specifications for LP01 Series		Red	Amber	Green
Forward peak current	30mA	30mA	30mA	
Continuous forward current	20mA	20mA	20mA	
Forward voltage	1.95V	2.0V	2.1V	
Reverse peak voltage	5V	5V	5V	
Current reduction rate above 25°C	0.41mA/°C	0.29mA/°C	0.39mA/°C	
Ambient temperature range	-10°C ~ +50°C			

### Non-Illuminated and Illuminated



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit ( ) = Momentary	Cap Color/LED Colors	Price Each		
					1	25	50
<b>Non-Illuminated Bushing Mount</b>							
633-LP0115CCKW01C	LP0115CCKW01C	A	SPDT On-(On)	Red	7.20	6.91	6.48
633-LP0115CCKW01A	LP0115CCKW01A	A	SPDT On-(On)	Black	7.20	6.91	6.48
633-LP0115CCKW01F	LP0115CCKW01F	A	SPDT On-(On)	Green	9.50	7.33	6.75
633-LP0125CCKW01C	LP0125CCKW01C	A	DPDT On-(On)	Red	8.40	8.06	7.56
633-LP0125CCKW01A	LP0125CCKW01A	A	DPDT On-(On)	Black	11.06	8.55	7.61
633-LP0125CCKW01F	LP0125CCKW01F	A	DPDT On-(On)	Green	8.40	8.06	7.56
<b>Non-Illuminated Snap-In Mount</b>							
633-LP0115CMKW01C	LP0115CMKW01C	B	SPDT On-(On)	Red	10.95	8.45	8.30
633-LP0115CMKW01A	LP0115CMKW01A	B	SPDT On-(On)	Black	7.20	6.91	6.48
<b>Illuminated Bushing Mount</b>							
633-LP0115CCKW015CB	LP0115CCKW015CB	A	SPDT On-(On)	White/Red	10.18	8.90	8.54
633-LP0115CCKW015DB	LP0115CCKW015DB	A	SPDT On-(On)	White/Amber	10.18	8.90	8.54
633-LP0115CCKW015FB	LP0115CCKW015FB	A	SPDT On-(On)	White/Green	11.77	10.29	9.87
633-LP0125CCKW015CB	LP0125CCKW015CB	A	DPDT On-(On)	White/Red	11.56	10.08	9.13
633-LP0125CCKW015DB	LP0125CCKW015DB	A	DPDT On-(On)	White/Amber	13.37	11.66	10.56
633-LP0125CCKW015FB	LP0125CCKW015FB	A	DPDT On-(On)	White/Green	13.37	11.66	10.56
<b>Illuminated Snap-In Mount</b>							
633-LP0115CMKW015CB	LP0115CMKW015CB	B	SPDT On-(On)	White/Red	9.42	8.70	8.17
633-LP0115CMKW015DB	LP0115CMKW015DB	B	SPDT On-(On)	White/Amber	9.42	8.70	8.17
633-LP0115CMKW015FB	LP0115CMKW015FB	B	SPDT On-(On)	White/Green	10.89	10.06	9.45



## GB SERIES: ULTRA-MINIATURE STRAIGHT PC ILLUMINATED PUSHBUTTON

### Features:

- Contact material: Gold
- Rating: 0.4VA max. @ 28VAC/VDC max.
- Washable
- Ideal for handheld equipment
- Smooth, positive detent actuation
- Highly visible indication status
- Process sealed

LED Specifications for GB Series		Red
Forward peak current	30mA	
Continuous forward current	20mA	
Forward voltage	1.9V	
Reverse peak voltage	5V	
Current reduction rate above 25°C	0.43mA/°C	
Ambient temperature range	-25°C ~ +55°C	

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit ( ) = Momentary	Cap Color/LED Colors	Price Each		
					1	25	50
633-GB15JPC	GB15JPC	C	SPDT ON-(ON)	Red	7.44	6.76	6.20

## HB SERIES: ILLUMINATED SUBMINIATURE PUSHBUTTONS

### Features:

- Contact material and ratings: Silver, 0.1A max. @ 30VAC/DC
- Single element, bright LEDs
- Bushing mount
- Solder lug

LED Specifications for HB Series		Red	Amber	Green
Forward peak current	30mA	30mA	25mA	
Continuous forward current	20mA	20mA	20mA	
Forward voltage	1.85V	2.0V	2.2V	
Reverse peak voltage	5V	5V	5V	
Current reduction rate above 25°C	0.40mA/°C	0.42mA/°C	0.38mA/°C	
Ambient temperature range	-25 ~ +50°C			

### Non-Illuminated and Illuminated

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit ( ) = Momentary	Cap Color/LED Colors	Price Each		
					1	25	50
633-HB15SKW01	HB15SKW01	D	SPDT On-(On)	Red	6.39	5.95	5.68
633-HB16SKW01	HB16SKW01	D	SPDT On-On	Red	5.80	5.61	5.46

### Snap-On Caps for use with Square Switches

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit ( ) = Momentary	Cap Color/LED Colors	Price Each		
					1	25	50
633-AT4166CB	AT4166CB	E	Transparent red lens/white diffuser	Red	1.05	1.03	1.01
633-AT4166FB	AT4166FB	E	Transparent green lens/white diffuser	Green	1.09	1.05	1.01
633-AT4052A	AT4052A	F	Spot illuminated; use with LED	Red	1.36	1.34	1.32

### Round Switches

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit ( ) = Momentary	Cap Color/LED Colors	Price Each		
					1	25	50
633-HB15CKW01	HB15CKW01	G	SPDT On-(On)	Red	6.98	6.75	6.40
633-HB16CKW01	HB16CKW01	G	SPDT On-On	Red	7.47	7.03	6.85

### Snap-On Caps for use with Round Switches

633-AT4167CB	AT4167CB	H	Transparent red lens/white diffuser	Red	.97	.92	.94
633-AT4167DB	AT4167DB	H	Transparent amber lens/white diffuser	Amber	1.20	1.15	1.10
633-AT4167FB	AT4167FB	H	Transparent green lens/white diffuser	Green	1.27	1.20	1.05

### Bright LEDs for HB Series

633-AT633D	AT633D	-	T-1 Bi-pin, amber	Amber	2.00	1.87	1.75
633-AT633F	AT633F	-	T-1 Bi-pin, green	Green	1.47	1.41	1.38

### Accessories

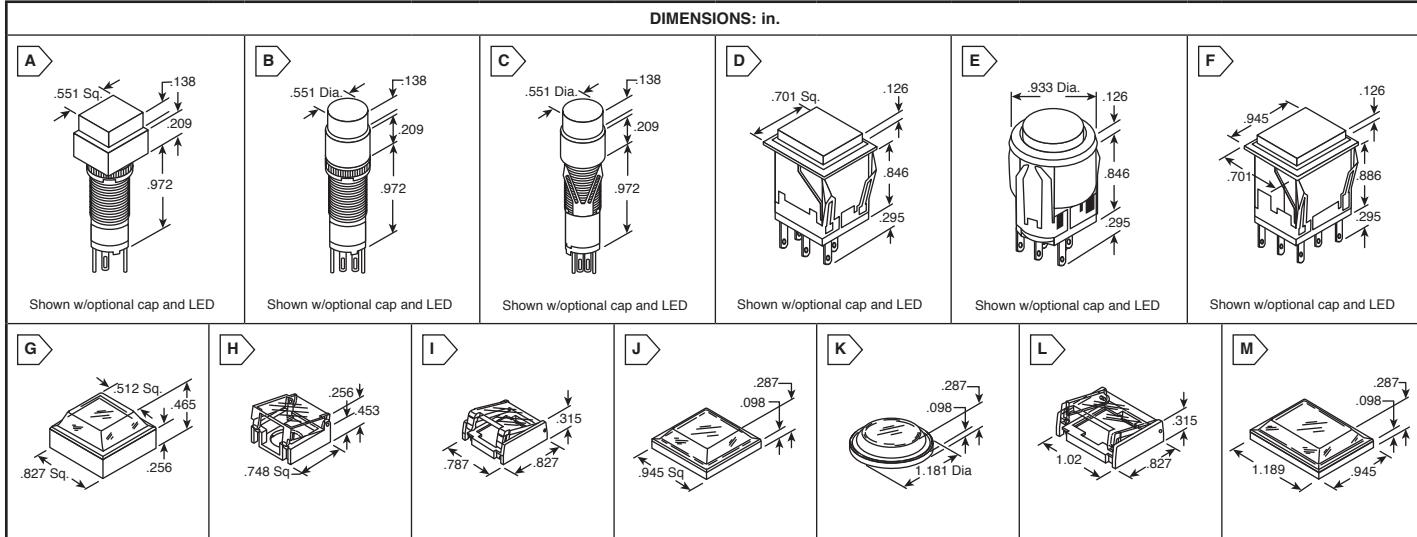
633-AT111	AT111	-	Lamping Tool	Red	.67	.62	.58
633-AT109	AT109	-	Cap Extractor	Red	1.52	1.44	1.35
633-AT110	AT110	-	Socket Wrench	Red	3.43	3.24	3.04

# NKK Illuminated Pushbutton Switches



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DIMENSIONS: in.



## Single Element Bright LEDs Specifications

Color	Red	Amber	Green
Forward peak current	30mA	30mA	30mA
Continuous forward current	20mA	20mA	20mA
Forward voltage	1.9V	2.0V	2.1V
Reverse peak voltage	5V	5V	5V
Current reduction rate above 25°C	0.42mA/°C	0.42mA/°C	0.42mA/°C
Ambient temperature range	-25~+50°C		

## Incandescent Lamp Specifications

Voltage AC	5VAC	12VAC
Current	115mA	60mA
Endurance (hours)		7,000
Ambient temperature range		-25~+50°C

## KB SERIES: ILLUMINATED MINIATURE PUSHBUTTONS

- Polyamide housing and housing base
- Power rating: 1A @ 125/250VAC or 30VDC
- Solder lug

( ) = Momentary

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Contact Material	Price Each		
					1	25	50

### Square, Bushing Mounting

633-KB15SKW01	KB15SKW01	A	SPDT On-(On)	Silver	5.83	5.72	5.65
633-KB16SKW01	KB16SKW01	A	SPDT On-On	Silver	6.47	6.32	6.27
633-KB25SKW01	KB25SKW01	A	DPDT On-(On)	Silver	8.29	8.16	8.02
633-KB26SKW01	KB26SKW01	A	DPDT On-On	Silver	8.46	8.33	8.19

### Snap-On Caps for Use with Square Switches and Incandescent Lamp AT611

633-AT485BB	AT485BB	Translucent white lens/white filter	1.19	1.12	1.05
633-AT485CB	AT485CB	Translucent red lens/white filter	1.18	1.11	1.04
633-AT485EB	AT485EB	Translucent yellow lens/white filter	1.19	1.12	1.05
633-AT485FB	AT485FB	Translucent green lens/white filter	1.19	1.12	1.05
633-AT485GB	AT485GB	Translucent blue lens/white filter	1.19	1.12	1.05

### Snap-On Caps for Use with Square Switches and Bright LEDs AT635

633-AT4133JB	AT4133JB	Clear lens/white translucent diffuser	1.03	1.01	1.00
633-AT4158JC	AT4158JC	Clear lens/red translucent diffuser	1.03	1.00	.96
633-AT4158JD	AT4158JD	Clear lens/amber translucent diffuser	1.03	1.00	.96
633-AT4158JF	AT4158JF	Clear lens/green translucent diffuser	1.03	1.00	.96

### Round, Bushing Mounting

633-KB15CKW01	KB15CKW01	B	SPDT On-(On)	Silver	5.74	5.60	5.47
633-KB16CKW01	KB16CKW01	B	SPDT On-On	Silver	6.82	6.21	6.00
633-KB25CKW01	KB25CKW01	B	DPDT On-(On)	Silver	8.13	7.77	7.53
633-KB26CKW01	KB26CKW01	B	DPDT On-On	Silver	8.29	8.02	7.93

### Round, Snap-In Mounting

633-KB15MKW01	KB15MKW01	C	SPDT On-(On)	Silver	5.32	5.14	4.97
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### Snap-On Caps for Use with Round Switches and Incandescent Lamp AT611

633-AT486BB	AT486BB	Translucent white lens/white filter	1.00	.97	.94
633-AT486CB	AT486CB	Translucent red lens/white filter	1.00	.97	.94
633-AT486FB	AT486FB	Translucent green lens/white filter	1.02	.957	.894

### Snap-On Caps for Use with Round Switches and Bright LEDs AT635

633-AT4132JB	AT4132JB	Clear lens/white translucent diffuser	1.12	1.09	1.04
633-AT4160JC	AT4160JC	Clear lens/red translucent diffuser	.97	.96	.94
633-AT4160JD	AT4160JD	Clear lens/amber translucent diffuser	1.03	1.01	1.00
633-AT4160JF	AT4160JF	Clear lens/green translucent diffuser	1.12	1.09	1.05

### Incandescent Lamps and Bright LEDs for KB series

633-AT611-5V	AT611-5V	Incandescent lamp, 5VAC, T-1	2.16	1.97	1.80
633-AT611-12V	AT611-12V	Incandescent lamp, 12VAC, T-1	2.16	1.97	1.80
633-AT635C	AT635C	T-1 1/2 cylindrical red LED	1.72	1.66	1.61
633-AT635D	AT635D	T-1 1/2 cylindrical amber LED	2.22	2.02	1.85
633-AT635F	AT635F	T-1 1/2 cylindrical green LED	1.72	1.66	1.61

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## LB SERIES: ILLUMINATED STANDARD PUSHBUTTONS

- Polyamide housing
- Snap-In Mounting
- Solder Lug
- Power rating: 3A @ 125/250VAC or 30VDC



( ) = Momentary For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Contact Material	Price Each		
					1	25	50
<b>Square Switches</b>							
633-LB15SKW01	LB15SKW01	D	SPDT On-(On)	Silver	9.05	8.66	8.38
633-LB16SKW01	LB16SKW01	D	SPDT On-On	Silver	9.14	8.60	8.41
633-LB25SKW01	LB25SKW01	D	DPDT On-(On)	Silver	10.43	9.98	9.69
633-LB26SKW01	LB26SKW01	D	DPDT On-On	Silver	11.31	10.80	10.48
<b>Snap-on Caps for Use with Square Switches and Incandescent Lamp AT607</b>							
633-AT476BJ	AT476BJ		Translucent white lens/clear filter		1.65	1.62	1.59
633-AT476GJ	AT476GJ		Translucent blue lens/clear filter		1.66	1.62	1.59
<b>Round Switches</b>							
633-LB15CKW01	LB15CKW01	E	SPDT On-(On)	Silver	8.31	7.95	7.70
633-LB26CKW01	LB26CKW01	E	DPDT On-On	Silver	12.32	11.78	11.42
<b>Snap-on Caps for Use with Round Switches and Incandescent Lamp AT607</b>							
633-AT4012BJ	AT4012BJ		Translucent white lens/clear filter		1.56	1.49	1.45
633-AT4012CJ	AT4012CJ		Translucent red lens/clear filter		1.66	1.59	1.55
633-AT4012FJ	AT4012FJ		Translucent green lens/clear filter		1.65	1.59	1.55
633-AT4012GJ	AT4012GJ		Translucent blue lens/clear filter		1.65	1.62	1.59
<b>Snap-on Caps for Use with Round Switches and Bright LEDs AT635</b>							
633-AT4178JC	AT4178JC		Clear lens/red translucent diffuser		1.66	1.61	1.57
633-AT4178JF	AT4178JF		Clear lens/green translucent diffuser		1.66	1.61	1.57
<b>Rectangular Switches</b>							
633-LB15RKW01	LB15RKW01	F	SPDT On-(On)	Silver	10.26	9.32	8.55
633-LB16RKW01	LB16RKW01	F	SPDT On-On	Silver	10.08	9.62	9.34
633-LB25RKW01	LB25RKW01	F	DPDT On-(On)	Silver	11.99	11.74	11.60
<b>Snap-on Caps for Use with Rectangular Switches and Incandescent Lamp AT607</b>							
633-AT4026BJ	AT4026BJ		Translucent white lens/clear filter		1.55	1.52	1.49
<b>Snap-on Caps for Use with Rectangular Switches and Bright LEDs AT635</b>							
633-AT4177JJ	AT4177JJ		Clear lens/green translucent diffuser		1.56	1.51	1.47
<b>Incandescent Lamps and Bright LEDs for LB series</b>							
633-AT607-5V	AT607-5V		Incandescent lamp, 5VAC, T-1		2.16	1.97	1.80
633-AT607-12V	AT607-12V		Incandescent lamp, 12VAC, T-1		2.16	1.97	1.80
633-AT635C	AT635C		T-1 1/2 cylindrical red LED		1.72	1.66	1.61
633-AT635F	AT635F		T-1 1/2 cylindrical green LED		1.72	1.66	1.61

MOUSER STOCK NO.	NKK Part No.	Fig.	Description			Price Each		
						1	25	50
633-AT495	AT495	G	Square and round dust cover, KB			2.54	1.52	1.42
633-AT494	AT494	H	Square and round protective guard, KB			1.33	1.27	1.22
633-AT499	AT499	I	Square protective guard, LB			1.86	1.82	1.78
633-AT4001	AT4001	J	Square dust cover, LB			1.80	1.72	1.67
633-AT4002	AT4002	K	Round dust cover, LB			1.62	1.59	1.56
633-AT4057	AT4057	L	Rectangular protective guard, LB			1.86	1.82	1.78
633-AT4011	AT4011	M	Rectangular dust cover, LB			1.70	1.63	1.58
633-AT111	AT111	-	Lamping tool, LB and KB			.67	.62	.58
633-AT109	AT109	-	Cap extractor, LB and KB			1.52	1.44	1.35
633-AT108	AT108	-	Socket wrench, KB			2.74	2.59	2.52

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# NKK Pushbutton Switches



Products may be RoHS compliant. Check mouser.com for RoHS status.

## UB SERIES: LOW PROFILE PUSHBUTTONS

Non-Illuminated • Solder lug

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit (SPDT)	Contacts	Contact Rating	Cap Color	Price Each			
							1	25	50	100
633-UB15KKW01N-A	UB15KKW01N-A	A	SPDT On-(On)	Silver	5A @ 125/250VAC	Black	6.54	6.37	6.20	5.85
633-UB15KKW01N-B	UB15KKW01N-B	A	SPDT On-(On)	Silver	5A @ 125/250VAC	White	7.57	6.82	6.34	5.92
633-UB15KKW01N-C	UB15KKW01N-C	A	SPDT On-(On)	Silver	5A @ 125/250VAC	Red	7.28	6.56	6.10	5.70
633-UB16KKW01N-A	UB16KKW01N-A	A	SPDT On-On	Silver	5A @ 125/250VAC	Black	8.89	8.00	7.45	6.96
633-UB16KKW01N-C	UB16KKW01N-C	A	SPDT On-On	Silver	5A @ 125/250VAC	Red	7.46	6.72	6.25	5.84
633-UB15KKG01N-A	UB15KKG01N-A	A	SPDT On-(On)	Gold	0.4VA Max. @ 28VAC/DC Max.	Black	8.18	7.38	6.85	6.41
633-UB15KKG01N-C	UB15KKG01N-C	A	SPDT On-(On)	Gold	0.4VA Max. @ 28VAC/DC Max.	Red	7.76	7.00	6.50	6.08

## Illuminated

### Features:

- Full face and spot illumination caps
- Ambient Temperature Range: -25°C ~ +50°C
- Solder lug
- Continuous Forward Current: 20mA
- Reverse Peak Voltage: 5V

\*Spot Illumination

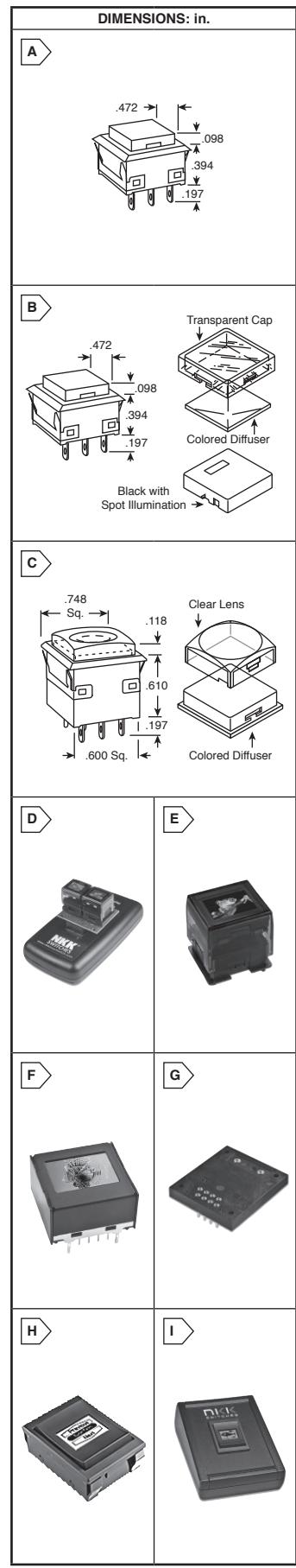
### Common Specifications:

- Contacts & ratings: Silver 5A @ 125/250VAC
- Ambient Temperature Range: -25°C ~ +50°C
- Continuous Forward Current: 20mA
- Reverse Peak Voltage: 5V



MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit () = Momentary	Colors			Price Each		
				LED	Cap	Diffuser	1	25	50
633-UB15KKW015C-JC	UB15KKW015C-JC	B	SPDT On-(On)	Bright Red	Clear	Red	8.81	8.62	8.15
633-UB15KKW015F-JF	UB15KKW015F-JF	B	SPDT On-(On)	Bright Green	Clear	Green	8.81	8.62	8.15
633-UB15KKW015C-CC	UB15KKW015C-CC	B	SPDT On-(On)	Bright Red	Red	Red	7.83	7.57	7.33
633-UB15KKW015D-DD	UB15KKW015D-DD	B	SPDT On-(On)	Bright Amber	Amber	Amber	8.24	7.97	7.72
633-UB15KKW015F-FF	UB15KKW015F-FF	B	SPDT On-(On)	Bright Green	Green	Green	7.84	7.58	7.34
633-UB16KKW015C-JC	UB16KKW015C-JC	B	SPDT On-On	Bright Red	Clear	Red	9.65	9.44	8.92
633-UB16KKW015C-CC	UB16KKW015C-CC	B	SPDT On-On	Bright Red	Red	Red	8.55	8.28	8.03
633-UB16KKW015D-DD	UB16KKW015D-DD	B	SPDT On-On	Bright Amber	Amber	Amber	9.01	8.73	8.46
633-UB16KKW015F-FF	UB16KKW015F-FF	B	SPDT On-On	Bright Green	Green	Green	9.19	8.25	7.71
633-KB25KKW015C-JC	UB25KKW015C-JC	B	DPDT On-(On)	Bright Red	Clear	Red	10.69	10.00	9.11
633-KB25KKW015C-CC	UB25KKW015C-CC	B	DPDT On-(On)	Bright Red	Red	Red	11.01	9.63	8.95
633-KB25KKW015D-DD	UB25KKW015D-DD	B	DPDT On-(On)	Bright Amber	Amber	Amber	10.44	9.63	8.95
633-UB26KKW015F	UB26KKW015F-FF	B	DPDT On-On	Bright Green	Green	Green	13.40	10.49	10.05
633-UB26KKW015C-AB	UB26KKW015C-AB	B	DPDT On-On	Bright Red	Black	Red	13.16	12.88	12.17
633-UB15KKW016B-JB	UB15KKW016B-JB	B	SPDT On-(On)	Super Bright White	Clear	White*	22.42	20.23	18.78
633-UB15KKW016G-JB	UB15KKW016G-JB	B	SPDT On-(On)	Super Bright Blue	Clear	White	22.42	20.23	18.78
633-UB16KKW016G-JB	UB16KKW016G-JB	B	SPDT On-On	Super Bright Blue	Clear	White	23.29	21.03	19.51

For quantities greater than listed, call for quote.



## UB2 SERIES: LOW PROFILE ILLUMINATED PUSHBUTTONS

### Common Specifications:

- Ambient Temperature Range: -25°C ~ +50°C

Color	Bright LEDs			Super Bright LEDs		
	Red	Amber	Green	Blue	Red/Green	
Forward peak current	30mA	30mA	25mA	25mA	60/60mA	
Cont. forward current	20mA	20mA	20mA	20mA	48/48mA	
Forward voltage	1.85V	2.0V	2.1V	3.6V	1.8/2.0V	
Reverse peak voltage	5V	5V	5V	5V	5V	
Current reduction rate above 25°C	0.40mA/C	0.42mA/C	0.46mA/C	0.40mA/C	1.0/1.0mA/C	

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit () = Momentary	Colors			Price Each		
				LED	Cap	Diffuser	1	25	50
633-215KKW015C-JB	UB215KKW015C-1JB	C	SPDT On-(On)	Bright Red	Clear	White	12.02	11.54	10.82
633-215KKW015D-JB	UB215KKW015D-1JB	C	SPDT On-(On)	Bright Amber	Clear	White	12.16	11.90	11.24
633-215KKW015F-JB	UB215KKW015F-1JB	C	SPDT On-(On)	Bright Green	Clear	White	12.16	11.90	11.49
633-215KKW015C-JC	UB215KKW015C-1JC	C	SPDT On-(On)	Bright Red	Clear	Red	12.16	11.90	11.24
633-215KKW015D-JD	UB215KKW015D-1JD	C	SPDT On-(On)	Bright Amber	Clear	Amber	12.02	11.32	10.60
633-215KKW015F-JF	UB215KKW015F-1JF	C	SPDT On-(On)	Bright Green	Clear	Green	12.16	11.90	11.24
633-225KKW015F-JB	UB225KKW015F-1JB	C	DPDT On-(On)	Bright Green	Clear	White	14.67	14.35	13.56
633-226KKW015C-JB	UB226KKW015C-1JB	C	DPDT On-On	Bright Red	Clear	White	15.90	15.55	14.71
633-226KKW015C-JC	UB226KKW015C-1JC	C	DPDT On-On	Bright Red	Clear	Red	15.90	15.55	14.71
633-226KKW016G-JB	UB226KKW016G-1JB	C	DPDT On-On	Super Bright Blue	Clear	White	28.66	25.87	24.02

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Description	Price Each	
				1	5
633-IS-DEVKIT-7	IS-DEV KIT-7	D	(2) ISC15ANP4 OLED PB with supplied hardware	318.95	315.20

633-ISC15ANP4	ISC15ANP4	E	OLED PB 64RGB x 48	77.29	63.01
633-ISC01P	ISC01P	F	OLED display 52RGB x 36	63.94	60.75
633-AT9704-085L	AT9704-085L	G	Socket for OLED PB	6.09	5.46

For quantities greater than listed, call for quote.					
633-IS18WWC1W-K	IS18WWC1W-K	H	Design Kit	86.31	83.72
633-IS-DEV-KIT-8	IS-DEV KIT-8	I	Development kit with 1 OLED Rocker	251.37	245.45

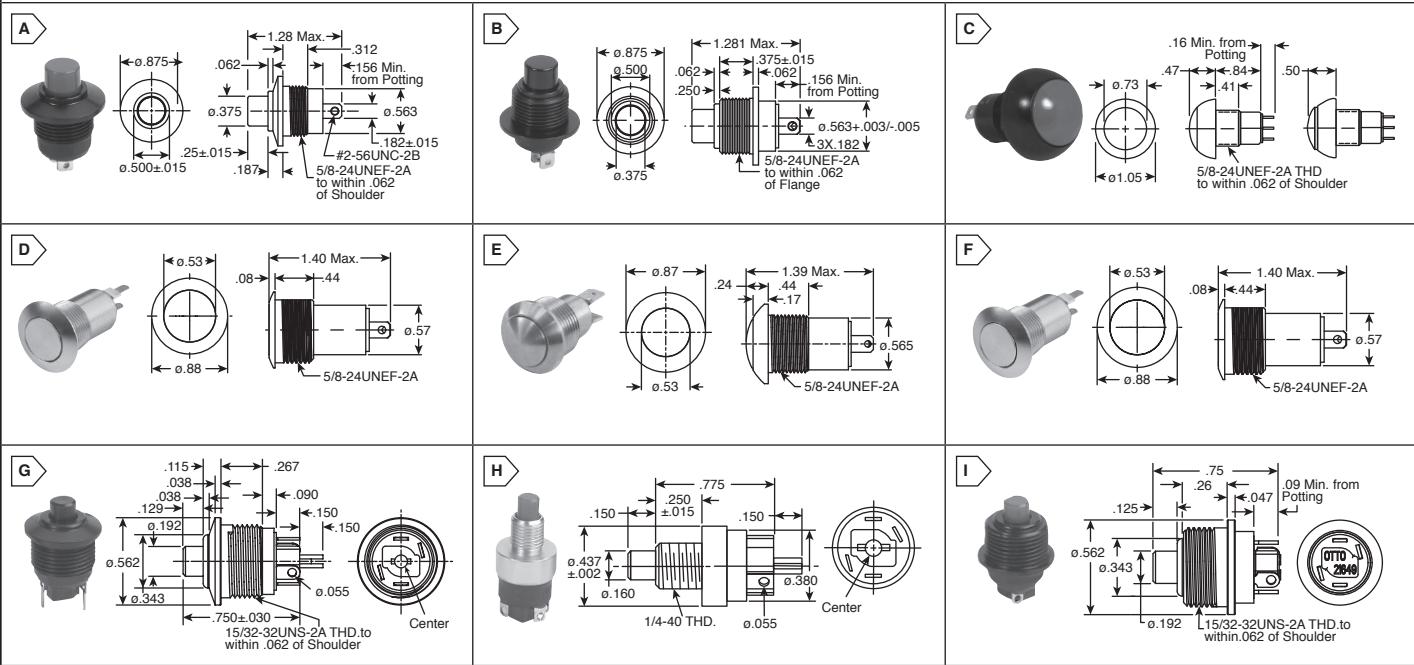
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# OTTO Pushbutton Switches

**OTTO**

## DIMENSIONS: In.



### P5 ALTERNATE ACTION PUSHBUTTONS

#### Features:

- Button sealed with patented "rolling sleeve" principle
- Contact area sealed at case & terminals
- Moistureproof & dusttight to IP64 & MIL-PRF-8805
- Design 2 or watertight to IP68S
- Less than 25mΩ contact resistance
- Handles low level up to 10A
- Engraved buttons available
- Choice of 9 button & 3 bezel colors
- Panel appearance matches most other OTTO momentary pushbutton switches
- Unsealed construction also available
- Variety of mounting styles

#### Specifications:

- Electrical Life: 25,000 cycles
- Mechanical Life: 1,000,000 cycles
- Operating Temp Range: -55°C to +85°C



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	OTTO Part No.	Fig.	Termination Style	Circuit Form/Contact Material/Grade	Button Color	Price Each			
						1	10	25	50
<b>Case Style: Style 3</b>									
999-P5-313321	P5-313321	A	Solder	SPDT/Silver/Commercial	Red	25.77	24.99	22.99	22.30
999-P5-313322	P5-313322	A	Solder	SPDT/Silver/Commercial	Black	22.31	21.98	21.76	21.32
999-P5-321321	P5-321321	A	Screw	SPST/Silver/Commercial	Red	28.56	27.70	25.49	24.72
999-P5-321322	P5-321322	A	Screw	SPST/Silver/Commercial	Black	28.56	27.70	25.49	24.72
<b>Case Style: Style 6</b>									
999-P5-621321	P5-621321	B	Screw	SPST/Silver/Commercial	Red	29.36	28.47	26.19	25.40
999-P5-621322	P5-621322	B	Screw	SPST/Silver/Commercial	Black	28.56	27.70	25.49	24.72

### P5-D ALTERNATE ACTION DOME PUSHBUTTONS

#### Features:

- 2 contoured button styles
- Button sealed with patented "rolling sleeve" principle
- Contact area sealed at case & terminals
- Less than 25mΩ contact resistance
- Handles low level up to 10A
- Moistureproof & dusttight to IP64 & MIL-PRF-8805
- Design 2 or watertight to IP68S options
- Unsealed construction also available
- Choice of 9 button colors
- Panel appearance matches most other OTTO momentary pushbutton switches
- Unsealed construction also available
- Variety of mounting styles

#### Specifications:

- Bezel Color: Black
- Electrical Life: 25,000 cycles
- Mechanical Life: 1,000,000 cycles
- Operating Temp Range: -55°C to +85°C



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	OTTO Part No.	Fig.	Circuit Form/Contact Material/Grade	Sea Level	Button Color	Price Each			
						1	10	25	50
<b>Terminal Style/Rating: Solder</b>									
999-P5-D113321	P5-D113321	C	SPDT/Silver/Commercial	Watertight	Red	27.98	27.14	24.97	24.22
999-P5-D113322	P5-D113322	C	SPDT/Silver/Commercial	Watertight	Black	27.98	27.14	24.97	24.22
<b>Terminal Style/Rating: Screw</b>									
999-P5-D121322	P5-D121322	C	SPST/Silver/Commercial	Watertight	Black	30.81	29.88	27.49	26.66

### P5-V VANDAL RESISTANT PUSHBUTTONS

#### Features:

- Security (aluminum) or vandal resistant (stainless steel) case & button
- Button sealed with patented "rolling sleeve" design
- Contact area sealed at case & terminals
- 1 million mechanical cycle life
- Watertight to IP68S or dusttight & moistureproof to IP64
- Less than 25mΩ contact resistance
- Handles low level up to 10A

#### Specifications:

- Electrical Life: 25,000 cycles
- Operating Temp Range: -55°C to +85°C



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	OTTO Part No.	Fig.	Thread	Circuit Form/Contact Material	Button Style	Price Each			
						1	10	25	50
<b>Terminal Style/Bezel Color: Solder/Silver</b>									
999-P5-V11323	P5-V11323	D	5/8-24 & Hex Nut	SPDT/Silver	Low Profile/Flat	34.56	33.52	30.84	29.91
<b>Terminal Style/Bezel Color: Screw/Silver</b>									
999-P5-V12122	P5-V12122	E	5/8-24 & Hex Nut	SPST/Silver	High Profile/Curved	37.36	36.23	33.33	32.33
999-P5-V52122	P5-V52122	E	3/4-20 & Hex Nut	SPST/Silver	High Profile/Curved	37.36	36.23	33.33	32.33
999-P5-V52123	P5-V52123	F	3/4-20 & Hex Nut	SPST/Silver	Low Profile/Flat Button	37.36	36.23	33.33	32.33
999-P5-V52133	P5-V52133	F	3/4-20 & Hex Nut	SPST/Silver	Low Profile/Flat Button	31.65	29.85	28.25	28.16

### P7 SUBMINIATURE PUSHBUTTONS

#### Features:

- Low level switching capability
- Less than 25mΩ contact resistance
- High contact pressure
- 6 circuit variations
- Positive tactile feedback
- Variety of mounting styles
- Qualified to MIL-PRF-8805/110
- Moistureproof & dusttight to IP64 & MIL-PRF-8805
- Design 2 or watertight to IP68S & MIL-PRF-8805
- Less than 25mΩ contact resistance
- Handles low level up to 10A

#### Specifications:

- Operating Temp Range: -55°C to +85°C
- Operating Force: 1.7 ± 0.5 lb.
- Circuit Form: SPDT 2 Circuit
- Bezel Color/Button Dia.: Black/Std.
- Terminal Style/ Construction Grade: Solder/Watertight Commercial



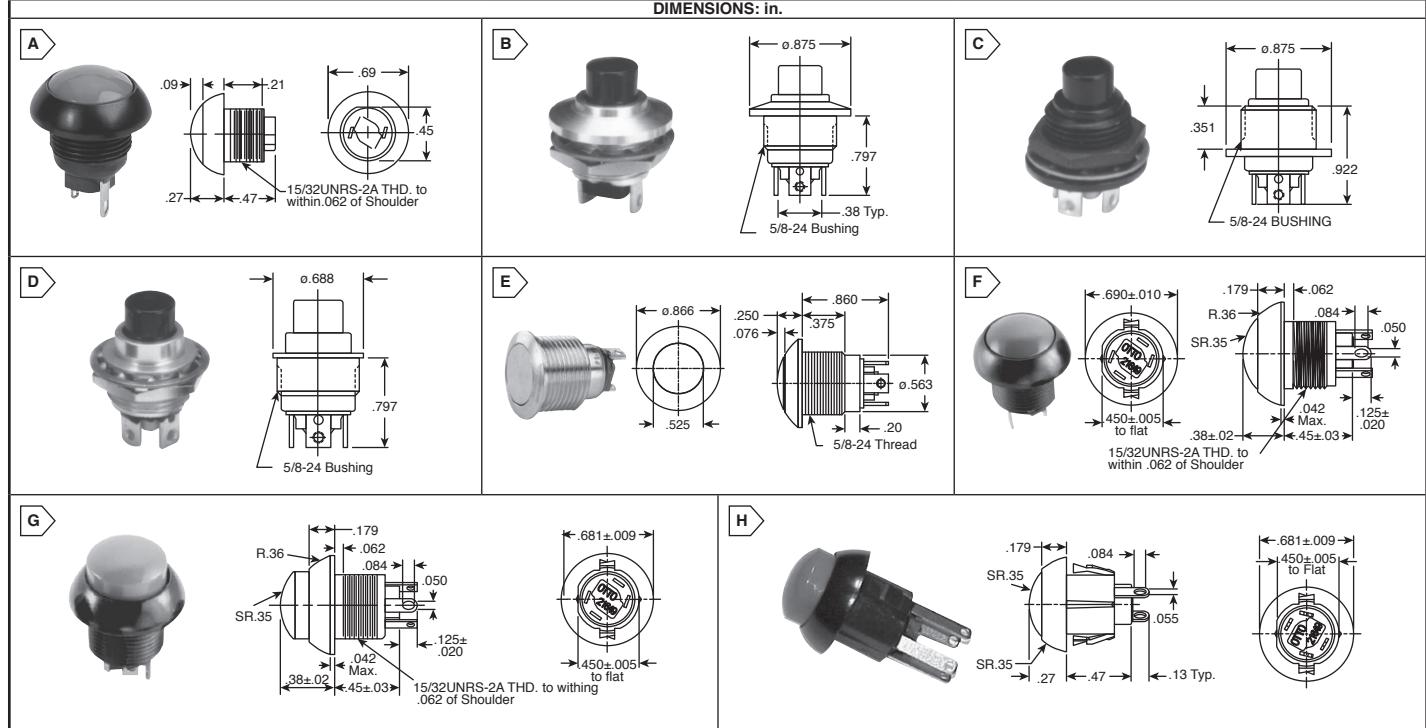
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	OTTO Part No.	Fig.	Case Style	Button Color	Price Each			
					1	25	50	100
<b>999-P7-3B6121</b>								
999-P7-3B6121	P7-3B6121	G	Style 3	Red	25.45	23.42	22.71	19.11
999-P7-3B6122	P7-3B6122	G	Style 3	Black	25.45	23.42	22.71	19.11
999-P7-5B6121	P7-5B6121	H	Style 5	Red	25.45	23.42	22.71	19.11
999-P7-5B6122	P7-5B6122	H	Style 5	Black	25.45	23.42	22.71	19.11
999-P7-6B6121	P7-6B6121	I	Style 6	Red	25.45	23.42	22.71	19.11
999-P7-6B6122	P7-6B6122	I	Style 6	Black	25.45	23.42	22.71	19.11

# OTTO Pushbutton Switches

**OTTO**

DIMENSIONS: in.



## P7-D SEALED DOME PUSHBUTTONS

### Features:

- Attractive dome style buttons
- Low level switching capability
- Less than 25mΩ contact resistance
- High contact pressure

- Constructed in accordance with MIL-PRF-8805/110 (no QPL)
- Positive tactile feedback
- Variety of mounting styles
- Dust tight to IP64 & MIL-PRF-8805 Design 2 or watertight to IP68S

### Specifications:

- Operating Temp Range: -55°C to +85°C
- Operating Force: 1.7 ± 0.5lb. (standard force)
- Mechanical Life: 1,000,000 cycles
- Terminal Style/Construction Grade: Std. Watertight Commercial Solder

- Circuit Form: SPST-DB, SPDT-DB 2 Circuit
- Contact Rating: Standard



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	OTTO Part No.	Fig.	Button Style	Button Color	Price Each			
					1	25	50	100
999-P7-DFB6121	P7-DFB6121	A	Flush	Red	21.72	19.98	19.78	19.38
999-P7-DFB6122	P7-DFB6122	A	Flush	Black	21.72	19.98	19.78	19.38

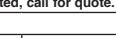
## P8 COMPACT PUSHBUTTONS

### Features:

- Shorter behind panel depth than OTTO's P1/P3
- Patented "rolling sleeve" button seal
- Contact area sealed at button & terminals
- Positive tactile feedback
- Sealed to IP64 or IP68S

### Specifications:

- Less than 25mΩ contact resistance
- Variety of mounting styles
- Variety of button lengths & shapes
- Engraved buttons & bezels available
- Mechanical Life: 1 million cycles
- Electrical Life: 100,000 cycles (25,000 low level)
- Operating Temp Range: -55°C to +85°C
- Terminal Style/Case Color: Screw/Silver
- Circuit Form: SPDT 2 Circuit
- Current Rating/Seal Type: Std./Watertight



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	OTTO Part No.	Fig.	Bezel Style	Button Diameter/Length/Shape	Actuator	Price Each			
						1	25	50	100
999-P8-326311A	P8-326311A	B	Style C	0.375"/0.250"/Flat	Flush	19.20	18.62	16.96	16.62
999-P8-326311B	P8-326311B	B	Style C	0.375"/0.250"/Dome	Round	19.20	18.62	16.96	16.62
999-P8-626311A	P8-626311A	C	Style F	0.375"/0.250"/Flat	Flush	19.20	18.62	16.96	16.62
999-P8-726311A	P8-726311A	D	Style G	0.375"/0.250"/Flat	Flush	19.20	18.62	16.96	16.62
999-P8-726311B	P8-726311B	D	Style G	0.375"/0.250"/Dome	Round	19.20	18.62	16.96	16.62

## P8-V VANDAL RESISTANT COMPACT PUSHBUTTONS

### Features:

- Stainless steel vandal resistant case
- Aluminum security level case
- Watertight to IP68S or moistureproof & dust tight to IP64
- UL1500 ignition protected
- Positive tactile feedback
- Less than 25mΩ contact resistance
- Variety of case and button styles available
- Mechanical Life 1 million cycles

### Specifications:

- Electrical Life: 100,000 cycles (25,000 low level)
- Operating Temp Range: -55°C to +85°C
- Current Rating/Seal Type: Std./Watertight
- Operating Force: 2.5 lbs.
- Button Profile: High Profile/Curved Button



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	OTTO Part No.	Fig.	Type	Case Style/Mounting	Circuit Form	Price Each			
						1	25	50	100
<b>Terminal Style/Case Color: Solder Terminal/Silver</b>									
999-P8-A111312	P8-A111312	E	Security Level (AL)	5/8-24/Hex Nut	SPST N.O.	22.88	21.06	20.84	20.42
<b>Terminal Style/Case Color: Screw Terminal/Silver</b>									
999-P8-V126312	P8-V126312	E	Vandal Resistant (SS)	5/8-24/Hex Nut	SPDT 2 Circuit	27.70	25.49	25.23	20.81
999-P8-V526312	P8-V526312	E	Vandal Resistant (SS)	3/4-20/Hex Nut	SPDT 2 Circuit	27.70	25.49	25.23	20.81

## P9 SEALED DOME PUSHBUTTON SWITCHES

### Features:

- Attractive dome style button
- 2 button heights
- Double break or shunting bar, momentary action
- All plastic housing & button construction
- Threaded body or snap-in panel mounting
- Solder, PC Pin & 0.110" Quick Connect terminal styles
- Moistureproof & dust tight to IP64 or watertight
- Withstands extreme shock & vibration
- Positive tactile feedback contact transfer on snap-action models

### Specifications:

- Circuit Form: SPDT 2 Circuit
- Electrical Life: 25,000 cycles 5A @ 28VDC resistive snap-action
- Mechanical Life: 1,000,000 cycles
- Operating Temp Range: -40°C to +85°C



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	OTTO Part No.	Fig.	Button & Case Style	Button Color	Price Each			
					1	5	10	20
999-P9-113121W	P9-113121W	F	Flush Dome and Threaded Case, Standard Finish	Red	14.14	13.99	13.85	13.57
999-P9-113122W	P9-113122W	F	Flush Dome and Threaded Case, Standard Finish	Black	14.14	13.99	13.85	13.57
999-P9-113125W	P9-113125W	F	Flush Dome and Threaded Case, Standard Finish	Green	14.96	14.81	14.66	14.36
999-P9-213129W	P9-213129W	G	Raised Dome and Threaded Case, Standard Finish	White	14.14	13.99	13.85	13.57
999-P9-313121W	P9-313121W	H	Flush Dome and Snap-In Case, Standard Finish	Red	14.14	13.99	13.85	13.57
999-P9-313122W	P9-313122W	H	Flush Dome and Snap-In Case, Standard Finish	Black	14.14	13.99	13.85	13.57
999-P9-313125W	P9-313125W	H	Flush Dome and Snap-In Case, Standard Finish	Green	14.96	14.81	14.66	14.36
999-P9-413129W	P9-413129W	G	Raised Dome and Snap-In Case, Standard Finish	White	14.14	13.99	13.85	13.57

# SCHNEIDER ELECTRIC Harmony® XB5 22mm Switches Schneider Electric

 This page of product is RoHS compliant.



## XB5 PUSHBUTTONS, SELECTOR AND KEY SWITCHES

- Snap-in color caps and clip-on contact blocks allow for easy modification in the field
- No-notch mounting in a 22mm (7/8in.) diameter hole
- Easy-to-install double insulated black plastic construction

For quantities greater than listed, call for quote.

MOUSER STOCK NO. Mfr. Mfr. Part No.	Fig.	Contact Form	Cap Color	Features	Price Each	
					1	10
<b>Momentary Pushbuttons</b>						
996-XB5AA21	A	NO	Black	Spring return, flush	46.12	41.47
996-XB5AA31	A	NO	Green	Spring return, flush	43.16	40.07
996-XB5AA42	A	NC	Red	Spring return, flush	40.30	39.14
996-XB5AA51	A	NO	Yellow	Spring return, flush	35.24	34.21
996-XB5AA61	A	NO	Blue	Spring return, flush	45.19	35.97
996-XB5AA3311	B	NO	Green	Green cap w/ white "I"	52.49	41.76
996-XB5AA4322	B	NC	Red	Red cap w/ white "O"	52.51	41.78
<b>Multi-Head Pushbuttons</b>						
996-XB5AL73415	C	NO, NC	Green, Red	Green cap with white "I", red cap with white "O"	84.98	78.49
996-XB5AW31B5	C	NO, NC	White	Spring return, flush	117.74	99.64
996-XB5AW31G5	C	NO, NC	White	Spring return, flush	117.74	99.65
996-XB5AA711237	D	2 NO, 1 NC	Black, Red, White	White left arrow, black right arrow, raised red "STOP"	119.98	110.87
996-XB5AA731327	D	2 NO, 1 NC	Green, Red	White "I", white "II", raised red "STOP"	119.98	110.87
<b>Emergency Stop Pushbuttons</b>						
996-XB5AT845	E	NO, NC	Red	40mm mushroom unmarked cap	99.94	84.58
996-XB5AS8445	F	1 NO/1 NC	Red	40mm mushroom unmarked cap	163.28	138.18
996-XB5AS9445	G	1 NO/1 NC	Red	40mm mushroom unmarked cap	163.27	138.18
996-XB5AS142	G	1 NC	Red	40mm mushroom unmarked cap	145.46	123.10
<b>22mm LED Pushbuttons</b>						
996-XB5AW33B5	H	NO, NC	Green	Spring return, flush	117.73	99.63
996-XB5AW33G5	H	NO, NC	Green	Spring return, flush	128.61	124.64



For quantities greater than listed, call for quote.

MOUSER STOCK NO. Mfr. Mfr. Part No.	Fig.	Contact Form	Cap Color	Features	Price Each	
					1	10
<b>22mm LED Pushbuttons (Cont.)</b>						
996-XB5AW34B5	H	NO, NC	Red	Spring return, flush	117.74	99.65
996-XB5AW34G5	H	NO, NC	Red	Spring return, flush	128.61	124.64
996-XB5AW35B5	H	NO, NC	Orange	Spring return, flush	117.74	99.64
996-XB5AW35G5	H	NO, NC	Orange	Spring return, flush	117.74	99.65
996-XB5AW36B5	H	NO, NC	Blue	Spring return, flush	117.74	99.64
996-XB5AW36G5	H	NO, NC	Blue	Spring return, flush	117.74	99.65
996-XB5AW73731B5	H	NO, NC	Green, Red	Green cap w/ white "I", red cap w/ white "O", central pilot light	133.47	128.41
996-XB5AW73731G5	H	NO, NC	Green, Red	Green cap w/ white "I", red cap w/ white "O", central pilot light	129.96	120.09
<b>22mm Selector Switches</b>						
996-XB5AD21	I	1 NO	Black	2 maintained, standard lever	46.72	44.61
996-XB5AD25	I	1 NO/1 NC	Black	2 maintained, standard lever	62.29	58.39
996-XB5AD33	I	2 NO	Black	3 maintained, standard lever	62.29	58.39
996-XB5AD53	I	2 NO	Black	3 momentary to center, standard lever	79.28	65.59
996-XB5AJ21	J	1 NO	Black	2 maintained, extended lever	53.93	44.61
996-XB5AJ33	J	2 NO	Black	3 maintained, extended lever	71.90	59.48
<b>22mm Key Switches</b>						
996-XB5AG03	K	2 NO	Black	3-maintained, Key No. 455 (key removal in position 1, 2 & 3)	139.52	118.08
996-XB5AG21	K	1 NO	Black	2-maintained, 1NO, Key No. 455 (key removal in position 1 only)	121.70	102.99
996-XB5AG41	K	1 NO	Black	2-maintained, 1NO, Key No. 455 (key removal in position 1 & 2)	112.62	103.00



## XB5 LED PILOT LIGHTS

For quantities greater than listed, call for quote.

MOUSER STOCK NO. Mfr. Mfr. Part No.	Fig.	Cap Color	Dimensions: mm (L x H x Dia.)	Price Each	
				1	10
<b>Contact Form: 24VAC/DC</b>					
996-XB5AVB1	L	White	54 x 41.5 x 22	65.92	62.29
996-XB5AVB3	L	Green	54 x 41.5 x 22	80.72	74.94
996-XB5AVB4	L	Red	54 x 41.5 x 22	65.92	62.29
996-XB5AVB5	L	Yellow	54 x 41.5 x 22	61.82	59.22
996-XB5AVB6	L	Blue	54 x 41.5 x 22	76.11	62.96

## Accessories for XB5 Series

For quantities greater than listed, call for quote.

MOUSER STOCK NO. Mfr. Mfr. Part No.	Description	Price Each	For quantities greater than listed, call for quote.	
			1	10
<b>Blank Legend Plate</b>				
996-ZBY0101T		2.14		
996-ZBY2303	Legend holder, 30x40mm with legend 8x27mm, "START" marking	3.91		
996-ZBY2303	Legend holder, 30x40mm with legend 8x27mm, "START" marking	3.91		
996-ZBY2304	Legend holder, 30x40mm with legend 8x27mm, "STOP" marking	3.12		
996-ZBY2304	Legend holder, 30x40mm with legend 8x27mm, "STOP" marking	3.12		
996-ZBY2307	Legend holder, 30x40mm with legend 8x27mm, "UP" marking	3.68		
996-ZBY2307	Legend holder, 30x40mm with legend 8x27mm, "UP" marking	3.68		
996-ZBY2308	Legend holder, 30x40mm with legend 8x27mm, "DOWN" marking	3.68		
996-ZBY2308	Legend holder, 30x40mm with legend 8x27mm, "DOWN" marking	3.68		
996-ZBY2322	Legend holder, 30x40mm with legend 8x27mm, "RESET" marking	4.31		
996-ZBY2322	Legend holder, 30x40mm with legend 8x27mm, "RESET" marking	4.31		
996-ZBY2326	Legend holder, 30x40mm with legend 8x27mm, "POWER ON" marking	4.89		
996-ZBY2326	Legend holder, 30x40mm with legend 8x27mm, "POWER ON" marking	4.89		
996-ZBY2330	Legend holder, 30x40mm with legend 8x27mm, "EMERGENCY STOP" marking	3.09		
996-ZBY2330	Legend holder, 30x40mm with legend 8x27mm, "EMERGENCY STOP" marking	3.09		

MOUSER STOCK NO. Mfr. Mfr. Part No.	Description	Price Each	For quantities greater than listed, call for quote.	
			1	10
<b>Legend holder, 30x40mm with legend 8x27mm, "OFF-ON" marking</b>				
996-ZBY2367		3.92		
996-ZBY2367	Legend holder, 30x40mm with legend 8x27mm, "OFF-ON" marking	3.92		
996-ZBY2387	Legend holder, 30x40mm with legend 8x27mm, "HAND-OFF-AUTO" marking	3.17		
996-ZBY2387	Legend holder, 30x40mm with legend 8x27mm, "HAND-OFF-AUTO" marking	3.17		
996-ZBY8330	Circular legend for emergency stops, 90mm, "EMERGENCY STOP" marking/ISO13850 logo	4.07		
996-ZBY9330	Circular legend for emergency stops, 60mm, "EMERGENCY STOP" marking/ISO13850 logo	4.22		
996-ZBZ006	Fixing screw for use with fixing collar pillar	3.39		
996-ZBZ010	Adaptor for electrical block mounted on 1.6mm printed circuit board	6.72		
996-ZBZ011	Adaptor for electrical block mounted on 2.2mm printed circuit board	8.38		
996-ZBZ012	Adaptor for electrical block mounted on 3.2mm printed circuit board	8.38		
996-ZENL111	Multi Head PB Accessories	19.74		
996-ZENL1121	Multi Head PB Accessories	19.50		



## HARMONY™ XB5R WIRELESS, BATTERLESS PUSHBUTTON SWITCHES

- Easy and fast installation
- Robust design for industrial environments
- Maintenance-free
- Eco-friendly green technology

For quantities greater than listed, call for quote.

MOUSER STOCK NO. Mfr. Mfr. Part No.	Description	Price Each	For quantities greater than listed, call for quote.	
			1	10
996-XB5RF0402	Pack XB5R 22mm transmitter programmable receiver AC/DC	512.22	470.95	
996-XB5RF01	Pack XB5R 22mm transmitter non-programmable receiver 24VDC	210.97	193.96	
996-XB5RMA04	O Pack SPS - XB5 - plastic handy box - programmable receiver - 24-240VAC/DC	592.74	544.95	
996-XB5RMB03	P Pack SPS - XB5 - plastic handy box - Non-programmable receiver - 24VDC	291.19	267.86	

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## HARMONY® XB5S - CONTROL AND SIGNALING BIOMETRIC SWITCHES

- Compact and easy to install
- User-friendly as fingerprint is your key
- Quick and easy set-up using stand-alone programming

- Fingerprint processing assures operator anonymity
- Degree of protection conforming to standard IEC 60529: IP65, NEMA 12

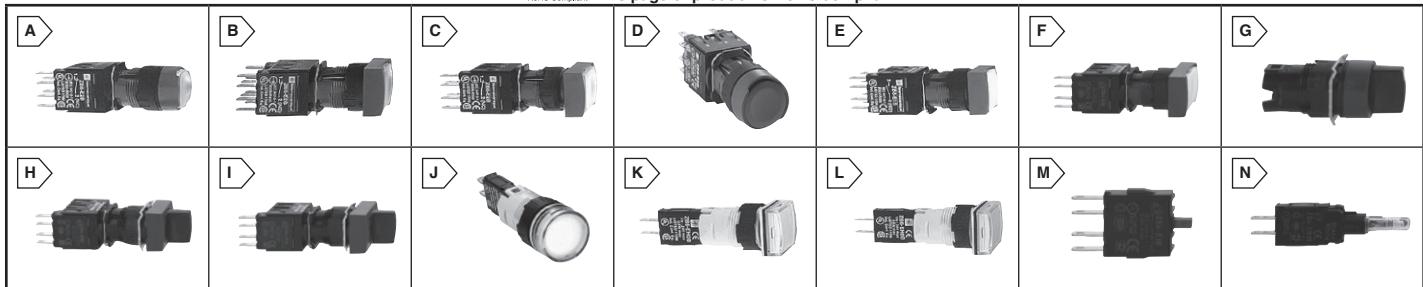


MOUSER STOCK NO. Mfr. Mfr. Part No.	Description	Connection	For quantities greater than listed, call for quote.	
			1	10
996-XBS1B2L2	Q Bistable biometric switch, 24DC, PNP output	2m/6.56 ft. cable	414.39	363.30
996-XBS2B2L2	Q Monostable biometric switch, 24VDC, PNP output	2m/6.56 ft. cable	414.38	363.30

1895

# SCHNEIDER ELECTRIC Harmony® XB6 16mm Switches Schneider Electric

 This page of product is RoHS compliant.



The Schneider Electric Harmony XB6 16mm Push Buttons, Selector Switches, Mushroom Head Operators and Pilot Lights are available with Rectangular, Square or Round plastic bezels and are ideal for high-density control panels.

- Contact blocks rated B300/R300 (5A, 300V)
- Contact Block and Light Modules with quick-connect wire connectors or optional pin-out adapter for printed circuit boards
- Rectangular, Square or Round plastic bezels
- Non-illuminated Push Buttons, Illuminated Push Buttons, Mushroom Head Operators, Selector Switches and Pilot Lights
- Available as complete assembled products or as components for customer snap-together assembly

- 12/24VAC/DC Light Modules with long-life White, Green, Blue, Red and Yellow LEDs



For quantities greater than listed, call for quote.

## PUSHBUTTON SWITCHES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Contact	Shape	Cap Color	Price Each	
					1	10
<b>Illuminated Pushbuttons</b>						
996-XB6AW1B1B	A	1 N.O.	Round	White	52.15	41.48
996-XB6AW1B5B	A	1 N.O. + 1 N.C.	Round	White	76.40	68.32
996-XB6AW3B1B	A	1 N.O.	Round	Green	52.15	41.48
996-XB6AW3B5B	A	1 N.O. + 1 N.C.	Round	Green	76.40	68.32
996-XB6AW4B2B	A	1 N.C.	Round	Red	52.15	41.48
996-XB6AW4B5B	A	1 N.O. + 1 N.C.	Round	Red	76.40	68.32
996-XB6AW5B1B	A	1 N.O.	Round	Yellow	52.15	41.48
996-XB6AW5B5B	A	1 N.O. + 1 N.C.	Round	Yellow	76.40	68.32
996-XB6AW6B5B	A	1 N.O. + 1 N.C.	Square	Blue	76.40	68.32
996-XB6CW1B1B	B	1 N.O.	Square	White	52.14	41.48
996-XB6CW1B5B	B	1 N.O. + 1 N.C.	Square	White	76.40	68.32
996-XB6CW3B1B	B	1 N.O.	Square	Green	52.14	41.48
996-XB6CW3B5B	B	1 N.O. + 1 N.C.	Square	Red	76.40	68.32
996-XB6CW4B2B	B	1 N.C.	Square	Red	52.15	41.48
996-XB6CW4B5B	B	1 N.O. + 1 N.C.	Square	Red	76.40	68.32
996-XB6CW5B1B	B	1 N.O.	Square	Yellow	52.15	41.48
996-XB6CW5B5B	B	1 N.O. + 1 N.C.	Square	Yellow	76.40	68.32
996-XB6CW6B1B	B	1 N.O.	Square	Blue	52.15	41.48
996-XB6CW6B5B	B	1 N.O. + 1 N.C.	Square	Blue	76.40	68.32
996-XB6DW1B1B	C	1 N.O.	Rectangular	White	52.15	41.48
996-XB6DW1B5B	C	1 N.O. + 1 N.C.	Rectangular	White	76.40	68.32
996-XB6DW3B1B	C	1 N.O.	Rectangular	Green	52.15	41.48
996-XB6DW3B5B	C	1 N.O. + 1 N.C.	Rectangular	Green	76.40	68.32
996-XB6DW4B2B	C	1 N.C.	Rectangular	Red	52.15	41.48
996-XB6DW4B5B	C	1 N.O. + 1 N.C.	Rectangular	Red	76.40	68.32
996-XB6DW5B1B	C	1 N.O.	Rectangular	Yellow	52.15	41.48
996-XB6DW5B5B	C	1 N.O. + 1 N.C.	Rectangular	Yellow	50.44	49.95
996-XB6DW6B5B	C	1 N.O. + 1 N.C.	Rectangular	Blue	76.40	68.32

MOUSER STOCK NO.	Fig.	Contact	Shape	Cap Color	Price Each	
					1	10
<b>Non-Illuminated Pushbuttons</b>						
996-XB6AA25B	D	1 N.O. + 1 N.C.	Round	Black	47.99	42.91
996-XB6AA31B	D	1 N.O.	Round	Green	30.75	24.47
996-XB6AA35B	D	1 N.O. + 1 N.C.	Round	Green	48.00	42.91
996-XB6AA42B	D	1 N.C.	Round	Red	30.76	24.49
996-XB6AA45B	D	1 N.O. + 1 N.C.	Round	Red	48.00	42.91
996-XB6AA51B	D	1 N.O.	Round	Yellow	30.76	24.49
996-XB6AA55B	D	1 N.O. + 1 N.C.	Round	Yellow	48.00	42.91
996-XB6AA61B	D	1 N.O.	Round	Blue	30.76	24.49
996-XB6AA65B	D	1 N.O. + 1 N.C.	Round	Blue	40.06	31.85
996-XB6CA11B	E	1 N.O.	Square	White	30.76	24.48
996-XB6CA15B	E	1 N.O. + 1 N.C.	Square	Yellow	48.00	42.91
996-XB6CA21B	E	1 N.O.	Square	Black	30.76	24.49
996-XB6CA25B	E	1 N.O. + 1 N.C.	Square	Black	48.00	42.91
996-XB6CA31B	E	1 N.O.	Square	Green	30.76	24.48
996-XB6CA42B	E	1 N.C.	Square	Red	30.76	24.49
996-XB6CA45B	E	1 N.O. + 1 N.C.	Square	Red	47.99	42.91
996-XB6CA51B	E	1 N.O.	Square	Yellow	30.76	24.49
996-XB6CA55B	E	1 N.O. + 1 N.C.	Square	Yellow	48.00	42.91
996-XB6CA61B	E	1 N.O.	Square	Black	30.76	24.49
996-XB6CA65B	E	1 N.O. + 1 N.C.	Square	Black	48.00	42.91
996-XB6DA11B	F	1 N.O.	Rectangular	White	30.76	24.49
996-XB6DA15B	F	1 N.O. + 1 N.C.	Rectangular	White	48.00	42.91
996-XB6DA21B	F	1 N.O.	Rectangular	Black	30.76	24.49
996-XB6DA25B	F	1 N.O. + 1 N.C.	Rectangular	Black	48.00	42.91
996-XB6DA31B	F	1 N.O.	Rectangular	Green	30.76	24.49
996-XB6DA35B	F	1 N.O. + 1 N.C.	Rectangular	Green	47.99	42.91
996-XB6DA42B	F	1 N.C.	Rectangular	Red	30.76	24.49
996-XB6DA45B	F	1 N.O. + 1 N.C.	Rectangular	Red	48.00	42.91
996-XB6DA51B	F	1 N.O.	Rectangular	Yellow	30.76	24.49
996-XB6DA55B	F	1 N.O. + 1 N.C.	Rectangular	Yellow	40.05	31.86
996-XB6DA61B	F	1 N.O. + 1 N.C.	Rectangular	White	30.76	24.49
996-XB6DA65B	F	1 N.O. + 1 N.C.	Rectangular	Red	48.00	42.91

## SELECTOR SWITCHES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Contact	Shape	Number of Positions	Price Each	
					1	10
<b>Illuminated Pushbuttons</b>						
996-XB6AD221B	G	1 N.O.	Round	2	34.88	27.73
996-XB6AD225B	G	1 N.O. + 1 N.C.	Round	2	44.17	35.14
996-XB6AD233B	G	2 N.O.	Round	3	44.16	35.13
996-XB6AD235B	G	1 N.O. + 1 N.C.	Round	3	44.18	35.15
996-XB6CD221B	H	1 N.O.	Square	2	34.87	27.75
996-XB6CD225B	H	1 N.O. + 1 N.C.	Square	2	44.18	35.15
996-XB6CD233B	H	2 N.O.	Square	3	44.18	35.15

MOUSER STOCK NO.	Fig.	Contact	Shape	Number of Positions	Price Each	
					1	10
<b>Non-Illuminated Pushbuttons</b>						
996-XB6CD235B	H	1 N.O. + 1 N.C.	Square	3	44.18	35.15
996-XB6DD221B	I	1 N.O.	Rectangular	2	34.88	27.74
996-XB6DD225B	I	1 N.O. + 1 N.C.	Rectangular	2	44.18	35.15
996-XB6DD233B	I	2 N.O.	Rectangular	3	44.18	35.15
996-XB6DD235B	I	1 N.O. + 1 N.C.	Rectangular	3	44.18	35.15

## PILOT LIGHTS AND EMERGENCY STOP SWITCHES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Shape	Cap/Lens Color	Price Each	
				1	10
<b>Pilot Lights (12-24VAC/DC LED)</b>					
996-XB6AV1BB	J	Round	White	27.48	26.14
996-XB6AV3BB	J	Round	Green	27.48	26.14
996-XB6AV4BB	J	Round	Red	27.47	26.14
996-XB6AV5BB	J	Round	Yellow	27.48	26.14
996-XB6AV6BB	J	Round	Blue	27.48	26.14
996-XB6CV1BB	K	Square	White	32.07	25.51
996-XB6CV3BB	K	Square	Green	32.06	25.51
996-XB6CV4BB	K	Square	Red	32.05	25.50
996-XB6CV5BB	K	Square	Yellow	32.07	25.51
996-XB6CV6BB	K	Square	Blue	32.07	25.51
996-XB6DV1BB	L	Rectangular	White	32.07	25.51
996-XB6DV3BB	L	Rectangular	Green	32.07	25.51
996-XB6DV4BB	L	Rectangular	Red	32.07	25.51
996-XB6DV5BB	L	Rectangular	Yellow	32.07	25.51

MOUSER STOCK NO.	Fig.	Shape	Cap/Lens Color	Price Each	
				1	10
<b>Pilot Lights (12-24VAC/DC LED) (Cont.)</b>					
996-XB6DV6BB	L	Rectangular	Blue	32.07	25.51
<b>Pilot Lights (120VAC LED)</b>					
996-XB6AV1GB	J	Round	White	27.47	26.14
996-XB6AV3GB	J	Round	Green	27.47	26.13
996-XB6AV4GB	J	Round	Red	27.47	26.13
996-XB6AV5GB	J	Round	Yellow	27.48	26.15
996-XB6AV6GB	J	Round	Blue	27.48	25.51
996-XB6CV3GB	K	Square	Green	32.07	25.51
996-XB6CV4GB	K	Square	Red	32.07	25.51
996-XB6CV5GB	K	Square	Yellow	32.07	25.51
<b>Emergency Stop Pushbuttons</b>					
996-XB6AS342B	L	Round	Red	68.65	56.76
996-XB6AS345B	L	Round	Red	105.03	94.27
996-XB6AS9345B	L	Round	Red	123.24	110.36

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1896

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MOUSER STOCK NO.	Fig.	Description	Price Each	
			1	10
<b>Contact Blocks</b>				
996-ZB6E1B	M	1 N.O., Silver Alloy Contact Material	8.51	7.50
996-ZB6E2B	M	1 N.C., Silver Alloy Contact Material	8.99	7.50
996-ZB6E2E	M	1 N.O., Gold Alloy Contact Material	15.99	12.25
<b>Light Modules</b>				
996-ZB6EB1B	N	White color, 12-24VAC/DC LED lamp	16.12	15.64
996-ZB6EB3B	N	Green color, 12-24VAC/DC LED lamp	19.30	18.92
996-ZB6EB4B	N			

# SCHURTER Sealed, Double Pole & Latching Switches

 This page of product is RoHS compliant.

ELECTRONIC COMPONENTS

## MSM19, MSM22 AND MSM30 SERIES: METAL PUSHBUTTON SWITCHES WITH SEALED MICROSWITCH

The MSM SPDT has seal protection to the front of the actuator, as well as to the panel with a sealing o-ring. An IP 67 microswitch option has been added, which provides an integrated seal between the actuator and the microswitch, as well as around the switch terminals. The completely sealed switching unit can be used in adverse conditions when increased humidity, condensation or water seeps in through openings in the equipment housing.

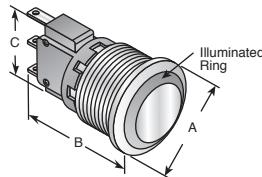
### Specifications:

- Contact material: Silver
- Max switching voltage: 125VAC/250VAC
- Max switching current: 5A/3A
- Contact form: SPDT
- Lifetime: 200,000 cycles
- Actuation force: 3.7N
- Degree of protection: IP 67

### Benefits:

- Stainless steel housing is vandal resistant
- IP67 complete seal protection from front and back protects microswitch from affects of moisture
- High shock resistance temperature range and IP67 seal protection for outdoor installation
- Point and ring illumination – red, green & blue
- Access to applications up to 250VAC standard and customized lettering available

\* Rated 100mA/30VDC



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schurter Part No.	Illumination	Mounting Diameter	Dimensions: mm			Price Each			
				A	B	C	1	10	25	50
693-1241.6621.1180	1241.6621.1180000	None	19mm	ø22	33.4	20	22.19	17.74	15.97	15.07
693-1241.6624.1181	1241.6624.1181000	Ring, Red	19mm	ø22	33.4	20	46.82	43.22	39.43	36.24
693-1241.6631.1180	1241.6631.1180000	None	22mm	ø25	33.4	20	16.42	15.15	13.82	12.71
693-1241.6634.1181	1241.6634.1181000	Ring, Red	22mm	ø25	33.4	20	49.86	46.04	42.00	38.60
*	693-1241.6661.1170	None	30mm	ø34	35.0	20	25.85	24.99	24.54	23.83

## MSM19, MSM22 AND MSM30 SERIES: METAL PUSHBUTTON SWITCHES WITH DOUBLE POLE CONTACTS

The new MSM DPDT momentary switch is designed with two separate switching contacts. The contacts can be used as normally open, normally closed or as change-over. The MSM DP is ideal for switching primary and secondary circuits where an additional set of contacts is required for an auxiliary function. In other applications, the MSM double pole can be installed to operate only when depressed and held by an operator.

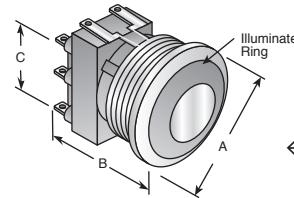
### Specifications:

- Max switching voltage: 125VAC/250VAC
- Max switching current: 5A/3A
- Contact form: DPDT
- Lifetime: 200,000 cycles
- Actuation force: 5.8N
- Degree of protection: IP67 (front)

### Benefits:

- Stainless steel housing is vandal resistant
- Double pole – two separate switching contacts for a variety of applications
- Quick connect terminals
- High Shock Resistance
- Temperature and IP67 protection rated for outdoor installation
- Point and ring illumination – red, green & blue
- Access to applications up to 250VAC

\* Types with lettering require change to part number -000 to indicate legend.



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schurter Part No.	Illumination	Mounting Diameter	Dimensions: mm			Price Each			
				A	B	C	1	10	25	50
693-1241.6921.1120	1241.6921.1120000	None	19	ø22	39.15	22.80	16.08	14.85	13.55	12.45
*	693-1241.6922.1120	With Lettering	19	ø22	39.15	22.80	25.32	23.37	21.32	19.59
693-1241.6923.1121	1241.6923.1121000	Point, Red	19	ø22	39.15	25.80	30.12	27.80	25.35	23.31
693-1241.6923.1122	1241.6923.1122000	Point, Green	19	ø22	39.15	25.80	30.12	27.80	25.35	23.31
693-1241.6923.1124	1241.6923.1124000	Point, Blue	19	ø22	39.15	25.80	32.27	29.78	27.17	24.97
693-1241.6924.1121	1241.6924.1121000	Ring, Red	19	ø22	39.15	25.80	47.99	44.30	40.41	37.14
693-1241.6924.1122	1241.6924.1122000	Ring, Green	19	ø22	39.15	25.80	47.99	44.30	40.41	37.14
693-1241.6924.1124	1241.6924.1124000	Ring, Blue	19	ø22	39.15	25.80	51.39	47.44	43.27	39.79
693-1241.6931.1120	1241.6931.1120000	None	22	ø25	39.15	22.80	18.42	17.01	15.57	14.94
*	693-1241.6932.1120	With Lettering	22	ø25	39.15	22.80	26.28	24.25	22.11	20.34
693-1241.6933.1121	1241.6933.1121000	Point, Red	22	ø25	39.15	25.80	30.93	28.54	26.04	23.93
693-1241.6933.1122	1241.6933.1122000	Point, Green	22	ø25	39.15	25.80	30.93	28.54	26.04	23.93
693-1241.6933.1124	1241.6933.1124000	Point, Blue	22	ø25	39.15	25.80	29.45	27.19	24.79	22.80
693-1241.6934.1121	1241.6934.1121000	Ring, Red	22	ø25	39.15	25.80	49.86	46.04	42.00	38.60
693-1241.6934.1124	1241.6934.1124000	Ring, Blue	22	ø25	39.15	25.80	53.44	49.32	44.99	41.36
693-1241.6961.1120	1241.6961.1120000	None	30	ø34	39.15	22.80	28.94	26.72	24.38	22.41
*	693-1241.6962.1120	With Lettering	30	ø34	39.15	22.80	36.66	33.83	30.87	28.38
693-1241.6963.1121	1241.6963.1121000	Point, Red	30	ø34	39.15	25.80	43.15	39.83	36.32	33.41
693-1241.6964.1121	1241.6964.1121000	Ring, Red	30	ø34	39.15	25.80	49.22	45.44	41.45	38.10
693-1241.6964.1122	1241.6964.1122000	Ring, Blue	30	ø34	39.15	25.80	56.75	52.39	47.79	43.93

## MSM19 AND MSM22 SERIES: METAL PUSHBUTTON SWITCHES WITH LATCHING ACTION

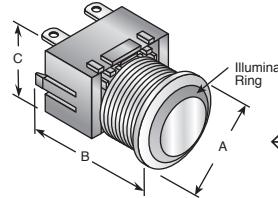
The new MSM LA offers latching-action (ON/OFF) actuation for use in primary or secondary switching applications. It is rated 30VDC up to 250VAC with a maximum switching current of 12 amps, and features two isolated contacts for 1- or 2-pole switching functions. The switch provides mechanical indication when in the ON and OFF positions. The actuator is raised above the switch housing in the resting OFF state and is recessed into the housing when depressed to switch ON. The distinct difference in position makes the mode of operation immediately evident. It also prevents inadvertent switching; for instance in the event persons or objects lean on the switch. The version with ring illumination is ideal for optical indication of the switching status in the ON or OFF state. Illuminating the switch in the OFF state is ideal for locating it in dark areas or where the ambient light is less than optimal. Due to the raised actuator, a 180° lateral view of the switch is possible.

### Specifications:

- Max switching voltage: 30VDC/250VAC
- Max switching current: 0.1A/12A
- Contact form: DPDT
- Lifetime: 50,000 cycles, 8A @ 250VAC
- Actuation force: 10N
- Degree of protection: IP67 (front)

### Benefits:

- Latching action for ON/OFF switching
- Mechanical indication of operational status - actuator raised above housing when OFF and recessed when ON
- Double pole (DPDT) – Two separate switching contacts for a variety of applications
- Stainless steel housing is vandal resistant
- High shock resistance
- Wide temperature range rated for outdoor installation
- IP67 seal protection rating against jetting water
- Wide range of switching voltage and current: 30VDC to 250VAC and 0.1A to 12A.
- Ring illumination may be installed to indicate OFF or ON state
- Ring illumination in OFF state offers 180° lateral viewing angle
- Ring illumination - red, green or blue



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schurter Part No.	Illumination	Mounting Diameter	Dimensions: mm			Price Each			
				A	B	C	1	10	25	50
693-1241.6821.1120	1241.6821.1120000	None	19mm	ø22	43.90	22	18.95	17.49	15.96	14.68
693-1241.6821.11000	1241.6821.1100000	None	19mm	ø22	43.90	22	26.59	21.63	19.44	18.20
693-1241.6823.11100	1241.6823.1110000	Point, Red	19mm	ø22	43.90	22	38.84	31.45	28.75	27.61
693-1241.6823.11200	1241.6823.1120000	Point, Green	19mm	ø22	43.90	22	36.76	31.15	29.17	27.85
693-1241.6823.11400	1241.6823.1140000	Point, Blue	19mm	ø22	43.90	22	46.85	37.47	35.18	33.56
693-1241.6824.11100	1241.6824.1110000	Ring, Green	19mm	ø22	43.90	22	53.00	44.16	41.24	39.46
693-1241.6824.11400	1241.6824.1140000	Ring, Blue	19mm	ø22	43.90	22	60.60	54.14	49.05	47.13
693-1241.6824.11121	1241.6824.1121000	Ring, Red	19mm	ø22	43.90	22	45.14	41.66	38.14	35.21
693-1241.6824.1122	1241.6824.1122000	Ring, Green	19mm	ø22	43.90	22	41.41	38.23	34.88	33.87
693-1241.6824.1124	1241.6824.1124000	Ring, Blue	19mm	ø22	43.90	22	49.55	45.75	41.88	38.62
693-1241.6831.11120	1241.6831.1120000	None	22mm	ø25	43.90	22	22.38	21.26	19.03	17.96
693-1241.6831.11100	1241.6831.1110000	None	22mm	ø25	43.90	22	27.40	21.98	19.99	19.29
693-1241.6834.11100	1241.6834.1110000	Ring, Red	22mm	ø25	43.90	22	58.51	48.48	45.54	41.22
693-1241.6834.111400	1241.6834.1114000	Ring, Blue	22mm	ø25	43.90	22	57.39	49.19	45.01	41.90
693-1241.6834.1121	1241.6834.1121000	Ring, Red	22mm	ø25	43.90	22	52.03	48.03	43.82	40.28
693-1241.6834.1122	1241.6834.1122000	Ring, Green	22mm	ø25	43.90	22	53.25	49.15	44.85	41.22
693-1241.6834.1124	1241.6834.1124000	Ring, Blue	22mm	ø25	43.90	22	55.75	51.47	46.96	43.17

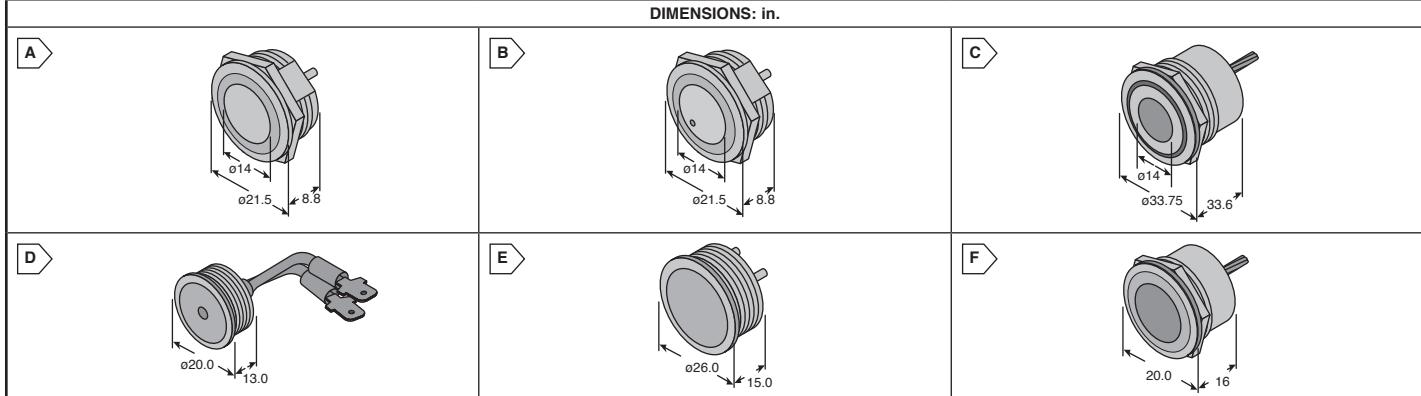
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**DIMENSIONS: in.**


## VANDAL-PROOF MECHANICAL SWITCHES

**Specifications:**

- Contact material: Silver
- Lifetime: 1,000,000 cycles
- Max switching voltage: 48VDC
- Switching function: N.O.
- Actuation force: 3.7N
- LED forward voltage: Red - 1.6V; green - 2.0V; yellow - 2.0V
- LED forward current: All colors = 20mA
- All switches supplied with nut and o-ring seal



RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schurter Part No.	Fig.	Illumination	Mounting Diameter	Housing Material	Actuator Material	Terminals	Price Each			
								1	10	25	50
693-1241.2800	1241.2800	A	N/A	19mm	Zinc Diecast	Zinc Diecast	Pins	9.17	8.34	7.64	7.05
693-1241.2855	1241.2855	B	Spot Red	19mm	Zinc Diecast	Stainless Steel	Pins w/ solder aid	16.33	14.52	13.06	12.33
693-1241.2856	1241.2856	B	Spot Green	19mm	Zinc Diecast	Stainless Steel	Pins w/ solder aid	13.20	12.30	11.34	10.37
693-1241.2857	1241.2857	B	Spot Yellow	19mm	Zinc Diecast	Stainless Steel	Pins w/ solder aid	18.36	16.33	14.69	13.86
693-1241.2858	1241.2858	B	Spot Red/Green	19mm	Zinc Diecast	Stainless Steel	Pins w/ solder aid	15.20	14.04	13.03	12.29
693-1241.2859	1241.2859	B	Spot Blue	19mm	Zinc Diecast	Stainless Steel	Pins w/ solder aid	15.03	14.01	12.91	11.81
693-1241.6400	1241.6400	C	Ring Red	30mm	Aluminum	Zinc Diecast	Wire	80.92	71.93	64.73	61.14
693-1241.6401	1241.6401	C	Ring Green	30mm	Aluminum	Zinc Diecast	Wire	80.92	71.93	64.73	61.14
693-1241.6402	1241.6402	C	Ring Yellow	30mm	Aluminum	Zinc Diecast	Wire	80.92	71.93	64.74	61.15
693-1241.6403	1241.6403	C	Ring Red/Green	30mm	Aluminum	Zinc Diecast	Wire	82.68	73.49	66.15	62.48

## VANDAL-PROOF INDICATORS

**Specifications:**

- Supplied with nut and o-ring seal
- Indicator only



RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schurter Part No.	Fig.	Illumination	Mounting Diameter	Housing Color	Housing Material	Terminals	Price Each			
								1	10	25	50
693-1241.3034.M	1241.3034.M	D	Spot Green	16mm	Aluminum Natural	Anodized Aluminum	Faston	30.63	27.94	26.54	22.75
693-1241.3035	1241.3035	D	Spot Yellow	16mm	Aluminum Natural	Anodized Aluminum	Faston	20.00	17.78	16.00	15.12

## VANDAL-PROOF PIEZO SWITCHES

**Specifications:**

- Max switching voltage: 42VAC
- Lifetime: 20,000,000 cycles
- Max switching current: 100mA
- Min. actuating force: 1.5N
- All switches supplied with nut and o-ring seal
- All switches supplied with nut and o-ring seal
- Switching function: N.O.



RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schurter Part No.	Fig.	Illumination	Mounting Diameter	Housing Color	Housing Material	Terminals	Price Each			
								1	10	25	50
693-1241.3008	1241.3008	E	N/A	22mm	Aluminum Natural	Anodized Aluminum	Pins	39.79	36.72	34.12	32.16
693-1241.3005	1241.3005	E	N/A	22mm	Red	Anodized Aluminum	Pins	38.90	38.52	38.43	37.96
693-1241.3006	1241.3006	E	N/A	22mm	Green	Anodized Aluminum	Pins	47.02	43.11	39.18	36.95

## VANDAL-PROOF CAPACITIVE SWITCHES

**Specifications:**

- Max switching voltage: 7VDC-24VDC
- Max switching current: 175mA
- All switches supplied with nut and o-ring seal
- Lifetime: 1,000,000 cycles
- Input current (irrespective of LEDs): 5V - 2mA not in action/3mA in action; 12V - 2mA not in action/ 6mA in action; 24V - 4mA not in action/8mA in action

**Features:**

- Pressure-free operation of input systems due to no actuation force
- IP67 degree of protection

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schurter Part No.	Fig.	Illumination	Mounting Diameter	Switching Type	Housing Material	Terminals	Price Each			
								1	10	25	50
693-1243.1218.1.1	1243.1218.1.1	F	Red	16mm	Latching	Aluminum	210mm wire	92.09	81.86	73.67	69.58
693-1243.1318.1.1	1243.1318.1.1	F	Red	16mm	Momentary	Aluminum	210mm wire	92.09	81.86	73.67	69.58
693-1243.1118.1.1	1243.1118.1.1	F	Red	16mm	Impulse	Aluminum	210mm wire	92.09	81.86	73.67	69.58
693-1243.1118.2.1	1243.1118.2.1	F	Green	16mm	Impulse	Aluminum	210mm wire	92.09	81.86	73.67	69.58

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## MSM16, MSM19 AND MSM22 SERIES: VANDAL-PROOF MOMENTARY MECHANICAL SWITCHES

The robust vandal-proof MSM switch has a high shock resistance and an extremely flat front construction of only 1.7mm. Housing and actuator are made of top-quality stainless steel. The MSM is designed for quick mounting: the wires are simply plugged onto the quick connect terminals of the detachable contact module. Then the module is snapped into the switch, which is simply mounted beforehand. There are variants with point or ring illumination for night applications or for optical status indications.

### Specifications:

- Contact material: Silver
- Max. switching voltage: 125VAC
- Max. switching current: 5A
- Contact form: SPDT
- Lifetime: 200,000 cycles
- Actuation force: 4.5 N
- IP67 protected

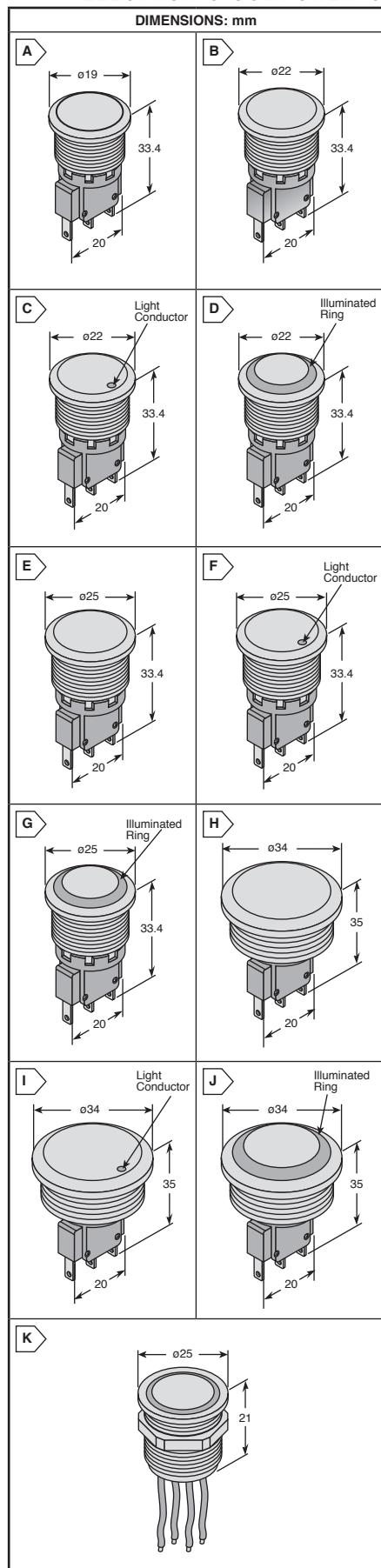
### Benefits:

- High shock resistance
- Pleasant tactile feeling
- Flat front design
- Easy mounting
- Made of top-quality stainless steel

### LED Characteristics:

- LED forward voltage: Red - 1.6V; Green - 2.0V, Blue-3.2V
- LED forward current: Red/Green - 40mA, Blue-20mA

MOUSER STOCK NO.		Schurter Part No.	Fig.	Illumination	Mounting Diameter	Price Each			
1	10	25	50						
693-1241.6611.1120	1241.6611.1120000	A	None	16mm	13.07	12.18	11.22	10.27	
693-1241.6621.1120	1241.6621.1120000	B	None	19mm	12.17	11.34	10.46	9.56	
693-1241.6623.1120	1241.6623.1121000	C	Point, Red	19mm	25.76	23.62	20.83	18.41	
693-1241.6623.1124	1241.6623.1124000	C	Point, Blue	19mm	27.72	24.98	22.32	19.71	
693-1241.6624.1121	1241.6624.1121000	D	Ring, Red	19mm	36.47	33.39	29.87	28.54	
693-1241.6624.1122	1241.6624.1122000	D	Ring, Green	19mm	42.05	38.54	34.53	30.09	
693-1241.6624.1124	1241.6624.1124000	D	Ring, Blue	19mm	40.17	36.19	32.89	32.12	
693-1241.6631.1120	1241.6631.1120000	E	None	22mm	13.74	12.81	11.81	10.80	
693-1241.6633.1124	1241.6633.1124000	F	Point, Blue	22mm	29.10	26.23	23.47	20.72	
693-1241.6634.1121	1241.6634.1121000	G	Ring, Red	22mm	42.93	38.67	34.59	30.52	
693-1241.6634.1122	1241.6634.1122000	G	Ring, Green	22mm	41.89	37.73	33.75	30.52	
693-1241.6634.1124	1241.6634.1124000	G	Ring, Blue	22mm	43.39	40.75	39.25	37.07	



## MSM30 SERIES: VANDAL-PROOF MOMENTARY MECHANICAL SWITCHES

The new MSM30 offers the same robust characteristics as its smaller counterparts, only it has a larger, ergonomically designed, actuating area of 30mm for superb tactile feel. The MSM30 is ideal for systems where a large actuating area is required for operation, information and vending systems, dashboards, consoles and broadcasting systems.

### Specifications:

- Insulation resistance: 100,000Ω
- Contact bounce time: < 5ms
- Lifetime (rated braking capacity): 0.1A/3A = 200,000 cycles
- 10A = 50,000 cycles

### Benefits:

- High shock resistance
- Pleasant tactile feeling
- Flat front design
- Easy mounting
- Made of top-quality stainless steel

### LED Characteristics:

- LED forward voltage: Red - 1.6V; Green - 2.0V, Blue-3.2V
- LED forward current: Red/Green - 40mA, Blue-20mA

MOUSER STOCK NO.		Schurter Part No.	Fig.	Illumination	Contact Material	Switching (Max) Current	Breaking Voltage	Price Each			
1	10	25	50								
<b>Standard</b>											
693-1241.6661.1110	1241.6661.1110000	H	None	Gold	0.1A	30V	3W	25.20	22.69	20.31	17.92
693-1241.6661.1120	1241.6661.1120000	H	None	Silver	3A	125V	1250W	22.65	20.39	18.25	17.03
<b>With Illumination</b>											
693-1241.6663.1111	1241.6663.1111000	I	Point, Red	Gold	100mA	30V	3W	42.17	37.96	33.98	29.97
693-1241.6663.1131	1241.6663.1131000	I	Point, Red	Silver	10A	250V	2500W	42.17	37.96	33.98	29.97
693-1241.6664.1111	1241.6664.1111000	J	Ring, Red	Gold	100mA	30V	3W	60.38	54.37	48.65	42.93
693-1241.6664.1112	1241.6664.1112000	J	Ring, Green	Gold	100mA	30V	3W	60.38	54.37	48.65	42.93
693-1241.6664.1121	1241.6664.1121000	J	Ring, Red	Silver	5A	125V	1250W	44.94	42.22	40.22	35.50
693-1241.6664.1122	1241.6664.1122000	J	Ring, Green	Silver	5A	125V	1250W	46.06	43.27	41.22	36.38
693-1241.6664.1131	1241.6664.1131000	J	Ring, Red	Silver	10A	250V	2500W	60.38	54.37	48.65	42.93
693-1241.6664.1132	1241.6664.1132000	J	Ring, Green	Silver	10A	250V	2500W	60.38	54.37	48.65	42.93

## PSE M22R SERIES: VANDAL-PROOF MOMENTARY PIEZO SWITCHES

This new piezo switch has been specifically designed for applications in hostile environments. Its vandal-proof housing with a compact M22 metric thread screw socket encloses a powerful ring illumination, which is available in a choice of one or two colors and can be attached to a 12V or 24V power supply. It can be ordered complete with Molex connector or wires.

### Specifications:

- Contact material: Aluminum natural
- Actuation force: 1.5N - 3.0N
- Switching current: 0.1A
- IP67 protected
- Switching capacity max: 1W

- Actuation force: 1.5N - 3.0N
- IP67 protected

MOUSER STOCK NO.		Schurter Part No.	Fig.	Illumination	Illumination Voltage	Terminals	Switching Volt. Max	Price Each			
1	10	25	50								
693-1241.3256	1241.3256	K	Red	24V	Wire	60V	103.47	98.25	93.07	87.90	
693-1241.3257	1241.3257	K	Green	24V	Wire	60V	103.47	98.25	93.07	87.90	
693-1241.3258	1241.3258	K	Red/Green	24V	Wire	60V	113.02	107.35	101.71	96.06	

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1899

# ALCOSWITCH Toggle Switches

RoHS Compliant

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## A SERIES (GEMINI SERIES) MINIATURE TOGGLE SWITCHES

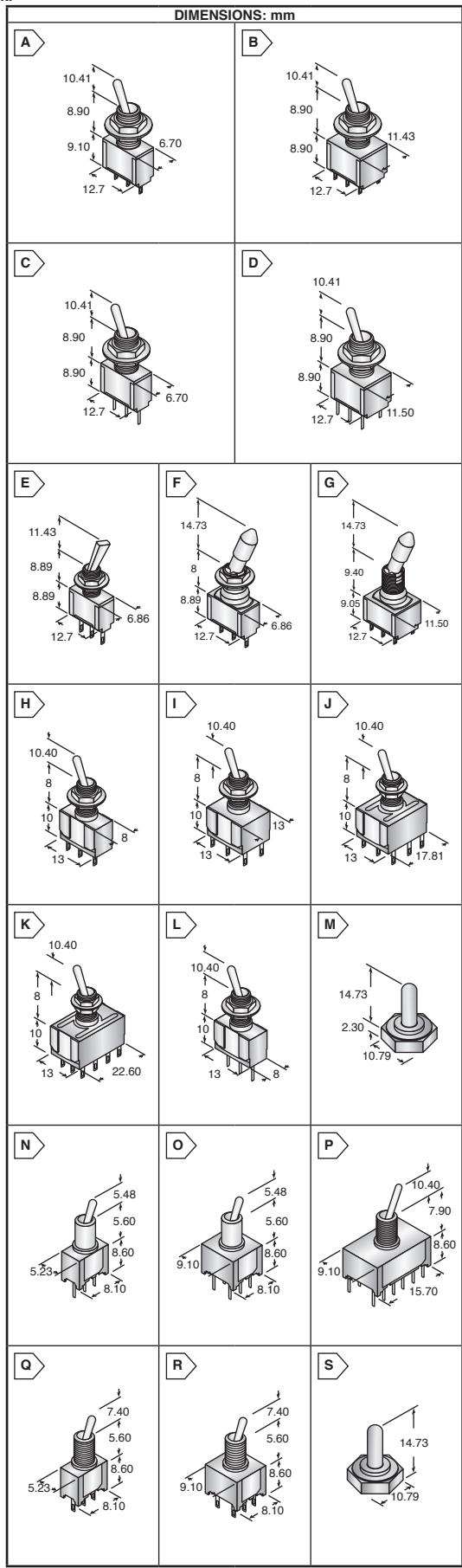
### Specifications:

- Contact rating: Gold - 0.4VA @ 20 VAC/DC; silver - 2A @ 250VAC, 5A @ 125VAC
- Terminal seal: Epoxy
- Case material: Thermoset
- Contact timing: Break before make
- Actuation force: Momentary - 950g max.; maintained - 1750g max.
- Actuator travel: 25°
- Life expectancy: 30,000 cycles

( ) Momentary

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alcoswitch Part No.	TE Part No.	Fig.	Type	Circuit	Price Each		
						1	10	25
<b>Standard Actuator; Silver Contact Material: Wire Lug</b>								
506-A101SYZQ04	A101SYZQ04	4-1825136-9	A	SPDT	On-None-On	3.15	3.00	2.85
506-A103SYZQ04	A103SYZQ04	2-1825137-0	A	SPDT	On-Off-On	4.85	4.62	4.50
506-A105SYZQ04	A105SYZQ04	3-1825137-9	A	SPDT	(On)-Off-(On)	4.54	4.34	4.15
506-A107SYZQ04	A107SYZQ04	5-1825137-2	A	SPDT	On-Off-(On)	4.15	3.97	3.80
506-A108SYZQ04	A108SYZQ04	6-1825136-4	A	SPDT	On-None-(On)	2.65	2.42	2.33
506-A201SYZQ04	A201SYZQ04	2-1825138-8	B	DPDT	On-None-On	2.78	2.66	2.44
506-A203SYZQ04	A203SYZQ04	1-1825139-0	B	DPDT	On-Off-On	3.77	3.58	3.27
506-A205SYZQ04	A205SYZQ04	1-1825139-8	B	DPDT	(On)-Off-(On)	4.11	3.73	3.58
506-A207SYZQ04	A207SYZQ04	2-1825139-4	B	DPDT	On-Off-(On)	3.82	3.50	3.24
506-A208SYZQ04	A208SYZQ04	3-1825138-8	B	DPDT	On-None-(On)	3.65	3.31	3.18
<b>Standard Actuator; Gold Contact Material: PCB</b>								
506-A101SYCB04	A101SYCB04	4-1825136-4	C	SPDT	On-None-On	4.01	3.84	3.67
506-A103SYCB04	A103SYCB04	1-1825137-5	C	SPDT	On-Off-On	4.20	4.02	3.76
506-A105SYCB04	A105SYCB04	3-1825137-6	C	SPDT	(On)-Off-(On)	4.70	4.50	4.31
506-A107SYCB04	A107SYCB04	5-1825137-0	C	SPDT	On-Off-(On)	3.32	3.01	2.89
506-A108SYCB04	A108SYCB04	6-1825136-2	C	SPDT	On-None-(On)	4.12	3.82	3.66
506-A201SYCB04	A201SYCB04	2-1825138-4	D	DPDT	On-None-On	2.74	2.49	2.28
506-A203SYCB04	A203SYCB04	1825139-8	D	DPDT	On-Off-On	3.23	3.01	2.88
506-A205SYCB04	A205SYCB04	1-1825139-6	D	DPDT	(On)-Off-(On)	4.54	4.12	3.96
506-A208SYCB04	A208SYCB04	3-1825138-6	D	DPDT	On-None-(On)	3.75	3.33	3.00
<b>Flatted Actuator; Silver Contact Material: Wire Lug</b>								
506-A103P3YZQ04	A103P3YZQ04	1825137-6	E	SPDT	On-Off-On	4.12	3.75	3.59
<b>Locking Actuator; Silver Contact Material: Wire Lug</b>								
506-A101KZQ04	A101KZQ04	1825136-7	F	SPDT	On-None-On	5.71	5.43	5.17
506-A201KZQ04	A201KZQ04	1825138-3	G	DPDT	On-None-On	4.62	4.19	4.02



## MTA/MTA-PC SERIES (GREEN SERIES) 6A TOGGLE SWITCHES

### Specifications:

- Contact rating: 6A @ 125VAC, 3A @ 250VAC
- Terminal seal: Insert molded
- Each switch supplied with:
  - (2) 1/4-4C UNS-2B hex nuts
  - (1) Internal tooth lockwasher
  - (1) Locating ring
- Contact material: Gold flash over silver
- Actuation force: .05-1.5kg
- Actuator travel: 24°
- High torque bushing shoulder standard
- Contact timing: Break before make
- ( ) Momentary

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alcoswitch Part No.	TE Part No.	Fig.	Type	Circuit	Price Each		
						1	10	25
<b>Wire Lug Terminals</b>								
506-MTA106D	MTA106D	1-1437558-0	H	SPDT	On-None-On	6.88	6.50	6.31
506-MTA106E	MTA106E	1-1437558-2	H	SPDT	On-Off-On	10.41	10.00	9.86
506-MTA106F	MTA106F	1-1437558-4	H	SPDT	On-None-(On)	10.13	9.88	9.59
506-MTA106G	MTA106G	1-1437558-6	H	SPDT	(On)-Off-(On)	11.65	11.30	11.03
506-MTA206N	MTA206N	2-1437558	I	DPDT	On-None-On	9.02	9.00	8.27
506-MTA206P	MTA206P	2-1437558-2	I	DPDT	On-Off-On	13.59	13.44	12.87
506-MTA206R	MTA206R	2-1437558-7	I	DPDT	On-None-(On)	13.05	12.58	11.87
506-MTA306D	MTA306D	3-1437558-5	J	3PDT	On-None-On	20.04	19.00	18.41
506-MTA406N	MTA406N	4-1437558-3	K	4PDT	On-None-On	18.80	17.80	17.22
506-MTA106DPC	MTA106DPC	1-1437558-1	L	SPDT	On-None-On	10.98	10.50	10.40
<b>Accessories for MTA Series</b>								
506-B1440004	B1440004	1825612-1	M	Black 1/4-40 toggle switch boot seal		5.29	4.90	4.69

## TT SERIES: TINY TOGGLE SWITCHES

### Specifications:

- Contact rating: Gold - 0.4VA; Silver - 3A
- Terminal seal: Epoxy on single pole, optional on double pole
- Contact material: Gold over nickel or silver plate
- Dielectric strength: 1000VRms
- Actuator Travel: 26°
- High torque bushing shoulder standard
- Contact timing: Break before make

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alcoswitch Part No.	TE Part No.	Fig.	Type	Circuit	Terminal	Price Each		
							1	10	25
<b>With Unthreaded Bushing</b>									
506-TT11AGPC104	TT11AGPC104	1825219-2	N	SPST	On-None-Off	PCB	11.13	10.14	9.55
506-TT11DGPC1	TT11DGPC1	2-1437561-6	N	SPDT	On-None-On	PCB	6.60	6.02	5.67
506-TT11EGPC1	TT11EGPC1	5-1437561-1	N	SPDT	On-None-On	PCB	10.58	9.37	8.47
506-TT21NGPC1	TT21NGPC1	1437562-3	O	DPDT	On-None-On	PCB	17.02	15.54	14.64
<b>With 1/4-40 Bushing</b>									
506-TT41NGPC9T1/4	TT41NGPC9T1/4	6-1437562-8	P	4PDT	On-None-On	PCB	27.65	25.34	23.39
<b>With 10-48 Bushing</b>									
506-TT13A2T	TT13A2T	7-1437561-8	Q	SPST	On-None-Off	Wire lug	17.81	16.24	15.30
506-TT23N2T	TT23N2T	1825222-7	R	DPDT	On-None-On	Wire lug	15.40	14.20	13.15
<b>Accessories for TT Series</b>									
506-B1440004	B1440004	1825612-1	S	Black 1/4-40 toggle switch boot seal		5.29	4.90	4.69	

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## 2M1 SERIES, MINIATURE TOGGLE SWITCHES

### Specifications:

- Electrical Life: 50,000 make & break cycles @ full load
- Contact Resistance: 10mΩ Max. initial @ 2-4VDC
- 100mA for both silver & gold plated contacts
- Insulation Resistance: 1000 MΩ Min.
- Dielectric Strength: 1500 Volts RMS @ sea level
- Operating Temperature: -30°C to +85°C
- Solder Heat Resistance: MIL-STD-202, Method 210
- Actuator Travel: 25°

\*\*( ) = Momentary

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Switch Current (125VAC)	Contact Form	Circuit **	Termination	Price Each		
						1	25	50
691-2M1-DP1-T1B1M1QE	A	5A	DPDT	ON-NONE-ON	Solder Lug	3.17	2.95	2.75
691-2M1-DP1-T1B1M2QE	A	5A	DPDT	ON-NONE-ON	PCB	4.98	3.76	3.31
691-2M1-SP1-T1B1M1QE	A	5A	SPST	ON-NONE-ON	Solder Lug	2.32	2.16	2.08
691-2M1-SP1-T1B1M2QE	A	5A	SPST	ON-NONE-ON	PCB	3.01	2.50	2.32
691-2M1-SP1-T2B4M6RE	A	5A	SPST	ON-NONE-ON	PC Mount, 90° Horizontal	2.61	2.42	2.36
691-2M1-SP3-T1B1M1QE	A	5A	SPST	ON-OFF-ON	Solder Lug	4.54	3.42	3.03
691-2M1-SP3-T1B1M2QE	A	5A	SPST	ON-OFF-ON	PCB	4.54	3.42	3.03
691-2M1-SP4-T1B1M1QE	A	5A	SPST	(ON)-OFF-(ON)	Solder Lug	4.89	3.68	3.26

## POWER TOGGLE SWITCHES

### Specifications:

- Actuator/Bushing Material: Brass/Nickel Plate
- 15/32" Threaded Bushing, 11/16" Toggle, 3/4" HP
- Combi Terminals Function as Both .250QC Tabs and Solder Lug Terminal

\* 1 HP    \*\*( ) = Momentary

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Current Rating	Contact Form	Circuit **	Termination	Price Each		
						1	25	50
691-110-110-73	B	6A	SPST	ON-NONE-OFF	Solder Lug Terminals	3.53	3.02	2.75
691-110-S-73	B	6A	SPST	ON-NONE-OFF	Screw Terminals	6.50	5.56	5.09
691-111-16-73	B	6A	SPST	ON-NONE-OFF	Wire Leads	6.50	5.56	4.88
691-2BB62-73	C	6A	SPDT	ON-NONE-ON	Solder Lug Terminals	6.10	5.22	4.77
691-2BK62-73	C	6A	DPST	ON-NONE-OFF	Solder Lug Terminals	8.86	6.69	6.14
691-2BL62-73	C	6A	DPDT	ON-NONE-ON	Solder Lug Terminals	7.52	6.44	5.65
691-DA100-BB-B	D	10A	SPST	ON-NONE-OFF	Solder Lug	3.13	2.87	2.66
691-DA100-PB-B	D	10A	SPST	ON-NONE-OFF	Solder Lug	2.54	2.20	1.99
691-DC100-PB-B	E	10A	SPST	ON-OFF-ON	Solder Lug	4.70	3.78	3.35
691-2FA52-73	F	15A	SPST	ON-NONE-OFF	Combi Terminals	5.02	4.29	3.77
691-2FA53-73	F	15A	SPST	ON-NONE-OFF	Solder Lug Terminals	3.25	2.78	2.44
691-2FA53-73/TABS	F	15A	SPST	ON-NONE-OFF	.250QC Tabs	3.33	2.63	2.30
691-2FA54-73	F	15A	SPST	ON-NONE-OFF	Screw Terminals	3.50	2.98	2.75
691-2FB53-73	F	15A	SPDT	ON-NONE-ON	Solder Lug Terminals	4.47	4.28	4.06
691-2FB53-73/TABS	F	15A	SPDT	ON-NONE-ON	.250QC Tabs	4.81	4.11	3.61
691-2FB54-73	F	15A	SPDT	ON-NONE-ON	Screw Terminals	5.66	4.84	4.25
691-2FC53-73	F	15A	SPDT	ON-OFF-ON	Solder Lug Terminals	4.47	4.29	4.14
691-2FC53-73/TABS	F	15A	SPDT	ON-OFF-ON	.250QC Tabs	4.81	4.11	3.61
691-2FC54-73	F	15A	SPDT	ON-OFF-ON	Screw Terminals	6.12	5.23	4.77
691-6GA5B-73	F	15A	SPDT	ON-NONE-(ON)	.250QC Tabs	7.63	5.25	4.63
691-6FA5473	G	15A	SPST	ON-NONE-OFF	-	7.73	7.33	6.96
691-6FA5H-73	F	15A	SPST	(ON)-NONE-OFF	Combi Terminals	7.70	7.35	6.65
691-6FB5H-73	F	15A	SPDT	ON-NONE-(ON)	Combi Terminals	7.99	6.05	5.54
691-6FC54-73	F	15A	SPDT	(ON)-OFF-(ON)	Screw Terminals	8.32	7.94	7.18
691-6FC5H-73	F	15A	SPDT	ON-OFF-(ON)	Combi Terminals	8.69	7.94	7.18
691-2FA5378/TABS	F	20A	SPDT	ON-NONE-OFF	Solder Lug Terminals	4.28	3.89	3.56
691-6GG5B-73	F	15A	SPST	(ON-OFF-(ON))	.250QC Tabs	8.28	7.48	6.75
691-2GG5173	G	20A	SPDT	ON-OFF-OFF	PC Terminal	6.84	6.48	6.15
691-2GK50-73	G	15A	DPST	ON-NONE-OFF	Solder Lug Terminals	6.82	6.54	6.27
691-2GK51-73	G	15A	DPST	ON-NONE-OFF	.250QC Tabs	4.89	4.18	3.67
691-2GK54-73	G	15A	DPST	ON-NONE-OFF	Solder Lug Terminals	5.93	4.99	4.84
691-2GL50-73	G	15A	DPDT	ON-NONE-ON	Solder Lug Terminals	7.48	7.05	6.20
691-2GL51-73	G	15A	DPDT	ON-NONE-ON	.250QC Tabs	7.14	6.82	5.84
691-2GL54-73	G	15A	DPDT	ON-NONE-ON	Screw Terminals	9.09	7.77	7.11
691-2GL57-73	G	15A	DPDT	ON-NONE-ON	Solder Lug Terminals	7.71	5.82	5.34
691-2GM50-73	G	15A	DPDT	ON-OFF-ON	.250QC Tabs	8.06	7.36	6.31
691-2GM51-73	G	15A	DPDT	ON-OFF-ON	Screw Terminals	5.39	4.60	4.05
691-2GM54-73	G	15A	DPDT	ON-OFF-ON	Combi Terminals	9.09	7.77	7.11
691-6GL5B-73	H	15A	DPDT	ON-NONE-(ON)	.250QC Tabs	15.42	11.11	9.81
691-6GMS5M73	H	15A	DPDT	(ON)-OFF-(ON)	.250QC Tabs	13.41	12.39	11.72
691-6GMSY-73	G	15A	DPDT	(ON)-OFF-(ON)	Combi Terminals	14.09	11.21	10.29
691-HK251-73	I	15A	3PST	ON-NONE-OFF	.250QC Tabs	10.59	9.50	8.50
691-HL250-73	I	15A	3PST	ON-NONE-ON	Solder Lug Terminals	14.14	11.06	10.45
691-HL251-73	I	15A	3PST	ON-NONE-ON	.250QC Tabs	14.16	11.69	10.46
691-HM250-73	I	15A	3PST	ON-OFF-ON	Solder Lug Terminals	13.01	11.69	10.46
691-HM251-73	I	15A	3PST	ON-OFF-ON	.250QC Tabs	13.00	9.82	9.00
691-HM254-73	I	15A	3PST	ON-OFF-ON	Screw Terminals	11.17	10.60	10.49
691-IL250-73	J	15A	4PST	ON-NONE-ON	Solder Lug Terminals	24.00	16.35	14.35
* 691-EK204-73	K	20A	DPST	ON-NONE-OFF	Screw Terminals	13.10	9.90	9.08
691-CA201-73	L	20A	SPST	ON-NONE-OFF	.250QC Tabs	3.68	-	3.07
691-LT1511610012	M	10A	SPDT	ON-NONE-OFF	.250 Tabs	10.55	9.99	9.49

### Hardware

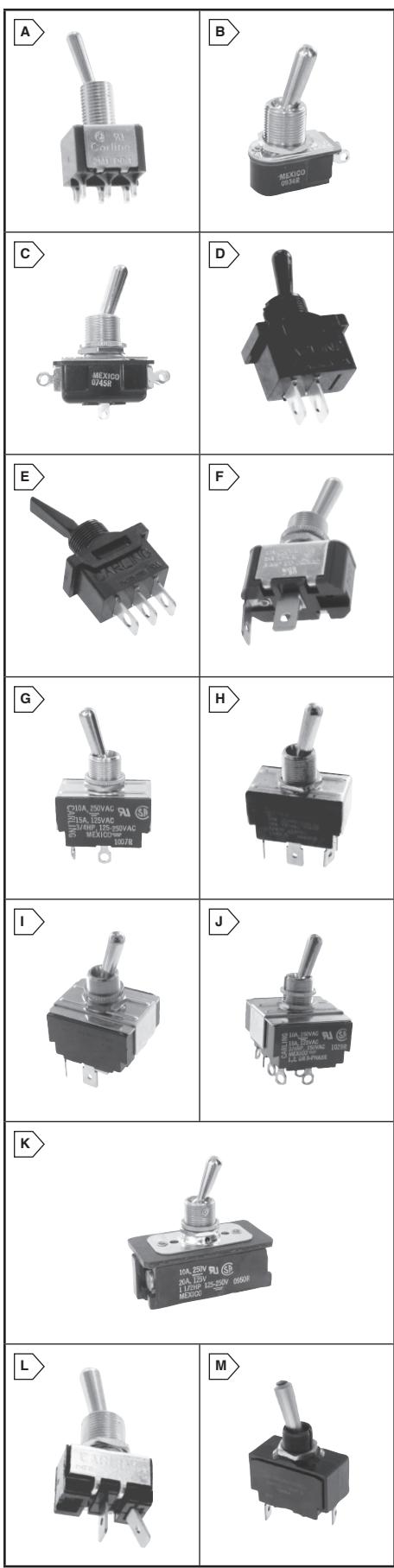
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Optional Lock Washer

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1901

# C&K Toggle Switches

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## GT SERIES: SEALED ULTRAMINIATURE TOGGLE SWITCHES

- Contact Material: Gold Terminal Plating
- Internal O-ring seal standard with all actuators
- Epoxy sealed termination
- Lead Free

- Contact Rating: 0.4VA @ 20VAC or DC max.
- Case and actuator material: Glass filled nylon (UL94V-0)
- Body Height: .210"



LEAD-FREE

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit	Mounting Type	Actuator/Bushing Height	Contact Material	Price Each			
								1	25	50	100
611-GT11MSCBE	GT11MSCBE	A	SPDT	On-On	Surface mount	.50"/.063"	Gold	5.63	5.23	5.09	4.96
611-GT11MABE	GT11MABE	B	SPDT	On-On	R/A PC thru-hole	.50"/.063"	Gold	5.03	4.87	4.79	4.66
611-GT12MABE	GT12MABE	B	SPST	Off-On	R/A PC thru-hole	.150"/.063"	Gold	5.63	5.23	5.10	4.96
611-GT12MCBE	GT12MCBE	C	SPDT	Off-None-On	Thru-hole	.150"/.063"	Gold	5.14	4.77	4.65	4.53

## E SERIES: SEALED MINIATURE TOGGLE SWITCHES

- Contact Material: Cu alloy, with Au plate over Ni plate, Au plate terminal
- Epoxy sealed termination
- Actuator material: Chrome plated brass
- Internal O-ring seal standard with all actuators

- Contact Rating: 0.4VA @ 20VAC or DC max.
- Case and bushing material: Glass filled nylon
- Unthreaded bushing

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit	Mounting Type	Bushing Height	Price Each				
							1	25	50	100	
<b>Standard Round Actuator (.300" High)</b>											
611-E101-001	E101MD1A1BE	D	SPDT	On-None-On	R/A PC thru-hole	.250"	5.15	4.77	4.67	4.54	
611-E101-002	E101MD1AV2BE	E	SPDT	On-None-On	Vertical R/A PC thru-hole	.250"	5.49	5.16	4.97	4.84	
611-E101-006	E101MD1CB1E	F	SPDT	On-None-On	PC thru-hole	.250"	4.68	4.39	4.24	4.13	
611-E103-002	E103MD1AV2BE	E	SPDT	On-Off-On	Vertical R/A PC thru-hole	.250"	6.27	5.81	5.65	5.49	
611-E201-002	E201MD1AV2BE	E	DPDT	On-None-On	Vertical R/A PC thru-hole	.250"	7.82	7.35	6.99	6.79	
611-E203-002	E203MD1AV2BE	E	DPDT	On-Off-On	Vertical R/A PC thru-hole	.250"	8.33	7.90	7.45	7.24	
<b>Long Round Actuator (.500" High)</b>											
611-E101-003	E101SD1CBE	F	SPDT	On-None-On	PC thru-hole	.250"	4.68	4.32	4.24	4.13	
611-E103-005	E103SD1ABE	D	SPDT	On-Off-On	R/A PC thru-hole	.250"	8.00	7.63	5.20	5.14	
611-E201-003	E201SD1CBE	F	DPDT	On-None-On	PC thru-hole	.250"	6.89	6.34	6.20	6.03	

## ET SERIES: SEALED SUBMINIATURE TOGGLE SWITCHES

- Contact Material: B- Cu alloy, with Au plate over Ni plate, Au plate terminal  
K- Cu alloy, with Au plate over Ni plate, SnPb plate terminal  
G- Coin Ag, with Au plate over Ni plate, Au plate terminal
- Epoxy sealed termination
- Actuator material: Chrome plated brass
- Internal O-ring seal standard with all actuators

- Contact Rating: B and K- 0.4VA @ 20VAC or DC max.  
G- 0.4VA @ 20VAC or DC max. or  
5A @ 120VAC; 2A @ 250VAC
- Case and bushing material: Glass filled nylon
- Unthreaded bushing

( ) = Momentary

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit	Mounting Type	Bushing Height	Contact Material	Price Each			
								1	25	50	100
<b>Standard Round Actuator (.240" High)</b>											
611-ET01-011	ET01MD1A1BE	G	SPDT	On-On	R/A PC thru-hole	.177"	B	5.27	5.11	5.01	4.88
611-ET01-006	ET01MD1AGE	G	SPDT	On-On	R/A PC thru-hole	.177"	G	5.68	5.25	5.11	4.97
611-ET01-002	ET01MD1AVBE	E	SPDT	On-On	R/A PC thru-hole	.177"	B	5.69	5.21	5.12	4.98
611-ET01-001	ET01MD1CBE	F	SPDT	On-On	PC thru-hole	.177"	B	4.83	4.72	4.59	4.47
611-ET01-013	ET01MD1V3BE	H	SPDT	On-On	V bracket	.177"	B	5.27	5.17	5.01	4.88
611-ET03-011	ET03MD1A1BE	G	SPDT	On-Off-On	R/A PC thru-hole	.177"	B	5.88	5.39	5.29	5.14
611-ET08-011	ET08MD1A1BE	G	SPDT	On-(On)	R/A PC thru-hole	.177"	B	5.88	5.41	5.29	5.14
<b>Round Actuator (.320" High)</b>											
611-ET01-005	ET01LD1CBE	F	SPDT	On-On	PC thru-hole	.177"	B	5.07	4.74	4.59	4.47
<b>Long Round Actuator (.400" High)</b>											
611-ET01-003	ET01SD1CBE	F	SPDT	On-On	PC thru-hole	.177"	B	4.83	4.67	4.59	4.47
611-ET01-004	ET01SD1ABE	G	SPDT	On-On	R/A PC thru-hole	.177"	B	5.54	5.17	5.01	4.88

## T SERIES: SEALED SUBMINIATURE TOGGLE SWITCHES

- Contact Material: B- Cu alloy, with Au plate over Ni plate, Au plate terminal  
Q- Cu alloy, with Ag plate, Ag plate terminal
- Actuator material: Chrome plated brass
- Housing material: Stainless steel

- Contact Rating: B- 0.4VA @ 20VAC or DC max.  
Q- 5A @ 120VAC; 2A @ 250VAC
- Bushing material: Nickel plated brass
- Case material: Glass filled nylon or DAP

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit	Mounting Type	Bushing Height	Contact Material	Price Each			
								1	25	50	100
<b>Standard Round Actuator (.370" High), Threaded Bushing</b>											
611-T101-001	T101SHCQE	I	SPDT	On-On	PC thru-hole	.220" flat	Q	5.10	4.71	4.61	4.49
611-T103-001	T103SHCQE	I	SPDT	On-Off-On	PC thru-hole	.220" flat	Q	5.82	5.41	5.24	5.20
611-T102SHZQE	T102SHZQE	J	SPDT	Off-None-On	Solder lug	.220" flat	Q	5.98	5.74	5.39	5.24
611-T103-002	T103SHZQE	J	SPDT	On-Off-On	Solder lug	.220" flat	Q	5.98	5.46	5.38	5.23
<b>Short Round Actuator (.210" High), Unthreaded Bushing</b>											
611-T101-004	T101MH9ABE	G	SPDT	On-On	R/A PC thru-hole	.220" flat	B	5.29	5.15	5.02	4.88
611-T101-005	T101MH9AVBE	E	SPDT	On-On	R/A PC thru-hole	.220" flat	B	5.57	5.35	5.28	5.13

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DIMENSIONS: in.											
<b>A</b>						<b>B</b>					
(SPDT Shown)						(SPDT Shown)					
<b>C</b>						<b>D</b>					
(SPDT Shown)						(SPDT Shown)					
<b>E</b>						<b>F</b>					
(SPDT Shown Vertical Right Angle)						(SPDT Shown)					
<b>G</b>						<b>H</b>					
(SPDT Shown)						(SPDT Shown)					
<b>I</b>						<b>J</b>					
(SPDT Shown)						(SPDT Shown)					

# C&K Toggle Switches

RoHS Compliant This page of product is RoHS compliant.



## 7000 SERIES MINIATURE TOGGLE SWITCHES, PANEL MOUNT

- Contact material:
  - B- Cu alloy, with Au plate over Ni plate, Au plate terminal
  - K- Cu alloy, with Au plate over Ni plate, SnPb plate terminal
  - Q- Cu alloy, with Ag plate, Ag plate terminal
  - G- Coin Ag, with Au plate over Ni plate, Au plate terminal

• Contact rating:

- B and K- 0.4VA @ 20VAC or DC max.
- Q- 5A @ 120VAC; 2A @ 250VAC
- G- 0.4VA @ 20VAC or DC max. or 5A @ 120VAC @ 250VAC

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit ( )=Momentary	Termination	Bushing	Contact Material	Price Each		
								1	25	50
<b>Standard Round Actuator (.420" High)</b>										
611-7101-054	7101SYCBE	A	SPDT	On-On	PC thru-hole	.350" high, keyway	B	4.34	4.17	4.12
611-7101-002	7101SYCQE	A	SPDT	On-On	PC thru-hole	.350" high, keyway	Q	4.18	3.88	3.58
611-7103-002	7103SYCQE	A	SPDT	On-Off-On	PC thru-hole	.350" high, keyway	Q	4.30	4.13	3.93
611-7105-002	7105SYCQE	A	SPDT	(On)-Off-(On)	PC thru-hole	.350" high, keyway	Q	4.69	4.62	4.40
611-7107-002	7107SYCQE	A	SPDT	On-Off-(On)	PC thru-hole	.350" high, keyway	Q	4.90	4.84	4.66
611-7201-054	7201SYCBE	B	DPDT	On-On	PC thru-hole	.350" high, keyway	B	9.45	8.53	7.62
611-7201-002	7201SYCQE	B	DPDT	On-On	PC thru-hole	.350" high, keyway	Q	7.38	7.00	6.61
611-7203-001	7203SYZQE	B	DPDT	On-Off-On	Solder lug	.350" high, keyway	Q	8.26	7.83	7.39
611-7101-075	7101SD9CQE	C	SPDT	On-On	PC thru-hole	.280" high, keyway	B	4.19	4.08	3.98
611-7101-004	7101SD9ABE	C	SPDT	On-On	R/A PC thru-hole	.280" high, keyway	B	5.03	4.87	4.55
611-7101-007	7101SH3ZQE	D	SPDT	On-On	Solder lug	.296" high, flat	Q	5.67	5.24	5.13
611-7101-005	7101SYZBE	D	SPDT	On-On	Solder lug	.350" high, keyway	B	4.22	4.10	4.02
611-7101-006	7101SYZGE	D	SPDT	On-On	Solder lug	.350" high, keyway	G	4.84	4.47	4.38
611-7101-001	7101SYZQE	D	SPDT	On-On	Solder lug	.350" high, keyway	Q	4.07	3.78	3.49
611-7103-005	7103SYZBE	D	SPDT	On-Off-On	Solder lug	.350" high, keyway	B	5.17	4.81	4.65
611-7103-001	7103SYZQE	D	SPDT	On-Off-On	Solder lug	.350" high, keyway	Q	4.48	4.39	3.98
611-7105-001	7105SYZQE	D	SPDT	(On)-Off-(On)	Solder lug	.350" high, keyway	Q	4.57	4.39	4.34
611-7107-001	7107SYZQE	D	SPDT	On-Off-(On)	Solder lug	.350" high, keyway	Q	4.78	4.67	4.34
611-7201-005	7201SYZBE	E	DPDT	On-On	Solder lug	.350" high, keyway	B	8.33	7.25	6.71
611-7201-001	7201SYZQE	E	DPDT	On-On	Solder lug	.350" high, keyway	Q	7.17	6.82	6.47
611-7207-001	7207SYZQE	E	DPDT	On-Off-(On)	Solder lug	.350" high, keyway	Q	9.42	7.60	7.59
611-7211-001	7211SYZQE	E	DPDT	On-On-On	Solder lug	.350" high, keyway	Q	9.08	6.80	6.53
611-7301-001	7301SYZQE	F	3PDT	On-On	Solder lug	.350" high, keyway	Q	9.05	9.05	8.82
611-7303-001	7303SYZQE	F	3PDT	On-Off-On	Solder lug	.350" high, keyway	Q	10.25	9.53	9.48
611-7401-001	7401SYZQE	G	4PDT	On-On	Solder lug	.350" high, keyway	Q	13.07	12.00	11.67
611-7101-076	7101SD9/3BEE	H	SPDT	On-On	V bracket	.280" high, keyway	B	5.52	5.12	4.99
<b>Standard Round Actuator (.420" High), Splashproof Bushing</b>										
611-7101-071	7101SCWZQE	D	SPDT	On-On	Solder lug	.294" high, flat	Q	5.52	5.09	5.00
611-7201-071	7201SCWZQE	E	DPDT	On-On	Solder lug	.294" high, flat	Q	9.20	8.61	8.23
<b>Paddle Actuator (.280" High)</b>										
611-E301MD1AGE	E301MD1AGE	C	3PDT	ON - NONE - ON	Solder Pin	.280 high, keyway	G	12.47	12.05	11.16
<b>Standard Round Actuator (.350 High)</b>										
611-7101SYAQE	7101SYAQE	I	SPST	ON - NONE - ON	Solder Pin	.350 high, keyway	Q	4.85	4.69	4.39
611-7108-001	7108SYZQE	I	SPDT	ON - NONE - (ON)	Solder Lug	.350 high, keyway	Q	4.57	4.52	4.35
611-7213-001	7213SYZQE	I	DPDT	ON - ON - ON	Solder Lug	.350 high, keyway	Q	7.77	7.18	7.00
<b>Standard Round Actuator (.280 High)</b>										
611-7207MD9ABE	7207MD9ABE	I	DPDT	ON - OFF - (ON)	Solder Pin	.280 high, keyway	B	9.76	8.59	7.87
611-7211SD9AV2BEE	7211SD9AV2BEE	I	DPDT	ON - ON - ON	Solder Pin	.280 high, keyway	B	11.76	11.14	10.52
<b>Short Round Actuator (.200" High)</b>										
611-7101-063	7101MDCQE	A	SPDT	On-On	PC thru-hole	.280" high, keyway	Q	4.40	4.05	3.98
611-7101-051	7101MD9ABE	C	SPDT	On-On	R/A PC thru-hole	.280" high, keyway	B	4.78	4.69	4.54
611-7101-053	7101MD9AQE	C	SPDT	On-On	R/A PC thru-hole	.280" high, keyway	Q	4.62	4.55	4.39
611-7101-061	7101MD9AV2BEE	J	SPDT	On-Off-On Vert.	R/A PC thru-hole	.280" high, keyway	B	5.04	4.80	4.59
611-7103-061	7103MD9AV2BEE	J	SPDT	On-Off-On Vert.	R/A PC thru-hole	.280" high, keyway	B	5.46	5.32	5.19
611-7201-051	7201MD9ABE	C	DPDT	On-On	R/A PC thru-hole	.280" high, keyway	B	8.78	6.77	6.58
611-7101-064	7101MDZQBE	I	SPDT	On-On	Solder lug	.280" high, keyway	Q	4.07	4.02	3.87
611-7101-065	7101MYZQE	I	SPDT	On-On	Solder lug	.350" high, keyway	Q	4.28	4.01	3.87
611-7201-064	7201MDZQE	I	DPDT	On-On	Solder lug	.280" high, keyway	Q	8.03	7.25	6.86
611-7101-062	7101MD9V3QEE	H	SPDT	On-On	V bracket	.280" high, keyway	Q	5.33	4.94	4.83
611-7103-062	7103MD9V3BEE	H	SPDT	On-Off-On	V bracket	.280" high, keyway	B	5.67	5.22	5.11
<b>Long Round Actuator (.640" High)</b>										
611-7201-041	7201L1YZQE	E	DPDT	On-On	Solder lug	.350" high, keyway	Q	8.03	6.78	6.47
<b>Flatted, Anti-Rotation Actuator (.450" High)</b>										
611-7101-022	7101P3YQCE	K	SPDT	On-On	PC thru-hole	.350" high, keyway	Q	6.04	5.55	5.44
611-7105-022	7105P3YQCE	K	SPDT	(On)-Off-(On)	PC thru-hole	.350" high, keyway	Q	6.54	6.10	5.89
611-7101-021	7101P3YZQE	K	SPDT	On-On	Solder lug	.350" high, keyway	Q	5.63	5.43	5.23
611-7103-021	7103P3YZQE	K	SPDT	On-Off-On	Solder lug	.350" high, keyway	Q	6.34	5.86	5.54
611-7201-025	7201P3YZQE	L	DPDT	On-On	Solder lug	.350" high, keyway	B	10.91	9.12	8.80
611-7201-021	7201P3YZQE	L	DPDT	On-On	Solder lug	.350" high, keyway	Q	10.53	9.51	8.50
611-7205-021	7205P3YZQE	L	DPDT	(On)-Off-(On)	Solder lug	.350" high, keyway	Q	8.15	7.74	7.29
611-7207-021	7207P3YZQE	L	DPDT	On-Off-(On)	Solder lug	.350" high, keyway	Q	11.07	8.94	8.93
<b>Large Round Actuator (.687" High)</b>										
611-7101-081	7101TZQE	D	SPDT	On-On	Solder lug	.448" high, keyway	Q	5.97	5.68	5.49
611-7101TCWZQE	7101TCWZQE	D	SPDT	On-None-On	Solder lug	Splashproof	Q	7.47	6.88	6.72
611-7201-081	7201TZQE	E	DPDT	On-On	Solder lug	.448" high, keyway	Q	10.21	9.67	9.14
611-7203-081	7203TZQE	E	DPDT	On-Off-On	Solder lug	.448" high, keyway	Q	8.49	8.03	7.60
<b>Locking Actuator (.704" High)</b>										
611-7101-031	7101K2ZOE	M	SPDT	On-On	Solder lug	.260" high, keyway	Q	6.58	5.89	5.70
611-7201-031	7201K2ZQE	N	DPDT	On-On	Solder lug	.260" high, keyway	Q	8.43	7.86	7.54
611-7203-031	7203K2ZQE	N	DPDT	On-Off-On	Solder lug	.260" high, keyway	Q	12.00	10.69	9.66

## SEALING BOOTS FOR 7000, T, MIL, AND 9000 SERIES TOGGLES

### Features/Benefits:

- Minimum IP65 Sealing
- Silicon Construction Remains Pliable in Cold Weather
- High Tear Strength
- Full and Half Boot Options
- Ideal for Sealing an Unsealed Switch

### Typical Applications:

- Harsh environments
- Marine
- Industrial
- Medical
- Offroad Transportation
- Military
- Food and Beverage

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Description	Price Each		
				1	25	50
611-759D02000	759D02000	O	Black full toggle boot for 1/4-40 bushing	1.93	1.79	1.76
611-703D02000	703D02000	P	Black full toggle boot for 15/32 bushing	2.37	2.19	2.16
611-704D20000	704D02000	Q	Black half toggle boot for 15/32 bushing	2.37	2.19	2.13

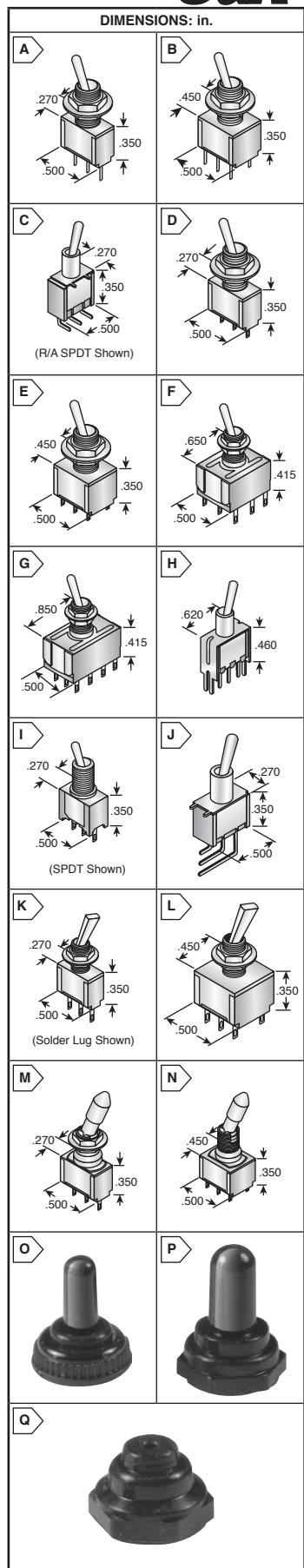
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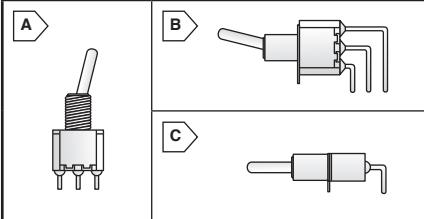


# Miniature Toggle Switches

## E-SWITCH™ MINIATURE TOGGLE SWITCHES, 100 AND 100A SERIES

### Specifications for 100 and 100A Series:

- Contact resistance: 10mΩ max. initial @ 2-4VDC 100mA for both silver and gold plated contacts.
- Insulation resistance: 1,000MΩ min.
- Dielectric strength: 1,000Vrms @ sea level
- Operating temperature: -30°C to 85°C



### Contact Material Options:

- Q** - Fixed terminal and moving contact: silver plated over copper alloy Contact rating: 5A with resistive load @ 120VAC or 28VDC, 2A with resistive load @ 250VAC
- R** - Fixed terminal and moving contact: copper alloy with gold plate over nickel plate Contact rating: 0.4VA max. @ 20V max. (AC or DC)

( ) = Momentary

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Type	Circuit	Options			Contact Material Options	Price Each			
					Actuator	Bush	Term.		1	10	25	50
<b>100 Series - Metal Bushing</b>												
612-100-A1421	100SP1T1B4M2QE	A	SPDT	On-On	T1	B4	M2	Q	2.11	2.02	1.93	1.85
612-100-A2111	100SP1T2B1M1QE	A	SPDT	On-On	T2	B1	M1	Q	2.11	2.02	1.93	1.85
612-100-A1112	100SP1T1B1M1RE	A	SPDT	On-On	T1	B1	M1	R	2.29	2.20	2.10	2.01
612-100-A1122	100SP1T1B1M2RE	A	SPDT	On-On	T1	B1	M2	R	2.29	2.20	2.10	2.01
612-100-A2472	100SP1T2B4M7RE	B	SPDT	On-On	T2	B4	M7	R	3.28	3.14	3.01	2.87
612-100-A6461	100SP1T6B12M6RE	C	SPDT	On-On	T6	B12	M6	R	3.83	3.68	3.52	3.36
612-100-C1112	100SP3T1B1M1RE	A	SPDT	On-Off-On	T1	B1	M1	R	2.56	2.45	2.35	2.24
612-100-C1462	100SP3T1B4M6RE	C	SPDT	On-Off-On	T1	B4	M6	R	3.32	3.19	3.05	2.91
612-100-D1111	100SP4T1B1M1QE	A	SPDT	(On)-Off-(On)	T1	B1	M1	Q	2.69	2.58	2.47	2.36
612-100-D1121	100SP4T1B1M2QE	A	SPDT	(On)-Off-(On)	T1	B1	M2	Q	2.69	2.58	2.47	2.36
612-100-D6211	100SP4T6B11M2QE	A	SPDT	(On)-Off-(On)	T6	B11	M2	Q	3.46	3.32	3.18	3.03
612-100-E1111	100SP5T1B1M1QE	A	SPDT	On-Off-(On)	T1	B1	M1	Q	2.85	2.73	2.61	2.49
612-100-E2462	100SP5T2B4M6RE	C	SPDT	On-Off-(On)	T2	B4	M6	R	3.80	3.64	3.49	3.33
612-100-L1111	100DP6T1B1M1QE	A	DPDT	On-On-On	T1	B1	M1	Q	4.25	4.08	3.90	3.72
612-100-F1111	100DP1T1B1M1QE	A	DPDT	On-On	T1	B11	M1	Q	2.82	2.71	2.59	2.47
612-100-F1112	100DP1T1B1M1RE	A	DPDT	On-On	T1	B11	M1	R	3.11	2.99	2.86	2.73
612-100-F1122	100DP1T1B1M2RE	A	DPDT	On-On	T1	B1	M2	R	3.11	2.99	2.86	2.73
<b>100A Series - Sealed (Plastic Bushing)</b>												
612-100A-A1422	100AWSP1T1B4M2R	A	SPDT	On-On	T1	B4	M2	R	3.08	2.95	2.82	2.70
612-100A-A2462	100AWSP1T2B4M6R	C	SPDT	On-On	T2	B4	M6	R	4.11	3.95	3.78	3.60
612-100A-C1422	100AWSP3T1B4M2R	A	SPDT	On-Off-On	T1	B4	M2	R	3.37	3.23	3.09	2.95
612-100A-C2472	100AWSP3T2B4M7R	B	SPDT	On-Off-On	T2	B4	M7	R	4.67	4.48	4.29	4.09

## E-SWITCH™ SUB-MINIATURE TOGGLE SWITCHES, 200 AND 200A SERIES

### Specifications for 200 and 200A Series:

- Contact resistance: 20mΩ max. initial @ 2-4VDC 100mA for both silver and gold plated contacts.
- Insulation resistance: 1,000MΩ min.
- Dielectric strength: 1,000Vrms @ sea level
- Operating temperature: -30°C to 85°C

( ) = Momentary

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Type	Circuit	Options			Contact Material Options	Price Each			
					Actuator	Bush	Term.		1	10	25	50
<b>200 Series</b>												
612-200-A1111	200MSP1T1B1M1QE	A	SPDT	On-On	T1	B1	M1	Q	2.22	2.13	2.04	1.94
612-200-A1121	200MSP1T1B1M2QE	A	SPDT	On-On	T1	B1	M2	Q	2.22	2.13	2.04	1.94
612-200-A2272	200MSP1T2B2M7RE	B	SPDT	On-On	T2	B2	M7	R	3.55	3.41	3.26	3.11
612-200-C1111	200MSP3T1B1M1QE	A	SPDT	On-Off-On	T1	B1	M1	Q	2.99	2.87	2.74	2.62
612-200-C1121	200MSP3T1B1M2QE	A	SPDT	On-Off-On	T1	B1	M2	Q	2.99	2.87	2.74	2.62
<b>200A Series-Sealed</b>												
612-200A-A2182	200AWMSP1T2A1VS2R	A	SPDT	On-On	T2	A1	VS2	R	3.54	3.39	3.25	3.10
612-200A-A2162	200AWMSP1T2A1M6R	C	SPDT	On-On	T2	A1	M6	R	3.37	3.24	3.10	2.95

## MINIATURE TOGGLE SWITCHES

### Materials:

- Base (body): 1- and 2-pole - Diallyl Phthalate (DAP)  
3- and 4-pole - high strength phenolic
- Bushing: Brass, nickel plated
- Switching Contacts: Coin silver
- Center Terminal: Silver plated brass

### Power Rating:

- 6A @ 125VAC
- 3A @ 250VAC

( ) Momentary

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Electroswitch Part No.	Fig.	Type	Circuit	Price Each			
					1	25	50	100
690-A121S1YZQ	A121S1YZQ	A	SPDT	On-Off-On	8.42	7.96	7.02	6.13
690-A123S1YZQ	A123S1YZQ	A	SPDT	On-None-On	5.21	4.76	4.46	4.09
690-A127S1YZQ	A127S1YZQ	A	SPDT	(On)-Off-(On)	9.22	8.71	7.68	6.70
690-A131S1YZQ	A131S1YZQ	A	SPDT	On-Off-(On)	8.62	8.15	7.19	6.26
690-A221S1YZQ	A221S1YZQ	B	DPDT	On-Off-On	12.22	11.54	10.20	8.89
690-A223S1YZQ	A223S1YZQ	B	DPDT	On-None-On	8.00	7.31	6.84	6.33
690-A232S1YZQ	A232S1YZQ	B	DPDT	On-On-On	13.57	12.82	11.30	9.88
690-A323S1YZQ	A323S1YZQ	C	3PDT	On-None-On	11.19	10.71	10.27	9.86

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DIMENSIONS: mm			
Actuator Options			
T1		T2	
T6			
D	L	D	L
2.9	10.4	2.9	10.4
2.54	9.4	2.54	10.2
2.54	10.2	2.54	6.1
Series	D	Series	D
100	2.9	100	2.7
100A	2.9	100A	2.7
200	2.54	200	2.54
200A	2.54	200A	5.1

Bushing Options			
B1		B2	
B4		B11	
NS	H	NS	H
100	1/4-40	100	10-48
100A	7.1	100A	6.4

Termination Options			
M1		M2	
VS2		M6	
4.0	4.1	4.8	3.3
2.0	1.5	.762	.762
1.27	3.2	1.27	3.3
6.9	5.1	7.62	5.1
12.7		12.7	
100&100A Series		200&200A Series	
M7			
12.7	3.2	5.08	5.08
.762		5.1	2.54
8.1	5.1	12.7	12.7
.508		.508	
5.1	2.54	5.1	2.54
12.7		12.7	
100&100A Series		200&200A Series	

DIMENSIONS: in.			
A		B	
C			
.410	.352	.410	.352
.350	.50	.350	.50
.415	.652	.415	.652
.45		.45	
.50		.50	

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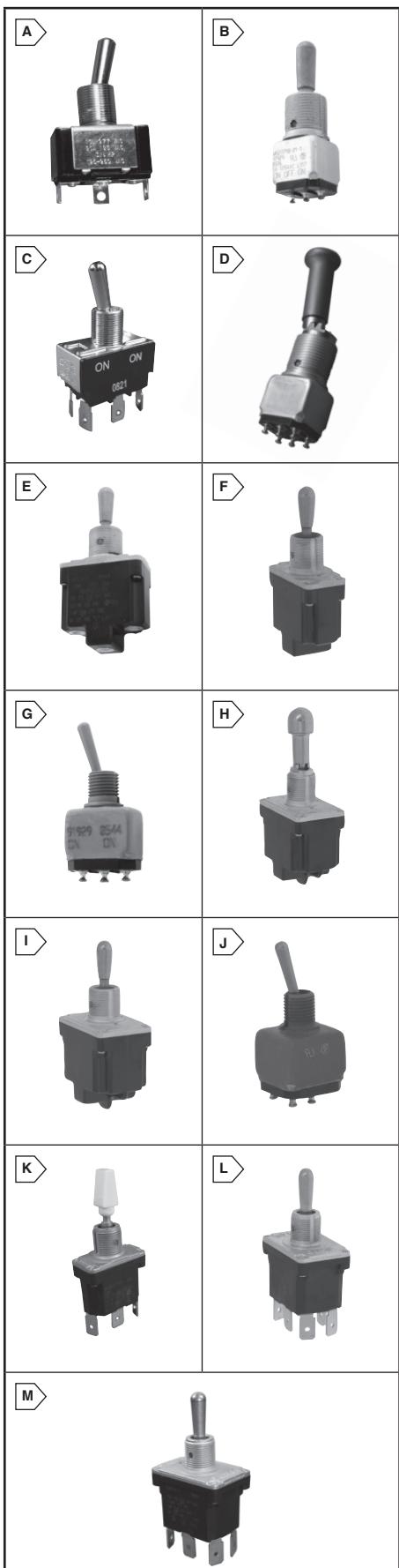
(800) 346-6873

# HONEYWELL Toggle Switches

 This page of product is RoHS compliant.

## MICRO SWITCH™ TOGGLE SWITCHES

MOUSER STOCK NO.	Honeywell Part No.	Fig.	Contact Form	Circuitry	Action	Termination	Lever Type	Price Each		
								1	10	50
785-11TS15-3	11TS115-3	A	SPDT	ON-ON	2 position	Solder	Standard	11.81	9.09	8.05
785-11TS15-1	11TS15-1	A	SPDT	ON-OFF-ON	3 position	Screw	Standard	12.54	8.66	8.19
785-11TS15-2	11TS15-2	A	SPDT	OFF-ON	2 position	Screw	Standard	6.32	4.66	3.76
785-11TS15-5	11TS15-5	A	SPDT	(ON)-OFF-ON	3 position	Screw	Standard	15.57	10.75	10.16
785-11TS15-6	11TS15-6	A	SPST	(ON)-OFF	2 position	Screw	Standard	13.18	9.10	8.60
785-11TS15-7	11TS15-7	A	SPDT	(ON)-OFF-(ON)	3 position	Screw	Standard	14.29	10.41	9.75
785-11TS95-2	11TS95-2	A	SPDT	ON-OFF-ON	2 position	Quick Connect	Standard	6.31	4.35	4.12
785-11TS95-7	11TS95-7	A	SPDT	(ON)-OFF-(ON)	3 position	Quick Connect	Standard	11.18	7.73	7.30
785-11TW1-1	11TW1-1	B	SPDT	(ON)-OFF-(ON)	3 position	Quick Connect	Standard	44.19	35.31	31.69
785-11TW1-3	11TW1-3	B	SPDT	ON-ON	2 position	Solder	Standard	44.02	32.95	31.57
785-11TW8-3G	11TW8-3G	B	SPDT	ON-ON	2 position	Solder	Locking	96.82	78.96	75.30
785-12TW1-3	12TW1-3	B	DPDT	ON-ON	2 position	PCB	Standard	46.52	34.82	33.36
785-12TW1-5	12TW1-5	B	DPDT	(ON)-OFF-ON	3 position	Solder	Standard	43.82	36.41	32.63
785-12TW1-7	12TW1-7	B	DPDT	(ON)-OFF-(ON)	3 position	Solder	Standard	51.08	40.82	36.63
785-12TS115-1	12TS115-1	C	DPDT	ON-OFF-ON	3 position	Solder	Standard	16.47	12.68	11.23
785-12TS115-2	12TS115-2	C	DPST	OFF-ON	2 position	Solder	Standard	14.63	11.27	9.98
785-12TS115-3	12TS115-3	C	DPDT	ON-ON	2 position	Solder	Standard	12.87	9.37	8.78
785-12TS15-1	12TS15-1	C	DPDT	ON-OFF-ON	3 position	Screw	Standard	16.47	11.99	11.23
785-12TS15-2	12TS15-2	C	DPST	OFF-ON	2 position	Screw	Standard	22.74	18.85	16.58
785-12TS15-3	12TS15-3	C	DPDT	ON-ON	2 position	Screw	Standard	16.47	11.99	11.23
785-12TS15-6	12TS15-6	C	DPST	(ON)-OFF	2 position	Screw	Standard	16.47	12.69	11.23
785-12TS15-7	12TS15-7	C	DPDT	(ON)-OFF-(ON)	3 position	Screw	Standard	19.44	14.15	13.25
785-12TS95-3	12TS95-3	C	DPDT	ON-ON	2 position	Quick Connect	Standard	14.97	10.34	9.77
785-12TS95-70	12TS95-70	C	DPDT	(ON)-OFF-(ON)	3 position	Quick Connect	Standard	35.12	28.06	25.19
785-12TW8-7E	12TW8-7E	D	DPDT	(ON)-OFF-(ON)	3 position	Solder	Locking	111.34	101.93	95.13
785-1NT1-2	1NT1-2	E	SPST	OFF-ON	2 position	Screw	Standard	20.97	16.16	14.31
785-1NT1-3	1NT1-3	E	SPDT	ON-ON	2 position	Screw	Standard	20.96	15.27	14.30
785-1NT1-6	1NT1-6	E	SPST	(ON)-OFF	2 position	Screw	Standard	30.82	24.63	22.11
785-1NT1-7	1NT1-7	E	SPDT	(ON)-OFF-(ON)	3 position	Screw	Standard	19.62	14.29	13.39
785-1NT1-8	1NT1-8	E	SPDT	ON-ON	2 position	Screw	Standard	30.82	23.07	22.11
785-1NT1-3D	1NT1-3D	F	SPDT	ON-ON	2 position	Screw	Locking	75.95	60.39	58.04
785-1TL1-1	1TL1-1	F	SPDT	ON-OFF-ON	3 position	Screw	Standard	27.00	20.21	19.37
785-1TL1-1A	1TL1-1A	F	SPDT	ON-OFF-ON	3 position	Screw	Locking	69.09	54.94	52.80
785-1TL1-2	1TL1-2	F	SPST	OFF-ON	2 position	Screw	Standard	27.00	20.21	19.37
785-1TL1-2D	1TL1-2D	F	SPST	OFF-ON	2 position	Screw	Locking	46.56	37.20	33.39
785-1TL1-3	1TL1-3	F	SPDT	OFF-ON	2 position	Screw	Standard	27.00	20.21	19.37
785-1TL1-3D	1TL1-3D	F	SPDT	ON-ON	2 position	Screw	Locking	48.79	36.52	34.99
785-1TL1-4	1TL1-4	F	SPST	(OFF)-ON	2 position	Screw	Standard	46.60	34.88	33.42
785-1TL1-5	1TL1-5	F	SPDT	(ON)-OFF-ON	3 position	Screw	Standard	43.55	34.79	31.23
785-1TL1-6	1TL1-6	F	SPST	(ON)-OFF	2 position	Screw	Standard	43.56	34.81	31.24
785-1TL1-7	1TL1-7	F	SPDT	(ON)-OFF-(ON)	3 position	Screw	Standard	27.00	20.21	19.37
785-1TL1-7L	1TL1-7L	F	SPDT	(ON)-OFF-(ON)	3 position	Screw	Locking	85.18	70.68	65.10
785-1TL1-8	1TL1-8	F	SPDT	ON-ON	2 position	Screw	Standard	43.56	34.81	31.24
785-1TL1-8F	1TL1-8F	F	SPDT	ON-ON	2 position	Screw	Locking	64.88	62.33	59.28
785-1TW1-3	1TW1-3	G	SPDT	ON-ON	2 position	Solder	Standard	56.88	45.22	43.47
785-2NT1-1	2NT1-1	H	DPDT	ON-OFF-ON	3 position	Screw	Standard	43.16	34.49	30.95
785-2NT1-2	2NT1-2	H	DPST	OFF-ON	2 position	Screw	Standard	43.15	34.48	30.94
785-2NT1-3	2NT1-3	H	DPDT	ON-ON	2 position	Screw	Standard	43.16	32.30	30.95
785-2NT1-50	2NT1-50	H	DPDT	(ON)-ON-ON	3 position	Screw	Standard	49.11	36.76	35.22
785-2NT1-7	2NT1-7	H	DPDT	(ON)-OFF-(ON)	3 position	Screw	Standard	43.15	34.48	30.94
785-2NT1-70	2NT1-70	H	DPDT	(ON)-ON-(ON)	3 position	Screw	Standard	49.11	36.76	35.22
785-2NT1-8	2NT1-8	H	DPDT	ON-ON	2 position	Screw	Standard	43.16	34.49	30.95
785-2TL1-1A	2TL1-1A	H	DPDT	ON-OFF-ON	3 position	Screw	Locking	86.45	71.73	66.07
785-2TL1-1E	2TL1-1E	H	DPDT	ON-OFF-ON	3 position	Screw	Locking	82.81	68.72	63.29
785-2TL1-2D	2TL1-2D	H	DPST	OFF-ON	2 position	Screw	Locking	86.45	68.75	66.07
785-2TL1-3D	2TL1-3D	H	DPDT	ON-ON	3 position	Screw	Locking	53.61	44.49	40.97
785-2TL1-3G	2TL1-3G	H	DPDT	ON-ON	2 position	Screw	Locking	64.14	53.23	47.30
785-2TL1-6F	2TL1-6F	H	DPST	(ON)-OFF	2 position	Screw	Locking	84.09	69.78	64.26
785-2TL1-7E	2TL1-7E	H	DPDT	(ON)-OFF-(ON)	3 position	Screw	Locking	105.65	84.00	80.74
785-4TL1-3D	4TL1-3D	H	4PDT	ON-ON	2 position	Screw	Locking	120.54	98.31	93.76
785-2TL1-1	2TL1-1	I	DPDT	ON-OFF-ON	3 position	Screw	Standard	86.42	71.72	66.05
785-2TL1-10	2TL1-10	I	DPDT	ON-ON-ON	3 position	Screw	Standard	60.42	48.04	46.17
785-2TL1-10A	2TL1-10A	I	DPDT	ON-ON-ON	3 position	Screw	Locking	89.20	72.75	69.38
785-2TL1-2	2TL1-2	I	DPST	OFF-ON	2 position	Screw	Standard	58.23	43.58	41.76
785-2TL1-3	2TL1-3	I	DPDT	ON-ON	3 position	Screw	Standard	36.09	28.84	25.88
785-2TL1-4	2TL1-4	I	DPST	(OFF)-ON	2 position	Screw	Standard	52.80	43.81	40.35
785-2TL1-5	2TL1-5	I	DPDT	(ON)-OFF-ON	3 position	Screw	Standard	53.59	42.61	40.96
785-2TL1-50	2TL1-50	I	DPDT	(ON)-ON-ON	3 position	Screw	Standard	61.63	51.14	47.10
785-2TL1-7	2TL1-7	I	DPDT	(ON)-OFF-(ON)	3 position	Screw	Standard	58.23	43.58	41.76
785-2TL1-70	2TL1-70	I	DPDT	(ON)-ON-(ON)	3 position	Screw	Standard	61.63	51.14	47.10
785-4NT1-1	4NT1-1	I	4PDT	ON-OFF-ON	3 position	Screw	Standard	86.84	69.05	66.37
785-4NT1-3	4NT1-3	I	4PDT	ON-ON	2 position	Screw	Standard	86.84	69.05	66.37
785-4NT1-7	4NT1-7	I	4PDT	ON-OFF-ON	3 position	Screw	Standard	68.20	54.23	52.12
785-4TL1-1	4TL1-1	I	4PDT	ON-OFF-ON	3 position	Screw	Standard	91.48	74.60	71.15
785-4TL1-12	4TL1-12	I	4PDT	ON-ON-ON	3 position	Screw	Standard	97.84	77.79	74.77
785-4TL1-2	4TL1-2	I	4PST	OFF-ON	2 position	Screw	Standard	91.48	74.60	71.15
785-4TL1-3	4TL1-3	I	4PDT	ON-ON	2 position	Screw	Standard	91.48	74.60	71.15
785-4TL1-5	4TL1-5	I	4PDT	(ON)-OFF-ON	3 position	Screw	Standard	88.96	75.48	69.19
785-4TL1-72	4TL1-72	I	4PDT	(ON)-ON-(ON)	3 position	Screw	Standard	75.63	60.13	57.79
785-4TL1-8	4TL1-8	I	4PDT	(ON)-ON	2 position	Screw	Standard	74.17	58.98	56.69
785-61NT1-2	61NT1-2	I	SPST	OFF-ON	2 position	Screw	Standard	30.82	23.07	22.11
785-2TW1-3	2TW1-3	J	DPDT	ON-ON	2 position	Solder	Standard	54.65	43.45	41.76
785-31NT391-7-C08	31NT391-7-C08	K	SPDT	(ON)-OFF-(ON)	3 position	Quick Connect	Tab	42.31	31.67	30.35
785-31NT91-2	31NT91-2	L	SPST	OFF-ON	2 position	Quick Connect	Standard	35.91	28.69	25.75
785-31NT91-3	31NT91-3	L	SPDT	ON-ON	2 position	Quick Connect	Standard	35.92	26.88	25.75
785-31NT91-7	31NT91-7	L	SPDT	(ON)-OFF-(ON)	3 position	Quick Connect	Standard	35.92	26.88	25.75
785-32NT91-70	32NT91-70	L	DPDT	(ON)-ON-(ON)	3 position	Quick Connect	Standard	39.28	29.40	28.17
785-32NT91-1	32NT91-1	M	DPDT	OFF-ON	3 position	Quick Connect	Standard	45.98	34.41	32.97
785-32NT91-2	32NT91-2	M	DPST	OFF-ON	2 position	Quick Connect	Standard	45.98	34.41	32.97
785-32NT91-3	32NT91-3	M	DPDT	ON-ON	2 position	Quick Connect	Standard	45.98	34.41	32.97
785-32NT91-7	32NT91-7	M	DPDT	(ON)-OFF-(ON)	3 position	Quick Connect	Standard	45.97	34.41	32.97



Honeywell

Toggle

Switches

# NKK Toggle, Kits and Tilt Switches



RoHS Compliant This page of product is RoHS compliant.

DIMENSIONS: in.


## M SERIES: MINIATURE TOGGLE SWITCHES

### With Small Toggles

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit () Momentary	Term.	Price Each		
					1	25	50
<b>Actuator: .413" Bat. .350" Threaded with Keyway</b>							
633-M201101	M2011SS1W01	A	SPST On-None-Off	Solder	2.57	2.51	2.37
633-M201201	M2012SS1W01	A	SPDT On-None-On	Solder	2.75	2.65	2.53
633-M201301	M2013SS1W01	A	SPDT On-Off-On	Solder	3.20	3.13	2.96
633-M201501	M2015SS1W01	A	SPDT On-(None)-(On)	Solder	5.63	4.36	3.88
633-M201801	M2018SS1W01	A	SPDT (On)-(Off)-(On)	Solder	3.96	3.60	3.30
633-M201901	M2019SS1W01	A	SPDT On-Off-(On)	Solder	3.96	3.60	3.30
633-M202601	M2026SS1W01	A	SP3T (On)-On-(On)	Solder	6.64	6.04	5.53
633-M202701	M2027SS1W01	A	SP3T On-(On)-On	Solder	6.64	6.04	5.53
633-M202201	M2022SS1W01	A	DPDT On-None-On	Solder	6.11	5.50	4.78
633-M202301	M2023SS1W01	A	DPDT On-Off-On	Solder	4.76	4.66	4.40
633-M202501	M2025SS1W01	A	DPDT On-(None)-(On)	Solder	7.00	4.99	4.91
633-M202801	M2028SS1W01	A	DPDT (On)-(Off)-(On)	Solder	6.12	5.56	5.10
633-M202901	M2029SS1W01	A	DPDT On-Off-(On)	Solder	7.65	5.50	5.31
633-M204401	M2044SS1W01	A	DP3T On-None-On	Solder	14.72	13.36	12.27
633-M204601	M2046SS1W01	A	DP3T (On)-On-(On)	Solder	14.72	13.36	12.27
633-M203201	M2032SS1W01	A	3PDT On-None-On	Solder	7.36	6.68	6.14
633-M2042SS1W01	M2042SS1W01	A	4PDT On-None-On	Solder	14.40	14.11	13.83
633-M201203	M2012SS1W03	B	SPDT On-None-On	PC	2.86	2.80	2.65
633-M201303	M2013SS1W03	A	SPDT On-Off-On	PC	3.31	3.24	3.06
633-M201503	M2015SS1W03	B	SPDT On-(None)-(On)	PC	3.72	3.64	3.44
633-M201803	M2018SS1W03	B	SPDT (On)-Off-(On)	PC	5.30	3.52	3.33
633-M202403	M2024SS1W03	B	SP3T On-None-On	PC	6.04	5.54	5.17
633-M202203	M2022SS1W03	B	DPDT On-None-On	PC	5.04	4.74	4.08
633-M204203	M2042SS1W03	B	4PDT On-None-On	PC	10.52	9.55	8.77
<b>Actuator: .450" Flated, .350" Threaded with Keyway</b>							
633-M201202	M2012ES1W01	C	SPDT On-None-On	Solder	3.53	3.46	3.27
633-M201502	M2015ES1W01	C	SPDT On-None-(On)	Solder	4.72	4.29	3.94
633-M201802	M2018ES1W01	C	SPDT (On)-Off-(On)	Solder	4.46	4.37	4.13
633-M201902	M2019ES1W01	C	SPDT On-Off-(On)	Solder	4.80	4.36	4.00

### With Small Toggles (Cont.)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit () Momentary	Term.	Price Each		
					1	25	50
<b>Actuator: .450" Flated, .350" Threaded with Keyway (Cont.)</b>							
633-M202402	M2024ES1W01	C	SP3T On-None-Off	Solder	7.16	6.50	5.97
633-M202202	M2022ES1W01	C	DPDT On-None-On	Solder	5.24	4.76	4.37
633-M202302	M2023ES1W01	C	DPDT On-Off-On	Solder	5.96	5.41	4.97
633-M202502	M2025ES1W01	C	DPDT On-(None)-(On)	Solder	7.47	5.84	5.60
633-M202802	M2028ES1W01	C	DPDT (On)-Off-(On)	Solder	6.96	6.33	5.80

### With Large Toggles

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit () Momentary	Term.	Price Each		
					1	25	50
<b>Actuator: .453" Bat., .472" Threaded with Keyway</b>							
633-M201104	M2011BB1W01	D	SPST On-None-Off	Solder	4.28	4.19	3.96
633-M201204	M2012BB1W01	D	SPDT On-None-On	Solder	4.46	4.37	4.13
633-M201504	M2015BB1W01	D	SPDT On-None-(On)	Solder	5.72	5.20	4.77
633-M201804	M2018BB1W01	D	SPDT (On)-Off-(On)	Solder	5.39	5.28	4.99
633-M202404	M2024BB1W01	D	SP3T On-None-On	Solder	8.16	7.41	6.80
633-M202204	M2022BB1W01	D	DPDT On-None-On	Solder	6.24	5.67	5.20
633-M203804	M2038BB1W01	D	SPDT (On)-Off-(On)	Solder	13.20	11.98	11.00

### With Large Toggles

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit () Momentary	Term.	Price Each		
					1	25	50
<b>Actuator: .453" Bat., .472" Threaded with Keyway for Lever Lock</b>							
633-M201205	M2012LL1W01	E	SPDT On-None-On	Solder	6.03	5.19	4.46
633-M201305	M2013LL1W01	E	SPDT On-Off-On	Solder	6.48	4.69	4.62
633-M201505	M2015LL1W01	E	SPDT On-(None)-(On)	Solder	6.04	5.49	5.04
633-M201905	M2019LL1W01	E	SPDT Off-(On)	Solder	6.12	5.56	5.10
633-M202205	M2022LL1W01	E	DPDT On-None-On	Solder	6.10	5.97	5.64
633-M204205	M2042LL1W01	E	4PDT On-None-On	Solder	11.42	10.74	9.91

### PC Mount

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit () Momentary	Term.	Price Each		
					1	25	50
<b>Right Angle PC</b>							
633-M2022S2A2W30	M2022S2A2W30	F	DPDT On-None-On	Silver	5.48	4.98	
<b>Vertical PC</b>							
633-M2012S2A2W40	M2012S2A2W40	G	SPDT On-None-On	Silver	4.86	4.64	

## M SERIES - MINIATURE TOGGLE SWITCHES KIT



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Description	Price Each
633-MSERIESKIT	M Series Kit	M Series Toggle Switches Kit	41.42

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MOUSER STOCK NO.	NKK Part No.	Fig.	Description	Price Each		
				1	25	50
<b>DS SERIES - CONTACTLESS TILT SWITCHES</b>						
633-DS-BA1P	DSBA1P	A	On-Off Status, NC, Straight PC	5.89	5.36	4.90
633-DS-BA1H	DSBA1H	B	On-Off Status, NC, Right Angle PC	7.13	6.40	6.10



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## DSA SERIES - HIGH CONTACT TILT SWITCH

### Specifications:

- Contact Resistance: 100mΩ maximum
- Contact Bounce (for reference) 500ms maximum

### Features:

- Environmentally friendly, contains no mercury
- PCB adaptor available as an accessory
- Housing : PBT

For quantities greater than listed, call for quote.

633-DSA01	DSA01	C	Single Pole Single Throw ON-OFF	7.39	6.95	6.15
<b>Optional Adaptor for DSA Series</b>						
633-AT094	AT094	D	PC Mount Battery Holder	2.04	1.85	1.69

# NKK Toggle Switches



This page of product is RoHS compliant.

**NKK**  
SWITCHES

## G SERIES: PROCESS SEALED ULTRA-MINIATURE TOGGLES

### Specifications:

- 0.4VA max. @ 28VAC/DC max.

### Features:

- Ultra-miniature size for high density mounting
- Extremely light weight, 0.25g
- Totally sealed body construction
- 100° x 100° terminal spacing

( )=Momentary

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Terminal	Price Each		
					1	25	50
633-G12AP	G12AP	A	SPDT On-None-On	Straight	4.65	4.50	4.30
633-G13AP	G13AP	A	SPDT On-Off-On	Straight	3.91	3.78	3.61
633-G22AP	G22AP	A	DPDT On-None-On	Straight	6.17	5.90	5.12
633-G23AP	G23AP	A	DPDT On-Off-On	Straight	8.44	7.25	6.23
633-G12AH	G12AH	B	SPDT On-None-On	Right angle	4.86	4.42	4.05
633-G13AH	G13AH	B	SPDT On-Off-On	Right angle	5.10	4.63	4.25
633-G22AH	G22AH	B	DPDT On-None-On	Right angle	7.16	6.50	5.97
633-G23AH	G23AH	B	DPDT On-Off-On	Right angle	6.75	6.61	6.24
633-G12AV	G12AV	C	SPDT On-None-On	Vertical	4.86	4.42	4.05
633-G13AV	G13AV	C	SPDT On-Off-On	Vertical	4.46	4.32	4.13
633-G22AV	G22AV	C	DPDT On-None-On	Vertical	6.29	6.15	5.81
633-G23AV	G23AV	C	DPDT On-Off-On	Vertical	7.70	6.99	6.42

## B SERIES: PROCESS SEALED ANTISTATIC SUBMINIATURE TOGGLES

### Specifications:

- Static capability: 3 kilovolts ESD
- 0.4VA max. @ 28VAC/DC max.

### Features:

- Saves space on PC boards
- Developed for logic-level applications
- Totally sealed body construction
- 100° x 100° terminal spacing

( )=Momentary

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Terminal	Price Each		
					1	25	50
633-B12AB	B12AB	D	SPDT On-None-On	Straight w/bracket	4.06	3.69	3.39
633-B13AB	B13AB	D	SPDT On-Off-On	Straight w/bracket	4.20	3.82	3.50
633-B22AB	B22AB	D	DPDT On-None-On	Straight w/bracket	5.56	5.05	4.64
633-B12AH	B12AH	E	SPDT On-None-On	Right angle	4.51	3.88	3.48
633-B25AH	B25AH	E	DPDT On-None-(On)	Right angle	6.79	6.12	5.44
633-B28AH	B28AH	E	DPDT (On)-Off-(On)	Right angle	7.06	6.41	5.89
633-B12AV	B12AV	F	SPDT On-None-On	Vertical	4.51	3.88	3.48
633-B22AV	B22AV	F	DPDT On-None-On	Vertical	5.76	5.23	4.80

### Threaded Bushing

633-B22A1P	B22A1P	G	DPDT On-None-On	Straight	9.80	8.43	7.45
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### Locking Lever

633-B12LB	B12LB	H	SPDT On-None-On	Straight w/bracket	6.30	5.72	5.25
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## M2T SERIES: PROCESS SEALED MINIATURE TOGGLES

### Specifications:

- Silver: 6A @ 125VAC & 3A @ 250VAC
- Gold: 0.4VA max. @ 28VAC/DC max.
- UL94V-0 Rated

( ) Momentary

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Terminal	Price Each		
					1	25	50
<b>Straight PC</b>							
633-M2T12SA5G03	M2T12SA5G03	I	SPDT On-None-On	Gold	4.31	4.01	3.56
633-M2T12SA5W03	M2T12SA5W03	I	SPDT On-None-On	Silver	3.21	2.91	2.67
633-M2T18SA5G03	M2T18SA5G03	I	SPDT (On)-Off-(On)	Gold	5.31	3.66	3.51
633-M2T22SA5G03	M2T22SA5G03	J	DPDT On-None-On	Gold	6.36	4.53	4.26
633-M2T22SA5W03	M2T22SA5W03	J	DPDT On-None-On	Silver	6.14	4.08	3.96
<b>Vertical PC</b>							
633-M2T12S4A5G40	M2T12S4A5G40	K	SPDT On-None-On	Gold	4.28	3.89	3.57

## ENVIRONMENTALLY SEALED TOGGLE SWITCHES

### Specifications:

- Power rating: 10A @ 125VAC/30VDC, 6A @ 250VAC
- Leads: AWG 16 heat resistant PVC
- Sealing at front and back panel meets IP67 & IP60 of IEC529
- UL94V-0 Standard

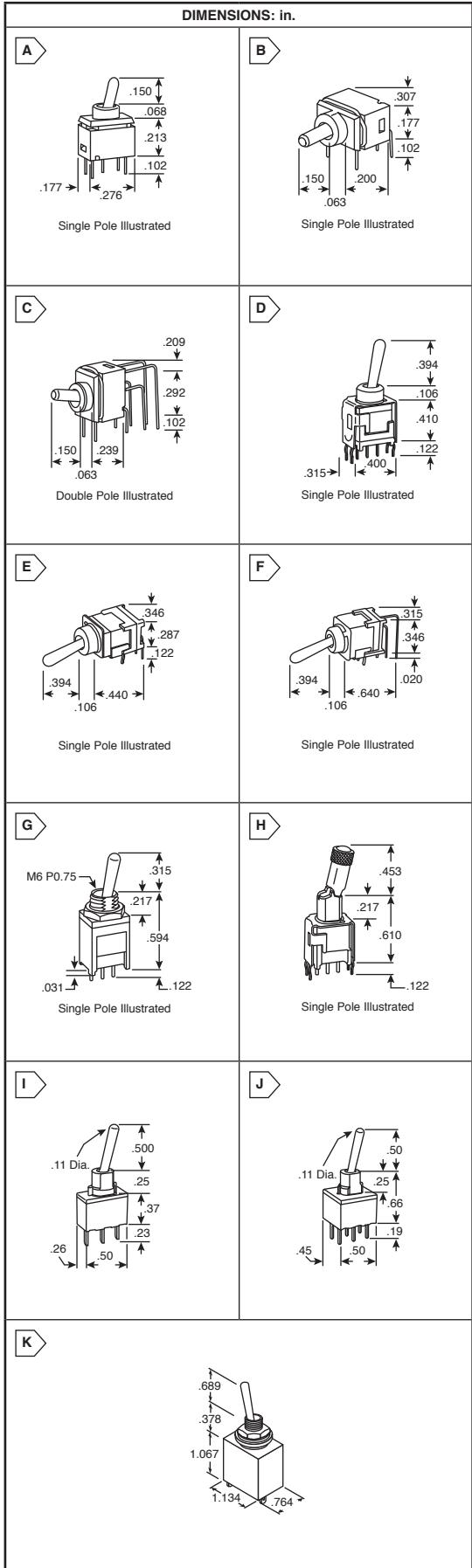
MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Terminal	Price Each			
					1	25	50	100
633-WT11S	WT11S	K	SPST On-None-Off	Solder Lug	12.70	11.53	10.59	10.16
633-WT11T	WT11T	K	SPST On-None-Off	Screw Lug	13.80	12.53	11.50	11.04

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# NKK Standard Size Med-High Capacity Toggle Switches

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## S SERIES

### Specifications:

- 15A to 50A Rating
- Locking Lever available
- 1 to 4 poles
- Panel Seal versions meet IP67 Standard
- Bushing Mount



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit (*)=Momentary	Resistive Load		Inductive AC 125V 125V 250V 30V	PF 0.6	Price Each			
				AC 125V	AC 250V	DC 30V		1	25	50	100
<b>Medium Capacity, Solder Lug Termination</b>											
633-S1A	S1A	A	SPST On-None-Off	15A	6A	20A	8A	3.65	3.52	3.40	3.09
633-S2A	S2A	A	SPDT On-None-On	15A	6A	20A	8A	4.15	4.06	3.84	3.48
633-S3A	S3A	A	SPDT On-Off-On	15A	6A	20A	8A	4.36	4.26	4.15	3.27
633-S21A	S21A	A	DPST On-None-Off	15A	15A	15A	8A	5.26	5.13	5.00	3.95
633-S6A	S6A	A	DPDT On-None-On	20A	10A	20A	8A	5.91	5.75	5.60	5.14
633-S7A	S7A	A	DPDT On-Off-On	20A	10A	20A	8A	5.99	5.83	5.67	5.52
<b>Medium Capacity, Quick Connect Termination</b>											
633-S1F	S1F	B	SPST On-None-Off	15A	6A	20A	8A	3.69	3.58	3.48	3.38
633-S2F	S2F	B	SPDT On-None-On	15A	6A	20A	8A	5.14	5.02	4.89	4.76
633-S3F	S3F	B	SPDT On-Off-On	15A	6A	20A	8A	5.36	5.23	5.10	4.02
633-S21F	S21F	B	DPST On-None-Off	15A	15A	15A	8A	7.26	6.59	6.05	5.81
633-S6F	S6F	B	DPDT On-None-On	20A	10A	20A	8A	6.88	6.70	6.52	6.34
633-S7F	S7F	B	DPDT On-Off-On	20A	10A	20A	8A	6.98	6.79	6.61	6.06
<b>Medium Capacity, Solder Lug Termination with Locking Lever &amp; Panel Seal</b>											
633-S1AL	S1AL	C	SPST On-None-Off	15A	6A	20A	8A	11.53	11.52	10.60	9.97
633-S2AL	S2AL	C	SPDT On-None-On	15A	6A	20A	8A	12.04	11.70	11.36	10.67
633-S21AL	S21AL	C	DPST On-None-Off	15A	15A	15A	8A	13.36	12.97	12.59	11.82
633-S6AL	S6AL	C	DPDT On-None-On	20A	10A	20A	8A	14.41	13.99	13.58	12.76
633-S7AL	S7AL	C	DPDT On-Off-On	20A	10A	20A	8A	14.53	14.11	13.70	12.87
<b>Medium Capacity, Solder Lug Termination with Panel Seal</b>											
633-S1AW	S1AW	D	SPST On-None-Off	15A	6A	20A	-	9.06	8.31	7.75	7.12
633-S5AW	S5AW	D	SPDT On-None-(On)	15A	6A	20A	-	10.93	9.92	9.12	8.75
633-S8AW	S8AW	D	SPDT (On)-Off-(On)	15A	6A	20A	-	9.50	9.45	8.73	6.93
633-S21AW	S21AW	D	DPST On-None-Off	15A	15A	15A	-	10.88	10.59	10.00	7.94
633-S6AW	S6AW	D	DPDT On-None-On	20A	10A	20A	-	12.27	11.94	11.28	8.95
633-S25AW	S25AW	D	DPDT On-(None)	15A	6A	20A	-	14.93	13.56	12.44	11.95
633-S28AW	S28AW	D	DPDT (On)-Off-(On)	15A	6A	20A	-	12.13	11.78	11.44	10.74
<b>Medium/High Capacity, Solder Lug Termination</b>											
633-S305	S305	E	SPDT On-None-(On)	15A	6A	20A	8A	4.96	4.84	4.72	3.72
633-S308	S308	E	SPDT (On)-Off-(On)	15A	6A	20A	8A	5.08	4.96	4.83	3.81
633-S309	S309	E	SPDT Off-On-(On)	15A	6A	20A	8A	5.26	5.13	5.00	3.95
633-S335	S335	F	DPDT On-None-(On)	15A	6A	20A	8A	7.42	7.22	6.82	6.42
633-S338	S338	F	DPDT (On)-Off-(On)	15A	6A	20A	8A	8.03	7.82	7.38	6.95
633-S31	S31	G	3PST On-None-Off	25A	9A	20A	10A	9.10	8.63	8.15	7.91
633-S32	S32	G	3PDT On-None-On	25A	9A	20A	10A	9.33	8.84	8.35	7.86
633-S33	S33	G	3PDT On-Off-On	25A	9A	20A	10A	10.05	9.53	9.00	8.47
633-S41	S41	G	4PST On-None-Off	25A	9A	20A	10A	10.74	10.17	9.61	9.04
633-S42	S42	G	4PDT On-None-On	25A	9A	20A	10A	13.30	10.89	10.00	9.60
633-S43	S43	G	4PDT On-Off-On	25A	9A	20A	10A	12.07	11.43	10.80	10.16
<b>Medium/High Capacity, Quick Connect Termination</b>											
633-S31F	S31F	H	3PST On-None-Off	25A	9A	20A	10A	10.26	9.72	9.18	8.64
633-S32F	S32F	H	3PDT On-None-On	25A	9A	20A	10A	10.47	9.92	9.37	8.82
633-S33F	S33F	H	3PDT On-Off-On	25A	9A	20A	10A	11.29	10.70	10.10	9.05
633-S41F	S41F	H	4PST On-None-Off	25A	9A	20A	10A	11.89	11.27	10.65	10.02
633-S42F	S42F	H	4PDT On-None-On	25A	9A	20A	10A	12.24	11.60	10.95	10.31
633-S43F	S43F	H	4PDT On-Off-On	25A	9A	20A	10A	12.69	11.67	11.32	10.64
<b>Medium/High Capacity, Screw Lug Termination</b>											
633-S301T	S301T	I	SPST On-None-Off	15A	6A	20A	10A	6.38	5.98	5.80	5.58
633-S302T	S302T	I	SPDT On-None-On	15A	6A	20A	10A	5.48	5.33	5.19	4.75
633-S303T	S303T	I	SPDT Off-On-(On)	15A	6A	20A	10A	5.78	5.63	5.48	5.02
633-S305T	S305T	I	SPDT On-None-(On)	15A	6A	20A	8A	5.69	5.54	5.39	4.94
633-S308T	S308T	I	SPDT (On)-Off-(On)	15A	6A	20A	8A	6.62	6.12	5.95	5.79
633-S331T	S331T	J	DPST On-None-Off	15A	15A	15A	10A	12.02	10.46	9.18	8.36
633-S332T	S332T	J	DPDT On-None-On	15A	15A	15A	10A	8.55	8.10	7.65	7.20
633-S333T	S333T	J	DPDT Off-On-(On)	15A	15A	15A	10A	9.58	9.08	8.57	8.07
633-S335T	S335T	J	DPDT On-(None)-(On)	15A	6A	20A	8A	9.84	9.33	8.81	8.55
633-S338T	S338T	J	DPDT (On)-Off-(On)	15A	6A	20A	8A	10.36	9.81	9.27	8.72
<b>High Capacity, Screw Lug Termination</b>											
633-S821	S821	K	DPST On-None-Off	30A	30A	30A	30A	21.14	20.54	19.94	18.73
633-S822	S822	K	DPDT On-None-On	30A	30A	30A	30A	21.93	21.38	20.75	20.24
633-S823	S823	K	DPDT Off-On-(On)	30A	30A	30A	30A	22.19	21.56	20.93	19.66
633-S831	S831	K	3PST On-None-Off	30A	30A	30A	30A	28.45	27.66	27.02	26.21
633-S832	S832	K	3PDT On-None-On	30A	30A	30A	30A	34.29	32.15	30.01	28.94
633-S833	S833	K	3PDT On-Off-On	30A	30A	30A	30A	34.32	32.17	30.03	28.96
633-S732	S732	L	DPDT On-None-On	50A	30A	50A	25A	51.22	49.62	48.12	46.94

### Accessories for S Series

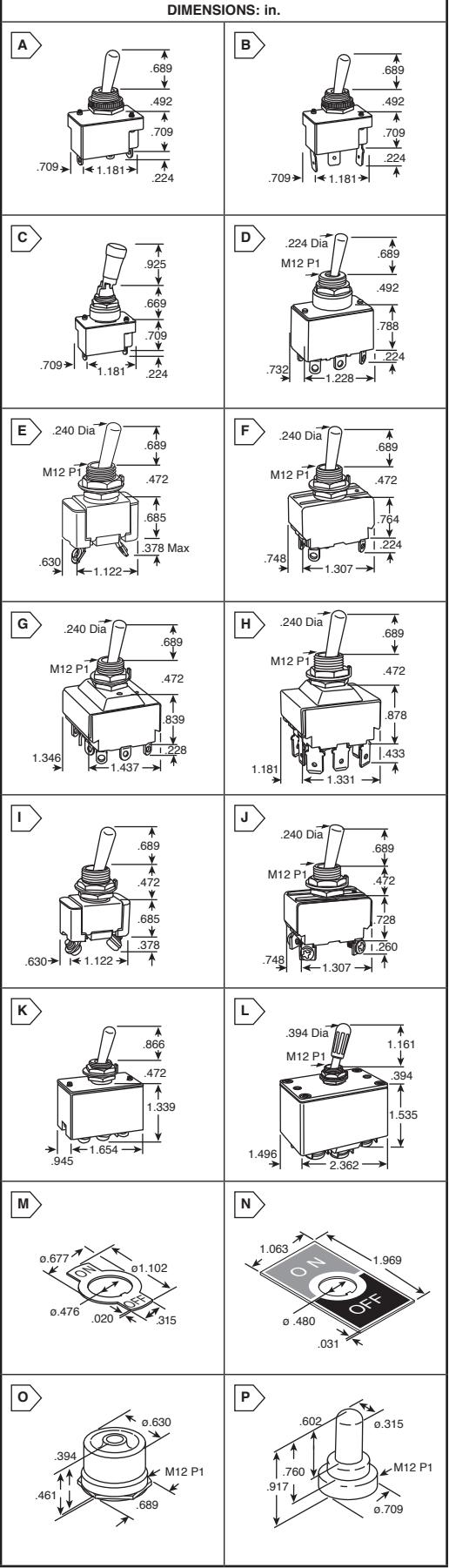
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit (*)=Momentary	Price Each			
				1	25	50	100
633-AT201	AT201	M	On-Off Plate	.53	.48	.44	.41
633-AT202	AT202	N	On-Off Plate Red/Black	1.63	1.52	1.48	1.35
633-AT214	AT214	M	On-Off Plate Red/Black	1.64	1.52	1.49	1.36
633-AT401	AT401A	O	Splashproof Half-Boot, Black	2.36	2.25	2.15	1.97
633-AT402	AT402A	P	Splashproof Full-Boot, Black	3.01	2.44	2.30	2.18

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# OTTO Toggle and Trim Switches

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**OTTO**

## T3 SNAP ACTION, LEVER LOCK OPTION

### Features:

- Snap-action contact actuation
- Shorter behind panel depth
- Superior wiping action keeps contacts clean
- Positive tactile response prevents operating errors
- Cap Color: Red; Max Rating: 5A
- Weighs up to 25% less than competitive products
- More contact/terminal plating choices
- Highly reliable: simpler design, fewer parts
- Black matte finish available (contact factory)



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	OTTO Part No.	Switch Function	Circuit	Price Each			
				1	25	50	100
<b>Sealed Bushing Style: 15/32-32</b>							
999-T3-11111	T3-11111	ON - OFF - ON	SPST	32.19	29.62	28.73	24.19
999-T3-11121	T3-11121	OFF - NONE - ON	SPST	30.64	28.19	27.34	23.02
999-T3-11151	T3-11151	(ON) - OFF - (ON)	SPST	33.74	31.05	30.11	25.35
999-T3-11211	T3-11211	OFF - NONE - ON	DPST	33.74	31.05	30.11	25.35
999-T3-11221	T3-11221	OFF - NONE - ON	DPST	32.19	29.62	28.73	24.19
999-T3-11241	T3-11241	(ON) - NONE - ON	DPST	30.56	30.25	30.11	26.90
999-T3-11251	T3-11251	(ON) - OFF - (ON)	DPST	35.30	32.48	31.50	26.52
<b>Sealed Bushing Style: 1/4-40</b>							
999-T3-21111	T3-21111	ON - OFF - ON	SPST	22.12	20.36	20.15	19.74
999-T3-21121	T3-21121	OFF - NONE - ON	SPST	20.57	18.92	18.73	18.35
999-T3-21151	T3-21151	(ON) - OFF - (ON)	SPST	23.67	21.78	21.56	21.12
999-T3-21211	T3-21211	ON - OFF - ON	DPST	23.67	21.78	21.56	21.12
999-T3-21221	T3-21221	OFF - NONE - ON	DPST	22.12	20.36	20.15	19.74
999-T3-21251	T3-21251	(ON) - OFF - (ON)	DPST	25.22	23.20	22.50	18.94

## T7 LOWER COST SEALED TOGGLES

### Features:

- Withstands direct water spray
- Submersible to IP68S
- Switches up to 16A
- Withstands extreme shock & vibration
- Positive detent, non-tearable contact transfer
- 2 & 3-position, momentary & maintained action
- Choice of terminal styles



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	OTTO Part No.	Switch Function	Circuit	Price Each			
				1	25	50	100
<b>999-T7-111A1</b>							
999-T7-111D1	T7-111D1	ON - NONE - OFF	SPST	19.24	18.66	16.13	15.64
999-T7-111E1	T7-111E1	(ON) - NONE - ON	SPST	19.24	18.66	16.13	15.64
999-T7-111F1	T7-111F1	(ON) - OFF - (ON)	SPST	16.66	16.16	15.42	14.95
999-T7-211A1	T7-211A1	ON - OFF - ON	SPST	19.24	18.66	16.13	15.64
999-T7-211D1	T7-211D1	ON - NONE - OFF	DPST	21.87	21.21	18.31	17.76
999-T7-211E1	T7-211E1	(ON) - OFF - (ON)	DPST	21.87	21.21	19.20	18.62
999-T7-211F1	T7-211F1	ON - OFF - ON	DPST	21.87	21.21	18.31	17.76

## MT T4-T TACTILE MINI TRIM

### Features:

- Positive detent
- 4-way momentary toggle action
- Positive click action
- Low level switching
- Water resistant per MIL-STD-810F; method 506.4, procedure 3 (drip)
- Available in Commercial & Military grades
- Variety of button styles and colors available
- Electric Life: 100,000 Cycles
- Load Resistive: 2A



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	OTTO Part No.	Description	Button Style	Current Rating	Price Each			
					1	25	50	100
999-T4-TCG3312	T4-TCG3312	PressFit Unseal Black	Hat	Standard	134.22	130.19	110.37	107.38

## MT T5 MINI TRIM SWITCH

### Features:

- 4-way plus center pushbutton and 8-way versions
- Commercial & Military grade available
- Variety of button style
- Resistive Rating: 10mA @ 5VDC (Low Level)
- Standard & low level switching
- Dust tight to IP64 or Watertight to IP68S or MIL-PRF-8805 Design 3
- Press fit or threaded case styles



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	OTTO Part No.	Description	Button Style	Current Rating	Price Each			
					1	25	50	100
999-T5-CH2212	T5-CH2212	Stadium Threaded Standard Black	Stadium	Standard	97.50	90.53	85.21	82.65

## MT T8 8-WAY MINI TRIM

### Features:

- 2-way, 4-way, 8-way plush pushbutton and 8-way versions available
- Dust tight to IP64 or Watertight to IP68S or MIL-PRF-8805 Design 3
- Press fit or threaded case styles
- Resistive Rating: 10mA @ 5VDC (Low Level)
- Commercial & Military grade available
- Variety of button style
- Standard and low level switching

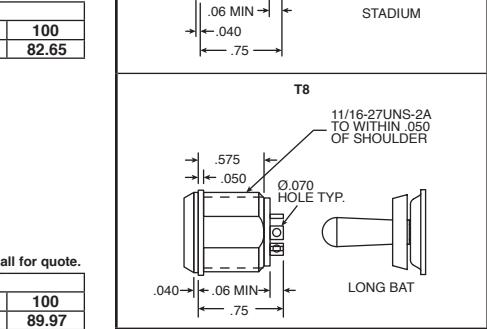
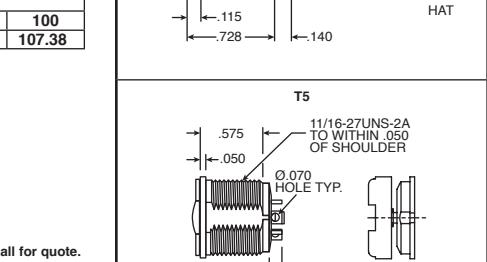
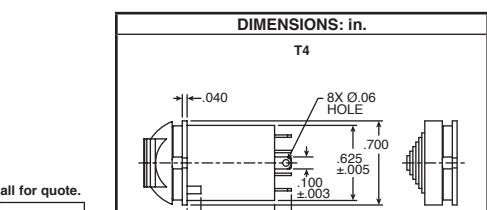
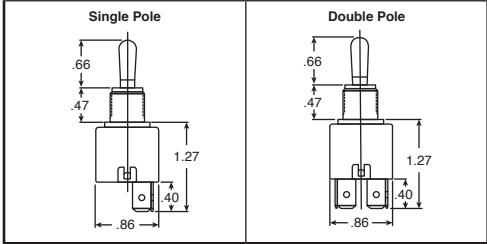
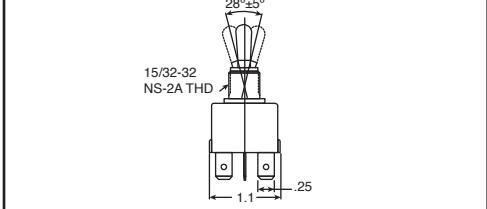
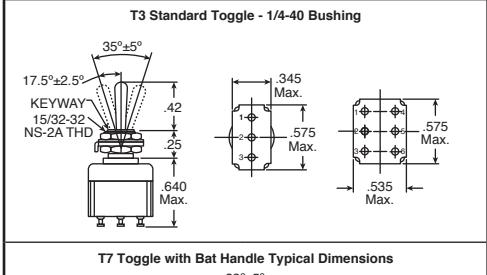
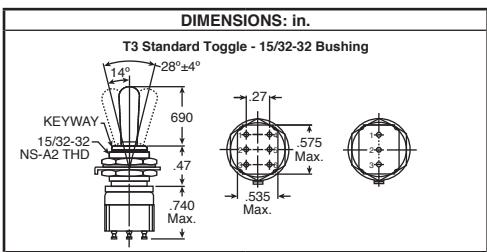


For quantities greater than listed, call for quote.

MOUSER STOCK NO.	OTTO Part No.	Description	Button Style	Current Rating	Price Each			
					1	25	50	100
999-T8-CM221N	T8-CM221N	8-Way Bat Handle Standard	Long Bat	Standard	109.07	101.28	92.47	89.97

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**OTTO**  
**Toggle Switches**

# Rocker Switches

## ALPS SDDJF SERIES ROCKER POWER SWITCHES

### Specifications:

- High capacity switch for TVs and other electronic devices
- supports regular 8A current and 128A inrush current
- Highly robust structure for rapid open/close operation (1m/sec.)

- Terminals support both one touch connector (faston #187) and soldering
- Flat panel TVs (LCD, plasma, displays) and monitors

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	ALPS Part No.	Fig.	Function	Terminal	Price Each			
					1	25	100	500
<b>Slim Type 5.2mm Body Width</b>								
688-SDDJF1A100	SDDJF1A100	A	SPST (ON) OFF	Quick Connect	1.23	.989	.94	.837
16A 250VAC rating (for Photocopiers and Printers)								
688-SDDJF30100	SDDJF30100	B	DPST (ON)OFF	Quick Connect	3.17	2.87	2.55	2.29
688-SDDJF30200	SDDJF30200	B	DPST (ON)OFF	Quick Connect	3.17	2.87	2.55	2.29
688-SDDJF31000	SDDJF31000	C	DPST (ON)OFF	Quick Connect	4.71	4.26	3.82	3.41

## APEM APPLIANCE STYLE ROCKER SWITCHES

MOUSER STOCK NO.	ApeM Part No.	Fig.	Function	Terminal	Price Each			
					1	25	100	500
642-FMC12A220	FMC12A220	A	SPST On-Off	Solder	1.58	1.52	1.36	1.25
642-FMC32A220	FMC32A220	A	SPST Off(On)	Solder	2.98	2.52	2.40	2.23
642-FMC62A220	FMC62A220	A	SPDT On-On	Solder	1.72	1.62	1.43	1.33
642-FML18A276A0	FML18A276A0	A	SPST On-Off Illum. Red	Quick-connect	5.52	4.93	4.23	3.19
642-AS36S010010	AS36S010010	B	SPDT On-On	Solder	4.98	4.48	4.30	4.11
642-AS39S010010	AS39S010010	B	SPDT On-Off-On	Solder	7.81	4.83	3.71	3.60
642-AS37S010010	AS37S010010	B	SPDT (On)-Off-(On)	Solder	5.92	4.32	3.16	3.07
642-AS36P0	AS36P0	B	SPDT On-On	PC	6.37	3.37	2.45	2.38
642-AS39P0	AS39P0	B	SPDT On-Off-On	PC	4.90	3.58	2.64	2.56

## APEM POWER ROCKER SWITCHES

MOUSER STOCK NO.	ApeM Part No.	Fig.	Function	Terminal	Price Each			
					1	25	100	500
<b>Non-illuminated</b>								
642-KG312A2XXA21	KG312A2XXA21		SPST On-Off		11.64	10.46	9.88	8.88
642-KG372A2XXA21	KG372A2XXA21		SPDT (On) -Off-(On)		15.86	14.27	13.48	12.11
642-KG412A2XXA21	KG412A2XXA21		DPST On-Off		12.09	11.49	10.87	10.28
642-KG462A2XXA21	KG462A2XXA21		DPDT On-On		13.94	12.55	11.83	10.44



## V SERIES: CONTURA SEALED ROCKER SWITCHES

The symmetrically curved the perfect complement to the Contura IV's "Shape to create a Shape" design concept. It can be mounted in between two Contura IV's, by itself, or in groups. This actuator style is available with all flush style mounting brackets.

\* The Contura II actuators are constructed of thermoplastic polycarbonate, and are offered with either a hard nylon overlay or a "soft-touch" elastomer overlay. The Contura II incorporates an aesthetic design of two rows of raised "bumps" on the top and bottom of the rocker.

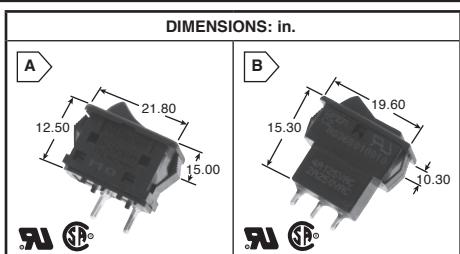
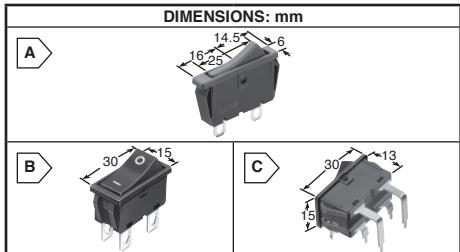
### Specifications:

- IP66/IP68 certified
- Meets UL1500/ISO8846 for ignition protection
- Temperature range: -40°C to +85°C
- Rating: 20A @ 12VDC
- Termination: 10 terminals, .250 QC without barriers
- 12V Switch Body

(\*) Momentary Flexibility of options with interchangeable actuators (sold separately below)

For quantities greater than listed, call for quote.

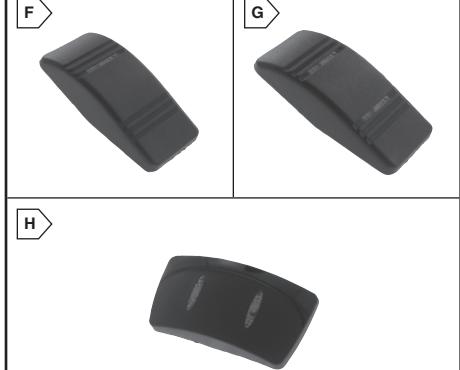
MOUSER STOCK NO.	Carling Technologies Part No.	Fig.	Contact Form	Circuit	Lamp	Price Each		
						1	25	50
691-V1D1B60B00000000	V1D1B60B-00000-000	A	SPST	ON - OFF	No Lamp	6.44	6.11	5.80
691-V1D1G66B00000000	V1D1G66B-00000-000	A	SPST	ON - OFF	Incandescent	8.03	7.61	7.23
691-V2D1A60B00000000	V2D1A60B-00000-000	A	SPST	(ON)-OFF	No Lamp	6.80	6.44	6.11
691-V2D1S00B00000000	V2D1S00B-00000-000	A	SPST	(ON)-OFF	No Lamp	5.10	4.84	4.59
691-V6D1D66B00000000	V6D1D66B-00000-000	A	SPST	ON-OFF-ON	Incandescent	8.37	7.93	7.54
691-V8D1S00B00000000	V8D1S00B-00000-000	A	SPST	(ON)-OFF-(ON)	No Lamp	5.54	5.24	4.98
691-VJD1D66B00000000	VJD1D66B-00000-000	A	DPDT	ON-OFF-ON	Incandescent	10.69	10.13	9.62
691-VLD1A60B00000000	VLD1A60B-00000-000	A	DPDT	(ON)-OFF-(ON)	No Lamp	10.46	9.91	9.42
691-VLD1S00B00000000	VLD1S00B-00000-000	A	DPDT	(ON)-OFF-(ON)	No Lamp	8.37	7.93	7.54
691-VLD1S00BAZC00000	VLD1S00B-AZC00-000	A	DPDT	(ON)-OFF-(ON)	No Lamp	9.46	8.96	8.51
691-V1D2B60B	V1D2B60B-00000-000	A	SPST	ON-OFF	Incandescent	5.70	4.87	4.52
691-V1D2GHN	V1D2GHN-00000-000	A	SPST	ON-OFF	Amber	10.32	8.81	8.28
691-V2D2GHN	V2D2GHN-00000-000	A	SPST	(ON)-OFF	Amber	10.10	8.63	8.11
691-V2D2S00B	V2D2S00B-00000-000	A	SPST	(ON)-OFF	No Lamp	4.52	3.86	3.55
691-V8D2GHN	V8D2GHN-00000-000	A	SPDT	(ON)-OFF-(ON)	Amber	9.07	7.75	7.07
691-VLD2GHN	VLD2GHN-00000-000	A	DPDT	(ON)-OFF-(ON)	Amber	11.34	9.69	8.78
691-V1D2GHNBAAC00000	V1D2GHN-BAC00-000	A	SPST	ON - OFF	Amber	9.59	8.47	7.92
691-V1D2S00BAZC00000	V1D2S00B-AZC00-000	A	SPST	(ON) - OFF	No Lamp	5.42	4.15	3.63
691-V2D2S00BAZC00000	V2D2S00B-AZC00-000	A	SPST	(ON) - OFF	No Lamp	6.65	5.37	4.77
691-V6D2GHNBAAC00000	V6D2GHN-BAC00-000	A	SPST	ON-OFF-ON	Amber	10.17	8.98	8.39
691-VGD2GHNBAAC00000	VGD2GHN-BAC00-000	A	SPDT	(ON)-OFF-(ON)	Amber	11.53	9.24	8.94
691-VLD2GHNBAAC00000	VLD2GHN-BAC00-000	A	DPDT	(ON)-OFF-(ON)	No Lamp	11.48	9.52	9.21
691-VLD2S00BAZC00000	VLD2S00B-AZC00-000	A	DPDT	(ON)-OFF-(ON)	No Lamp	8.27	6.11	5.71



## Actuators, Tools and Accessories

For quantities greater than listed, call for quote.

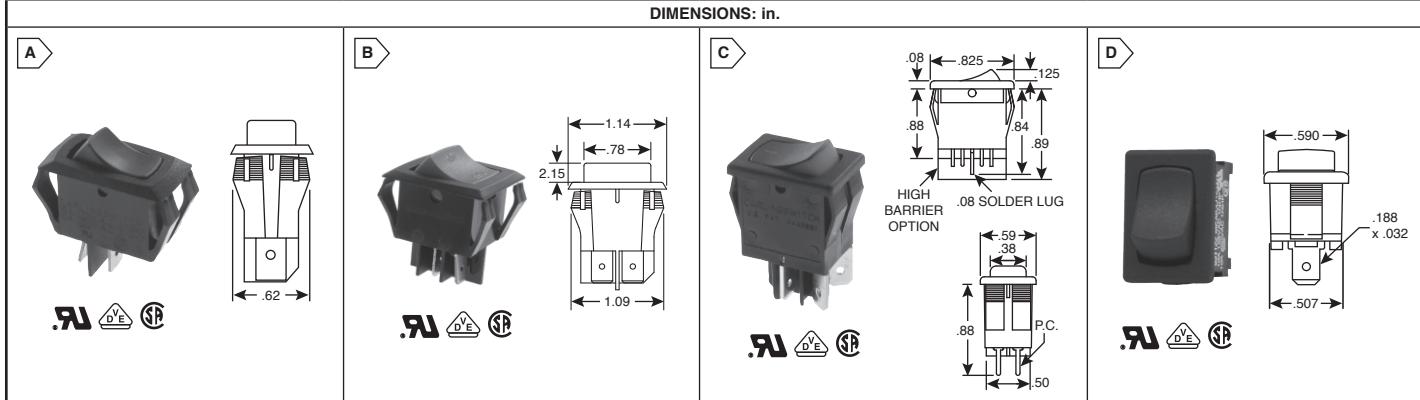
MOUSER STOCK NO.	Carling Technologies Part No.	Fig.	Description		Price Each			
					1	25	50	100
<b>Actuators for Switches with No Lamps or LEDs</b>								
691-VVAZC	VVAZC00-000	B	Black, hard, raised bumps each end		1.20	1.13	.996	.845
691-VVAZB	VVAZB00-000	B	Black, soft, raised bumps each end		1.42	1.32	1.30	1.28
<b>Actuators for Switches with LEDs</b>								
691-VVAAC	VVAAC00-000	C	Contura II, Black with white square lens, white bar		1.05	.896	.859	.786
691-VVEAC	VVEAC00-000	D	Contura IV, Black with white dual round lenses		1.83	1.57	1.45	1.23
691-VVGAC	VVGAC00-000	E	Contura V, Black with white dual round lenses		1.95	1.77	1.59	1.10
<b>Actuators for Switches with Incandescent Lamps</b>								
691-VVCMC	VVCMC00-000	F	Contura III, Red bar lens one end		1.31	1.14	.91	.75
691-VVCNC	VVCNC00-000	G	Contura III, 2 red bar lenses, 1 each end		1.54	1.32	1.26	1.16
691-VVENC	VVENC00-000	H	Contura IV, 2 red bar lenses, 1 each end		1.83	1.57	1.45	1.23
<b>Tools and Accessories for Contura Switches</b>								
691-VRT	VRT	-	Actuator removal tool		2.65	2.27	2.08	1.76
691-VPS-01	VPS-01	-	Panel seal		.74	.63	.58	.49
691-VC1-01	VC1-01	-	10 terminal connector		.92	.88	.84	.76
691-VH2-01	VH2-01	-	Hole plug		1.25	1.18	1.07	.98
691-VM3-01	VM3-01	-	3-gang mounting bracket		10.48	9.80	9.42	9.19



# CARLING TECHNOLOGIES Rocker Switches

 Carling Technologies®  
Innovative Designs. Powerful Solutions.

DIMENSIONS: in.



\* 125V Neon Lamp

\*\* 250V Neon Lamp

## LRA AND LRG SERIES: SINGLE, DOUBLE AND PADDLE ROCKER SWITCHES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Carling Technologies Part No.	Fig.	Contact Form	Circuit	Actuator Markings	Termination	Actuator/Bezel Color	Price Each			
								1	25	50	100
* 691-LRA911RSB/125N	LRA911-RS-B/125N	A	SPST	OFF-NONE-ON	None	.250QC Tabs	Clear Red/Black	1.54	1.29	1.23	1.07
* 691-LRA211RSB/125N	LRA211-RS-B/125N	A	SPST	OFF-NONE-ON	None	.250QC Tabs	Clear Red/Black	1.97	1.80	1.72	1.05
* 691-LRGCK611RSB0	LRGSCK611-RS-B-0/125N	B	DPST	OFF-NONE-ON	None	.250 Tabs	Black	3.57	3.16	2.94	2.64
* 691-LRGCK611SBSBAN	LRGSCK611-RS-B/A/125N	B	DPST	OFF-NONE-ON	OFF-ON Vertical	.250 Tabs	Black	3.29	2.99	2.74	2.53
* 691-LRGCK611SBSBEN	LRGSCK611-RS-B-E/125N	B	DPST	OFF-NONE-ON	I-O Vertical	.250 Tabs	Black	3.00	2.52	2.39	2.08
** 691-LRGCK611RSB0250	LRGSCK611-R-S-B-0/250N	B	DPST	OFF-NONE-ON	Red	.250 Tabs	Black	2.92	2.75	2.34	1.95

## R SERIES: CURVETTE SNAP-IN ROCKER SWITCHES

- Contact Form: SPST
- Rating: 10A @ 250VAC/16A @ 125VAC/3/4HP 125-250VAC
- Termination: .250QC Tab
- Circuit
- Actuator: Matte Finish
- Visi-Rocker Actuator Shows Red to Indicate "ON" Position

For qualities greater than listed, call for quote

Standard Actuator											
691-RA901RBB0N	RA901-RB-B-0-N	A	SPST	OFF-NONE-ON	None	.250QC Tabs	Black/Black	1.23	1.12	1.02	.955
691-RA901RBBA0N	RA901-RB-B-A-N	A	SPST	OFF-NONE-ON	OFF-ON Vertical	.250QC Tabs	Black/Black	1.31	1.20	1.07	.969
691-RA901RBBN	RA901-RB-B-E-N	A	SPST	OFF-NONE-ON	None	.250QC Tabs	Black/Black	1.06	.921	.91	.792
691-RA901RBPN	RA901-RB-B-F-N	A	SPST	OFF-NONE-ON	ON-OFF Vertical	.250QC Tabs	Black/Black	1.13	1.06	.97	.85
691-RB901-RW-B-0-N	RB901-RW-B-0-N	A	SPST	ON-NONE-ON	None	.250QC Tabs	White/Black	1.76	1.47	1.40	1.21
Visi-Rocker Actuator											
691-RA901VBB0V	RA901-VB-B-0-V	A	SPST	OFF-NONE-ON	None	.250QC Tabs	Black/Black	1.13	1.01	.97	.85
691-RA901VBB2V	RA901-VB-B-2-V	A	SPST	OFF-NONE-ON	OFF-ON Horizontal	.250QC Tabs	Black/Black	1.13	1.01	.97	.85
691-RA901VBB9V	RA901-VB-B-9-V	A	SPST	OFF-NONE-ON	O-I Vertical	.250QC Tabs	Black/Black	1.13	1.01	.97	.85
691-RA901VWW1V	RA901-VW-W-1-V	A	SPST	OFF-NONE-ON	OFF-ON Vertical	.250QC Tabs	White/White	1.23	1.13	.973	.856
691-RB901-VB-B-0-V	RB901-VB-B-0-V	A	SPST	ON-NONE-ON	None	.250QC Tabs	Black/Black	1.58	1.33	1.26	1.09
691-RB901-VB-B-1-V	RB901-VB-B-1-V	A	SPST	ON-NONE-ON	OFF-ON Vert	.250QC Tabs	Black/Black	1.72	1.57	1.34	1.19
691-RB901-VB-B-2-V	RB901-VB-B-2-V	A	SPST	ON-NONE-ON	OFF-ON Horizontal	.250QC Tabs	Black/Black	1.72	1.57	1.34	1.19
691-RB901-VB-B-9-V	RB901-VB-B-9-V	A	SPST	ON-NONE-ON	O-I Vertical	.250QC Tabs	Black/Black	1.46	1.23	1.17	1.01

## 621 SERIES: SINGLE AND DOUBLE POLE ROCKER SWITCHES

- Rating: 4A@250VAC, 8A@125VAC, 6(4)A 250V

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Carling Technologies Part No.	Fig.	Contact Form	Circuit	Termination	† Actuator Color	Actuator Markings	Price Each			
								1	25	50	100
691-62115919-0-9-V	62115919-0-9-V	C	DPST	ON-NONE-OFF	Solder Lug	Visi-RED	I-O Vertical	1.46	1.40	1.32	1.14
691-6211421-0-0-N	6211421-0-0-N	C	SPDT	ON-NONE-ON	Solder Lug	Black	None	1.63	1.37	1.30	1.12
691-62114241-0-0-N	62114241-0-0-N	C	DPDT	ON-NONE-ON	Solder Lug	Black	None	2.07	1.74	1.56	1.39
691-62116919-0-0-N	62116919-0-0-N	C	SPST	ON-NONE-OFF	Solder Lug	Black	None	1.40	1.34	1.28	1.22
691-62115929-0-0-V	62115929-0-0-V	C	DPDT	ON-NONE-ON	.0187QC Tabs	Visi-RED	None	2.16	1.81	1.72	1.50
691-62116919-0-9-V	62116919-0-9-V	C	SPST	ON-NONE-OFF	.0187QC Tabs	Visi-RED	I-O Vertical	1.38	1.16	1.10	.954

† Visi-Rocker is a black actuator with red molded on indicator.

## 651 SERIES: SUB-MINIATURE ROCKER SWITCH

- Rating: 4A@250VAC, 8A@125VAC, 6(4)A 250V

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Carling Technologies Part No.	Fig.	Contact Form	Circuit	Terminals	† Actuator Color	Actuator Markings	Price Each			
								1	25	50	100
691-651122-BB-0N	651122-BB-0N	D	SPST	ON-NONE-OFF	.187QC Tabs	Black	No Legend	1.55	1.40	1.22	1.10

† Visi-Rocker is a black actuator with red molded on indicator.

## RG SERIES: SINGLE AND DOUBLE POLE ROCKER SWITCHES

- Rating: 15A @ 250VAC, 20A @ 125VAC, 3/4 HP @ 125-250VAC, 14(6)A @ 250VAC
- Circuit: OFF-NONE-ON
- Terminals: .250QC Tabs

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Carling Technologies Part No.	Fig.	Contact Form	Circuit	Actuator Color	Actuator Markings	Termination	Price Each			
								1	25	50	100
691-RGSCC201RBB0	RGSCC201-R-B-B-0	B	DPDT	OFF-NONE-ON	Black	None	.250 Tabs	3.92	3.54	3.21	2.94
691-RGSCC201-R-B-B-E	RGSCC201-R-B-B-E	B	DPDT	OFF-NONE-ON	Black	I-O vertical	.250 Tabs	3.40	2.75	2.50	1.73
691-RGSCA901RB-B-0	RGSCA901-R-B-B-0	B	SPST	OFF-NONE-ON	Black	None	.250 Tabs	2.13	1.88	1.64	1.38
691-RGSCA901RB-B-E	RGSCA901-R-B-B-E	B	SPST	OFF-NONE-ON	Black	I-O vertical	.250 Tabs	1.97	1.65	1.57	1.37
691-RGSCC901RB-B-0	RGSCC901-R-B-B-0	B	DPST	OFF-NONE-ON	Black	None	.250 Tabs	2.64	2.22	2.11	1.83
691-RGSCC901RB-B-E	RGSCC901-R-B-B-E	B	DPST	OFF-NONE-ON	Black	I-O vertical	.250 Tabs	2.54	2.13	2.02	1.76

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# CHERRY Rocker Switches



This page of product is RoHS compliant.

**CHERRY**

## MINIATURE ROCKER SWITCHES

### Specifications:

- Dielectric Strength: 1000VAC for 1 minute
- Insulation Resistance:  $10^8 \Omega$  min at 500VDC
- All part numbers have a black bezel.
- .187" Q.C. Terminals



**LR Series - Power Rating: 10A 125VAC and 8A 250VAC**

MOUSER STOCK NO.	Cherry Part No.	Fig.	Circuit	Rocker Color / Legend	Price Each			
					1	50	100	500
540-LRA32H2FBBNN	LRA32H2FBBNN	A	DPST On-Off	Black / O -	1.22	1.07	.98	.931
540-LRA22H2BBLRN	LRA22H2BBLRN	A	SPST On-Off	Red Illuminated / Blank	1.23	1.07	1.01	.938
540-LRA32H2BBLRN	LRA32H2BBLRN	A	DPST On-Off	Red Illuminated / Blank	1.32	1.14	1.08	1.00

**SR Series - Power Rating: 10A 125VAC and 6A 250VAC**

MOUSER STOCK NO.	Cherry Part No.	Fig.	Circuit	Rocker Color / Legend	Price Each			
					1	50	100	500
540-SRB22A2FBBNN	SRB22A2FBBNN	B	SPST On-Off	Black / O -	.95	.83	.76	.722
540-SRB23A2BBLRN	SRB23A2BBLRN	B	SPDT On-On	Black / Blank	1.00	.873	.799	.759
540-SRB24A2HBBNN	SRB24A2HBBNN	B	SPDT On-Off-On	Black / I O II	1.11	.962	.88	.836
540-SRB22A2DBBBN	SRB22A2DBBBN	B	SPST On-Off	Black / ON OFF	.92	.809	.739	.703

## POWER ROCKER SWITCHES

### Specifications:

- Dielectric Strength: 1000VAC for 1 minute
- Insulation Resistance:  $10^8 \Omega$  min at 500VDC
- All part numbers have a black bezel.
- .250" Q.C. Terminals



**CR Series - Power Rating: 20A 125VAC and 16A 250VAC**

MOUSER STOCK NO.	Cherry Part No.	Fig.	Circuit	Rocker Color / Legend	Price Each			
					1	50	100	500
540-CRE22F2FBBNE	CRE22F2FBBNE	C	SPST On-Off	Black / O -	1.15	1.00	.92	.873
540-CRE22F4BBLRN	CRE22F4BBLRN	C	SPST On-Off	Black-Red / Blank	1.21	1.04	.959	.912
540-CRE24F2HBBNE	CRE24F2HBBNE	C	SPDT On-Off-On	Black / I O II	1.20	1.05	.99	.92
540-CRE22F2BBLRN	CRE22F2BBLRN	C	SPST On-Off	Red Illuminated / Blank	1.29	1.12	1.06	.989

**PR Series - Power Rating: 6A 125VAC and 3A 250VAC**

MOUSER STOCK NO.	Cherry Part No.	Fig.	Circuit	Rocker Color / Legend	Price Each			
					1	50	100	500
540-PRK22J5BBLRN	PRK22J5BBLRN	D	SPST On-Off	Black / Blank	1.15	1.00	.961	.885
540-PRK22J5DBBBN	PRK22J5DBBBN	D	SPST On-Off	Black / On-Off	1.28	1.11	1.02	.969

**TR Series - Power Rating: 16A 125VAC and 16A 250VAC**

MOUSER STOCK NO.	Cherry Part No.	Fig.	Circuit	Rocker Color / Legend	Price Each			
					1	50	100	500
540-TRG22F2FBBNN	TRG22F2FBBNN	E	SPST On-Off	Black / O -	1.15	1.00	.961	.885

**WR Series - Power Rating: 16A 125VAC and 16A 250VAC**

MOUSER STOCK NO.	Cherry Part No.	Fig.	Circuit	Rocker Color / Legend	Price Each			
					1	50	100	500
540-WRG32F2FBBNN	WRG32F2FBBNN	F	DPST On-Off	Black / O -	1.47	1.28	1.22	1.12

**YR Series - Power Rating: 20A 125VAC and 16A 250VAC**

MOUSER STOCK NO.	Cherry Part No.	Fig.	Circuit	Rocker Color / Legend	Price Each			
					1	50	100	500
540-YRM32F2FBBNN	YRM32F2FBBNN	G	DPST On-Off	Black / O -	2.03	1.75	1.66	1.53
540-YRM32F2BBLRN	YRM32F2BBLRN	G	DPST On-Off/Lighted	Black / Blank	2.50	2.17	2.06	1.90

## ROUND ROCKER SWITCHES

### Specifications:

- Dielectric Strength: 1000VAC for 1 minute
- Insulation Resistance:  $10^8 \Omega$  min at 500VDC
- .187" Q.C. Terminals



**RR Series - Power Rating: 10A 125VAC and 8A 250VAC**

MOUSER STOCK NO.	Cherry Part No.	Fig.	Circuit	Rocker Color / Legend	Bezel Color	Lamp	Price Each			
							1	50	100	500
540-RRA22H3FBRNN	RRA22H3FBRNN	H	SPST On-Off	Red / O -	Black	-	1.23	1.06	.98	.93
540-RRA32H3FBBNN	RRA32H3FBBNN	H	DPST On-Off	Black / O -	Black	-	1.64	1.42	1.35	1.24
540-RRA22H3BBLRN	RRA22H3BBLRN	H	SPST On-Off	Red Illuminated / Blank	Black	125VAC	1.45	1.26	1.20	1.10
540-RRA22H3BBLRN	RRA22H3BBLRN	H	SPST On-Off	Green Illuminated / Blank	Black	125VAC	1.45	1.26	1.20	1.10
540-RRA22H3BALN	RRA22H3BALN	H	SPST On-Off	Amber Illuminated / Blank	Black	125VAC	1.45	1.26	1.20	1.10
540-RRA32H3BBLRN	RRA32H3BBLRN	H	DPST On-Off	Red Illuminated / Blank	Black	125VAC	1.93	1.68	1.59	1.47
540-RRA22H3BBLRN	RRA22H3BBLRN	H	SPST On-Off	Red Illuminated / Blank	Black	12VDC	1.45	1.26	1.20	1.10

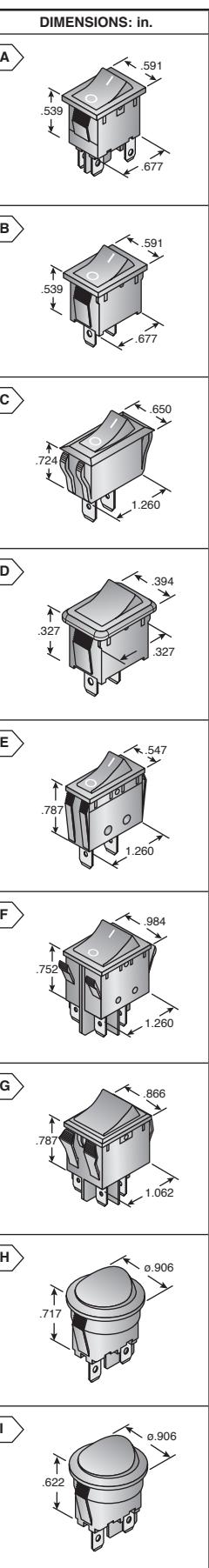
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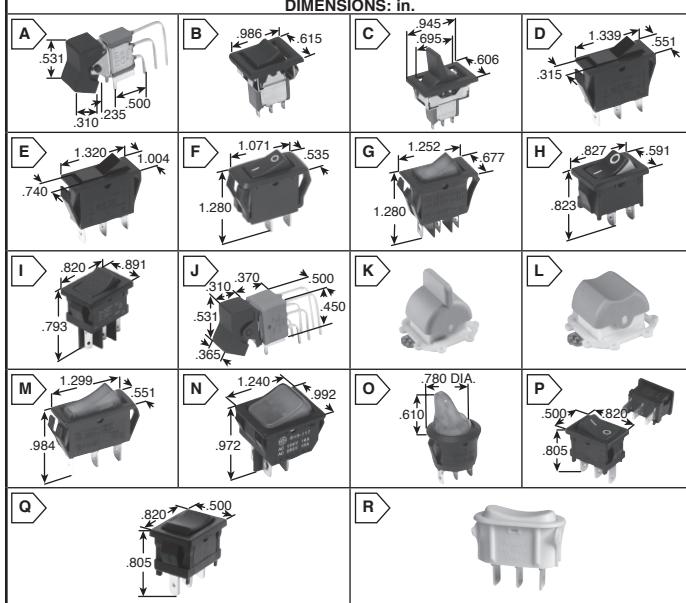
# C&K Rocker Switches

RoHS Compliant

This page of product is RoHS compliant.



## DIMENSIONS: in.



## 7000 SERIES: ROCKER SWITCHES

• Contact Material: End Contacts - Coin Ag over Ag plate  
Center contact and all terminals - Cu alloy over Ag plate

• Termination: Solder lug

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Switch Function	Price Each		
				1	25	100
611-710J3V6BE3	710J3V6BE3	A	SPDT On-None-On	8.44	7.89	6.26
611-710J60CQE3	710J60CQE3	A	SPDT On-None-On	7.43	6.91	5.42
611-710J5ZQ2E	710J5ZQ2E	A	SPDT (On)-Off-(On)	5.87	5.25	4.96
611-710J5ZQ2E	710J5ZQ2E	A	SPDT (On)-Off-(On)	9.16	8.62	7.82
611-720J5ZQ2E	720J5ZQ2E	A	DPDT (On)-Off-(On)	10.55	9.33	8.70
611-710J51ZQE22	710J51ZQE22	B	SPDT (On)-None-On	6.11	5.26	5.16
611-710J51ZQE22	710J51ZQE22	B	SPDT (On)-Off-(On)	6.48	5.88	5.53
611-710J7-022	710J7-022	B	SPDT On-Off-(On)	6.48	5.87	5.53
611-710J51ZQE22	710J51ZQE22	B	SPDT On-None-(On)	6.48	5.82	5.53
611-720J51ZQE22	720J51ZQE22	B	DPDT On-None-(On)	10.44	9.21	7.99
611-720J51ZQE22	720J51ZQE22	B	DPDT (On)-Off-(On)	11.68	9.33	8.46
611-720J51ZQE22	720J51ZQE22	B	DPDT Off-On-Off	11.68	9.33	8.46
611-720J61ZQE22	720J61ZQE22	C	DPDT On-Off-On	14.98	11.97	10.85
611-720J61ZQE22	720J61ZQE22	C	DPDT (On)-Off-(On)	11.68	9.33	8.46

## CA SERIES: POWER ROCKER SWITCHES

• 15A @ 125VAC

• Positive detent (non-illuminated rocker)

For quantities greater than listed, call for quote.

Non-illuminated			
611-CA01J12207HQ	CA01J12207HQ	D	SPDT, On-On
611-CA02J11207Q	CA02J11207Q	D	SPST, On-Off
611-CA22J76207PQ	CA22J76207PQ	E	DPST, On-Off
Illuminated			
611-CA04J137107DQ	CA04J137107DQ	D	SPST, On-Off
611-CA24J167207DQ	CA24J167207DQ	E	DPST, On-Off
611-CA24J737207Q	CA24J737207Q	D	DPST, On-Off

## CG/CL SERIES: SINGLE POLE POWER ROCKER SWITCHES

• Bevelled frame

• Easy panel mount installation

• Positive detent (CL Series)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Switch Function	1	25	100
611-CG101J11S205QF	CG101J11S205QF	F	SPDT On-None-On	1.84	1.64	1.30
611-CG102J11S205PQF	CG102J11S205PQF	F	SPST On-None-Off	1.44	1.37	1.22
611-CG102J11S205QF	CG102J11S205QF	F	SPST On-None-Off	1.62	1.45	1.15
611-CG102J25S205QF	CG102J25S205QF	F	SPST On-None-On	2.08	1.94	1.65
611-CG102J3AS205QF	CG102J3AS205QF	F	SPST On-None-Off	1.89	1.81	1.61
611-CL101J71S205QA	CL101J71S205QA	G	SPDT On-None-On	1.44	1.37	1.24
611-CL101J72S205QA	CL101J72S205QA	G	SPDT On-None-On	1.45	1.28	1.04
611-CL102J71S205QA	CL102J71S205QA	G	SPST On-None-Off	1.30	1.25	1.14
611-CL102J72S205QH	CL102J72S205QH	G	SPST On-None-Off	1.45	1.28	1.02
611-CL102J72S205PQA	CL102J72S205PQA	G	SPST On-None-Off	1.45	1.28	1.02
611-CL102J9GS205QA7	CL102J9GS205QA7	G	SPST On-None-Off	1.79	1.59	1.27

## DA SERIES: MINIATURE SINGLE POLE ROCKER SWITCHES

• Contact Rating: UL/CSA: 16A @ 125VAC, 1/3 HP; 10A @ 250VAC,  
1/2 HP VDC: 10A @ 125VAC, 6A @ 250VAC

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Switch Function	1	25	100
611-DA101J11S115QF	DA101J11S115QF	H	SPDT On-None-On	1.16	1.11	.983
611-DA101J11S1215QF	DA101J11S1215QF	H	SPDT On-None-On	1.24	1.19	1.08
611-DA101J12S1215QF	DA101J12S1215QF	H	SPDT On-None-On	1.07	.931	.856
611-DA101J12S2APQF	DA101J12S2APQF	H	SPDT On-None-On	1.36	1.26	1.15
611-DA102J11S215PQF	DA102J11S215PQF	H	SPST On-None-Off	1.22	1.17	1.07
611-DA102J11S215QF	DA102J11S215QF	H	SPST On-None-Off	.93	.886	.786
611-DA102J12S215DFQ	DA102J12S215DFQ	H	SPST On-None-Off	1.07	.99	.856
611-DA102J12S215PQF	DA102J12S215PQF	H	SPST On-None-Off	1.07	.931	.856
611-DA102J12S217QF	DA102J12S217QF	H	SPST On-None-Off	1.28	1.19	1.06
611-DA102J3GS215QF8	DA102J3GS215QF8	H	SPST On-None-Off	1.42	1.36	1.22

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## DM SERIES: MINIATURE POWER ROCKER SWITCHES

• Contact Material: Q: Cu alloy, Ag Plated

• Contact Rating: 10A @ 125VAC, 5A @ 250VAC

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Switch Function	1	25
<b>Non-Illuminated</b>					
611-DM61-122	DM61J12S205Q	I	DPDT On-On	4.78	4.49
611-DM61J12S205PQ	DM61J12S205PQ	I	DPDT On-On	4.70	4.50
611-DM62J12S205PQ	DM62J12S205PQ	I	DPST On-Off	4.52	4.38
<b>Illuminated</b>					
611-DM54J72S205Q3	DM54J72S205Q3	I	SPST On-Off	4.56	4.02
611-DM64J72S205Q3	DM64J72S205Q3	I	DPST On-Off	5.02	4.60

## E SERIES: SEALED MINIATURE ROCKER AND LEVER HANDLE SWITCHES

• Contact Rating: B: Contact material: 0.4 VA Max. @ 20VAC or DC Max., Q contact material (E1XX & E2XX Models): 7.5A @ 125VAC or 28VDC; 3A @ 250VAC or 28VDC (E3XX Models); 5A @ 125VAC or 28VDC; 2A @ 250VAC

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Switch Function	1	25
<b>AR3 and AR5 Series Hall Effect</b>					
611-E101J1V3SE2	E101J1V3SE2	J	SPDT On-None-On	8.10	7.56
611-E203J1AV2QE2	E203J1AV2QE2	J	DPDT Off-On	12.03	11.24
611-ET05J6SAPE2	ET05J6SAPE2	J	DPDT On-Off-On	7.04	6.55
<b>SR3 Series</b>					
611-890003-0002	SR3 02 GY 5N/5N 01 R00 M	L	5 N Left / 5 N Right	20.09	16.20
611-890003-0005	SR3 05 GY 5N/5N 01 R00 M	L	6 N Left / 6 N Right	30.80	27.33

## ANALOG ROCKER SWITCHES

• Analog was developed to provide the reliability required in demanding environments

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Operating Force	1	25
<b>AR3 and AR5 Series Hall Effect</b>					
611-890003-0121	AR3 01 GY 30/30 4N 0 V102	K	6N	56.50	52.44
611-890003-0122	AR3 02 GY 30/30 5N 0 V102	K	5N	69.56	68.25
611-BG5022C0106	AR5S DTC BN	K	6N	104.33	102.97
<b>SR3 Series</b>					
611-890003-0002	SR3 02 GY 5N/5N 01 R00 M	L	5 N Left / 5 N Right	20.09	16.20
611-890003-0005	SR3 05 GY 5N/5N 01 R00 M	L	6 N Left / 6 N Right	30.80	27.33

## CM/CN SERIES: POWER ROCKER SWITCHES

• Robust design-CN Series

• Illumination available

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Switch Function	1	25
<b>CM101J11S205QA</b>					
611-CM101J11S205QA	CM101J11S205QA	M	SPDT On-None-On	1.55	1.47
611-CM102J12S207QA	CM102J12S207QA	M	SPDT On-None-On	1.90	1.68
611-CM102J11S205QA	CM102J11S205QA	M	SPDT On-Off-On	1.31	1.25
611-CM102J12S207QA	CM102J12S207QA	M	SPDT On-Off-On	1.64	1.46
611-CM102J12S405QA	CM102J12S405QA	M	SPDT On-Off-On	1.30	1.16
611-CM102J3AS205QA8	CM102J3AS205QA8	M	SPDT On-Off-On	1.88	1.79
611-CM103J12S205QA	CM103J12S205QA	M	SPDT On-Off-On	1.63	1.56

## Double Pole

MOUSER STOCK NO.	C&K Part No.	Fig.	Switch Function	1	25
<b>CN201J11S115Q</b>					
611-CN201J11S115Q	CN201J11S115Q	N	DPDT On-None-On	3.59	3.26
611-CN201J11S215Q	CN201J11S215Q	N	DPDT On-None-On	2.24	2.14
611-CN201J6S205QA	CN201J6S205QA	N	DPDT On-None-Off	2.27	2.12
611-CN202J11S215PQ	CN202J11S215PQ	N	DPST On-None-Off	2.18	2.09
611-CN202J3AS215Q7	CN202J3AS215Q7	N	DPST On-None-Off	2.52	2.41
611-CN202J6S205QA	CN202J6S205QA	N	DPST On-None-Off	2.15	2.06

## CR SERIES: ROUND SINGLE POLE SPECIALTY ROCKER SWITCHES

• Round actuator and body

• Nice styling

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Switch Function	1	25
<b>Quick Connect</b>					

# CW INDUSTRIES Rocker Switches



RoHS Compliant This page of product is RoHS compliant.

## IP68 SEALED 25A ROCKER SWITCHES

### Specifications:

- Water Proof: IP68
- Ratings: 25A 12VDC
- Dimensions: L 49.0 x W 24.5 x H 54.0

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CW Industries Part No.	Fig.	Type	Circuit	Current Rating	Actuator		Price Each			
						Color	Marking	1	10	25	50
629-GRB114A2NABA1	GRB114A2NABA1	A	SPST	On-Off	25A	Black	None	4.14	4.05	3.85	3.66
629-GRB124A2NABA1	GRB124A2NABA1	A	SPDT	On-On	25A	Black	None	4.56	4.46	4.25	4.03
629-GRB134A2NABA1	GRB134A2NABA1	A	SPDT	On-Off-On	25A	Black	None	4.70	4.60	4.38	4.16
629-GRB214A2NABA1	GRB214A2NABA1	A	DPST	On-Off	25A	Black	None	5.41	5.15	4.89	4.64
629-GRB224A2NABA1	GRB224A2NABA1	A	DPDT	On-On	25A	Black	None	5.98	5.69	5.41	5.12
629-GRB234A2NABA1	GRB234A2NABA1	A	DPDT	On-Off-On	25A	Black	None	5.98	5.69	5.41	5.12

## SEQUENCING DP3POS MINI ROCKER SWITCH

### Specifications:

- Ratings: 3(1.5)A 250~ TUV
- Operating Temperature: 10,000 Cycles at rated load
- Endurance: 25,000 Cycles no load Minimum

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CW Industries Part No.	Fig.	Circuit	Actuator		Price Each			
				Color	Marking	1	10	25	50
629-GC-509-0025	GC-509-0025	B	OFF-ON-(ON)	White	I/O	1.26	1.21	1.15	1.10

## MINIATURE ROCKER INDICON™ SWITCHES

### Specifications:

- Contact Resistance: < 0.01mA @ 10mA
- Housing and actuator material: Nylon
- Operating Temperature: 65°C max.
- Terminals and contact material: Copper
- Rating: 16A/125VAC
- Terminal Type: .187" QC

• Actuator: Black with Red Indicator

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CW Industries Part No.	Fig.	Type	Circuit	Actuator	Price Each			
						1	10	25	50
629-GRS-4011-0138	GRS-4011-0138	C	SPST	On-Off	None	.84	.775	.741	.707
629-GRS-4011-0140	GRS-4011-0140	C	SPST	On-Off	Vert. I/O	.84	.775	.741	.707
629-GRS-4012-0065	GRS-4012-0065	C	SPDT	On-On	None	1.03	.948	.906	.865
629-GRS-4021-0035	GRS-4021-0035	C	DPST	On-Off	None	1.45	1.39	1.33	1.27

## STANDARD ROCKER SWITCHES

### Specifications:

- Contact Resistance: < 0.01Ω @ 10mA
- Housing and actuator material: Nylon
- Operating Temperature: 105°C max.
- Dielectric Strength: 2,500V, 60Hz for 1 minute
- Terminal Type: .250" QC

• Illuminated style has 120VAC neon bulb

• Markings are hot stamped

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CW Industries Part No.	Fig.	Type	Circuit	Current Rating	Actuator		Price Each			
						Color	Marking	1	10	25	50
629-GRL20111600	GRL-2011-1600	D	SPST-NO	On-Off	16A	Red Illum.	None	2.18	2.09	2.00	1.90
629-GRS20112019	GRS-2011-2019	D	SPST-NO	On-Off	16A	Red	None	.65	.603	.576	.55
629-GRS20112080	GRS-2011-2080	D	SPST-NO	On-Off	16A	Black	Vert. I/O	.96	.883	.844	.806
629-GRS2011C2000	GRS-2011C-2000	D	SPST-NC	On-Mom	13A	Black	None	1.84	1.76	1.68	1.60
629-GRS201126	GRS-2011-2600	D	SPST	On-Off	16A	Black	None	.65	.603	.576	.55
629-GRS2011B2	GRS-2011B-2000	D	SPST-NO	Off-Mom	13A	Black	None	1.84	1.76	1.68	1.60
629-GRS201226	GRS-2012-2600	D	SPDT	On-On	16A	Black	None	.70	.646	.618	.59
629-GRS20122028	GRS-2012-2028	D	SPDT	On-On	16A	Black	Vert. I/O	1.00	.926	.885	.845
629-GRS2013A26	GRS-2013A-2600	D	SPDT	On-Off-On	16A	Black	None	.77	.711	.679	.648
629-GR20220007	GR-2022-0007	D	DPDT	On-On	16A	Black	Vert. I/O	3.44	3.36	3.20	3.04
629-GR20221600	GR-2022-1600	D	DPDT	On-On	16A	Black	None	3.26	3.18	3.03	2.88

## MINIATURE ROCKER SWITCHES

### Specifications:

- Contact Resistance: < .01Ω @ 10mA
- Terminal and contact material: Copper
- Operating Temperature: 105°C max.
- Dielectric Strength: 2,500V, 60Hz for 1 min.
- Housing and knob material: Nylon

• Illuminated style has 120VAC neon bulb

• Markings are hot stamped

(-) = Momentary

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CW Industries Part No.	Fig.	Type	Circuit	Current Rating	Actuator		Price Each			
						Color	Marking	1	10	25	50
629-GRS401116	GRS-4011-1600	E	SPST	On-Off	16A	Black	None	.68	.625	.597	.57
629-GRS401140	GRS-4011-0040	E	SPST	On-On	16A	Red	None	.75	.689	.659	.629
629-GRS40110024	GRS-4011-0024	E	SPST	On-Off	16A	Black	None	.68	.625	.597	.57
629-GRL20111600	GRL-2011-1600	E	SPST	On-Off	16A	Red Illum.	None	2.97	2.91	2.77	2.63
629-GRS40110068	GRS-4011-0068	E	SPST	On-Off	16A	Black	Horiz. I/O	.91	.84	.803	.766
629-GRS40110076	GRS-4011-0076	E	SPST	On-Off	16A	Black	Vert. I/O	.91	.84	.803	.766
629-GRS4011B13	GRS-4011B-1300	E	SPST	Off-Mom	13A	Black	None	.61	.56	.535	.511
629-GRS40200047	GRS-4020-0047	E	SPDT	On-On	16A	Black	Vert. I/O	1.10	1.01	.967	.924
629-GRS4013A008	GRS-4013A-0008	E	SPDT	On-Off-On	13A	Red	None	.79	.732	.70	.668
629-GRS401216	GRS-4012-1600	E	SPDT	On-On	16A	Black	None	.86	.803	.762	.727
629-GRS401226	GRS-4012-2026	E	SPDT	On-On	16A	Red	None	.86	.797	.762	.727
629-GRS4013A13	GRS-4013A-1300	E	SPDT	On-Off-On	13A	Black	None	.77	.711	.679	.648
629-GRS4013C001	GRS-4013C-0001	E	SPDT	(On)-Off-(On)	13A	Black	None	1.50	1.43	1.37	1.30
629-GRS4021B0000	GRS-4021B-0000	E	DPST	Off-(On)	13A	Black	None	.84	.775	.741	.707
629-GRS4023A009	GRS-4023A-0009	E	DPDT	On-Off-On	13A	Red	None	1.24	1.14	1.09	1.04
629-GRS4023C005	GRS-4023C-0005	E	DPDT	(On)-Off-(On)	13A	Red	None	2.76	2.65	2.53	2.41
629-GRS402210	GRS-4022-0010	E	DPDT	On-On	16A	Red	None	1.63	1.56	1.49	1.42
629-GRS4023A13	GRS-4023A-1300	E	DPDT	On-Off-On	13A	Black	None	1.17	1.07	1.02	.983
629-GRS4023C13	GRS-4023C-1300	E	DPDT	(On)-Off-(On)	13A	Black	None	1.33	1.27	1.21	1.15
629-GRS4121-0001	GRS 4121-0001	E	DPST	On-Off	8A	Red	None	.93	.862	.823	.786

## INDICON™ ROCKER SWITCHES

### Specifications:

- Ratings: 16A/125VAC; 12A/250VAC
- Housing and knob material: Nylon
- Terminal and contact material: Copper
- Two-color knob provides positive indication of switch position
- Economical alternative to expensive lighted switches

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CW Industries Part No.	Fig.	Type	Indicator Color	Panel Openings	Price Each			
						1	10	25	50
629-AA111B11	NAA-111-BI11-00	F1	SPST	Red	1.125 x .550	1.24	1.14	1.09	1.04
629-AA211B11	NAA-211-BI11-00	F1	SPST	Red	1.072 x .480	1.20	1.15	1.09	1.04
629-AA211B21	NAA-211-BI21-00	F2	SPST	Red	1.072 x .480	.98	.905	.865	.825
629-AA111B21	NAA-111-BI21-00	F2	SPST	Red	1.125 x .550	.98	.905	.865	.825
629-AA211B31	NAA-211-BI31-00	F3	SPST	Red	1.072 x .480	1.19	1.09	1.05	1.00
629-BA111B31	NBA-111-BI31-00	F3	SPDT	Red	1.125 x .550	1.21	1.12	1.07	1.02
629-BA211B31	NBA-211-BI31-00	F3	SPDT	Red	1.072 x .480	1.12	1.03	.988	.943

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DIMENSIONS: in.

**A**

**B**

**C**

**D**

**E**

**F**

<b>1</b>	On/Off Legend
<b>2</b>	I/O Legend
<b>3</b>	Blank (Color on Edge)

# E-SWITCH® Rocker Switches



## R1966 SERIES ROCKER SWITCHES

### Specifications:

- Contact Resistance: <10mΩ
- Rating: 15A @ 125V
- Dielectric Strength: >1500V for one minute, >3000V between poles
- Electric Life: 10,000 cycle
- Mechanical Life: 15,000 cycles
- Insulation Resistance: >1,000mΩ
- Contact Form: SPST

### Features:

- Black semi-gloss finish
- Contact Material: Coin silver, silver plated
- Terminal Material: Silver plated copper alloy



\* Contact form: SPDT

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Circuit	Housing	Actuator	Price Each			
						1	10	25	50
<b>Faston Terminal</b>									
612-R1966ABLKBLKEF	R1966ABLKBBLKEF	A	On-Off	Black	Black	1.14	1.04	1.00	.958
612-R1966FBKBLKEF	R1966FBBLKBBLKEF	A	(On)-Off	Black	Black	1.50	1.43	1.36	1.30
612-R1966ABLKBBLKIF	R1966ABLKBBLKIF	B	On-Off	Black	Black	1.14	1.04	1.00	.958
612-R1966ABKBKFF	R1966ABLKBBLKFF	C	On-Off	Black	Black	1.14	1.04	1.00	.958
612-R1966AGRYGYFF	R1966AGRYGYFF	C	On-Off	Gray	Gray	1.14	1.04	1.00	.958
612-R1966ABKBKG	R1966ABLKBBLKG	D	On-Off	Black	Black	1.14	1.04	1.00	.958
* 612-R1966DBKBKCF	R1966DBBLKBBLKCF	E	On-Off-On	Black	Black	1.74	1.66	1.59	1.51
<b>Solder Terminal</b>									
612-R1966ABLKBBLKES	R1966ABLKBBLKES	A	On-Off	Black	Black	1.14	1.04	1.00	.958
612-R1966ABKBKIS	R1966ABLKBBLKIS	B	On-Off	Black	Black	1.14	1.04	1.00	.958
612-R1966ABKBKFS	R1966ABLKBBLKFS	C	On-Off	Black	Black	1.14	1.04	1.00	.958
612-R1966ABKBKG	R1966ABLKBBLKG	D	On-Off	Black	Black	1.14	1.04	1.00	.958
<b>R/A PCB Terminal</b>									
612-R1966ABKBKFR	R1966ABLKBBLKFR	F	On-Off	Black	Black	1.37	1.31	1.25	1.19
612-R1966ABKBKG	R1966ABLKBBLKG	G	On-Off	Black	Black	1.37	1.31	1.25	1.19

## R1966 SERIES ILLUMINATED ROCKER SWITCHES

### Specifications:

- Contact Resistance: <10mΩ
- Rating: 15A @ 125V
- Dielectric Strength: >1500V for one minute, >3000V between poles
- Electric Life: 10,000 cycles
- Mechanical Life: 15,000 cycles
- Insulation Resistance: >100mΩ
- Contact Form: SPST

### Features:

- Contact Material: Coin silver, silver plated
- Terminal Material: Silver plated copper alloy



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Circuit	LED Color	Terminal	Price Each			
						1	10	25	50
612-R1966ABKBKEFR	R1966ABLKBBLKEFRED	H	On-Off	Red	Faston	1.72	1.64	1.57	1.49
612-R1966ABKBKEFG	R1966ABLKBBLKEFGRN	H	On-Off	Green	Faston	1.72	1.64	1.57	1.49
612-R1966ABKBKEFY	R1966ABLKBBLKEFYEL	H	On-Off	Yellow	Faston	1.72	1.64	1.57	1.49
612-R1966ABKBKESRED	R1966ABLKBBLKESRED	H	On-Off	Red	Solder	1.72	1.64	1.57	1.49
612-R1966ABKBKESG	R1966ABLKBBLKESGRN	H	On-Off	Green	Solder	1.72	1.64	1.57	1.49
612-R1966ABKBKESY	R1966ABLKBBLKESYEL	H	On-Off	Yellow	Solder	1.72	1.64	1.57	1.49
612-R1966ABKBKER	R1966ABLKBBLKERRED	H	On-Off	Red	R/A PCB	1.99	1.91	1.82	1.73

## R5 SERIES ROCKER SWITCHES

### Specifications:

- Contact Rating: 10A @ 250VAC, 15A @ 125VAC
- Mechanical Life: >30,000 cycles
- Electrical Life: >10,000 cycles
- Faston termination

### Features:

- Black housing
- Contact Material: Coin silver, silver plated



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Type	Circuit	Actuator	Price Each			
						1	10	25	50
612-R5ABLKBBLKEFO	R5ABLKBBLKEFO	I	DPST	On-Off	Black	1.55	1.48	1.41	1.35
612-R5CBLKBBLKEFO	R5CBLKBBLKEFO	I	DPDT	On-On	Black	1.93	1.85	1.77	1.68
612-R5DBLKBBLKEFO	R5DBLKBBLKEFO	I	DPDT	On-Off-On	Black	2.52	2.41	2.30	2.19
612-R5ABLKBBLKF0	R5ABLKBBLKF0	J	DPST	On-Off	Black	1.55	1.48	1.41	1.35
612-R5DBLKBBLKCF0	R5DBLKBBLKCF0	K	DPDT	On-Off-On	Black	2.52	2.41	2.30	2.19
612-R5DBLKBBLKHFO	R5DBLKBBLKHFO	L	DPDT	On-Off-On	Black	2.52	2.41	2.30	2.19

### Illuminated Switches

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Type	Circuit	Actuator	Price Each			
						1	10	25	50
<b>Neon Bulb Lamp Type with 125VAC</b>									
612-R5BBLKREDEF1	R5BBLKREDEF1	I	DPST	On-Off	Red	2.52	2.41	2.30	2.19
612-R5BBLKGRNEF1	R5BBLKGRNEF1	I	DPST	On-Off	Green	2.52	2.41	2.30	2.19
612-R5BBLKREDFF1	R5BBLKREDFF1	J	DPST	On-Off	Red	2.52	2.41	2.30	2.19
612-R5BBLKGRNFF1	R5BBLKGRNFF1	J	DPST	On-Off	Green	2.52	2.41	2.30	2.19
<b>Neon Bulb Lamp Type with 250VAC</b>									
612-R5BBLKREDFF2	R5BBLKREDFF2	J	DPST	On-Off	Red	2.52	2.41	2.30	2.19
612-R5BBLKGRNFF2	R5BBLKGRNFF2	J	DPST	On-Off	Green	2.52	2.41	2.30	2.19
<b>Incandescent Bulb Lamp Type with 12VDC</b>									
612-R5BBLKREDFF3	R5BBLKREDFF3	J	DPST	On-Off	Red	2.52	2.41	2.30	2.19
612-R5BBLKGRNFF3	R5BBLKGRNFF3	J	DPST	On-Off	Green	2.52	2.41	2.30	2.19

## RR SERIES ROCKER SWITCHES

### Specifications:

- Contact Rating: 10A @ 125V, 6A 250VAC
- Contact Resistance: 50mΩ max.

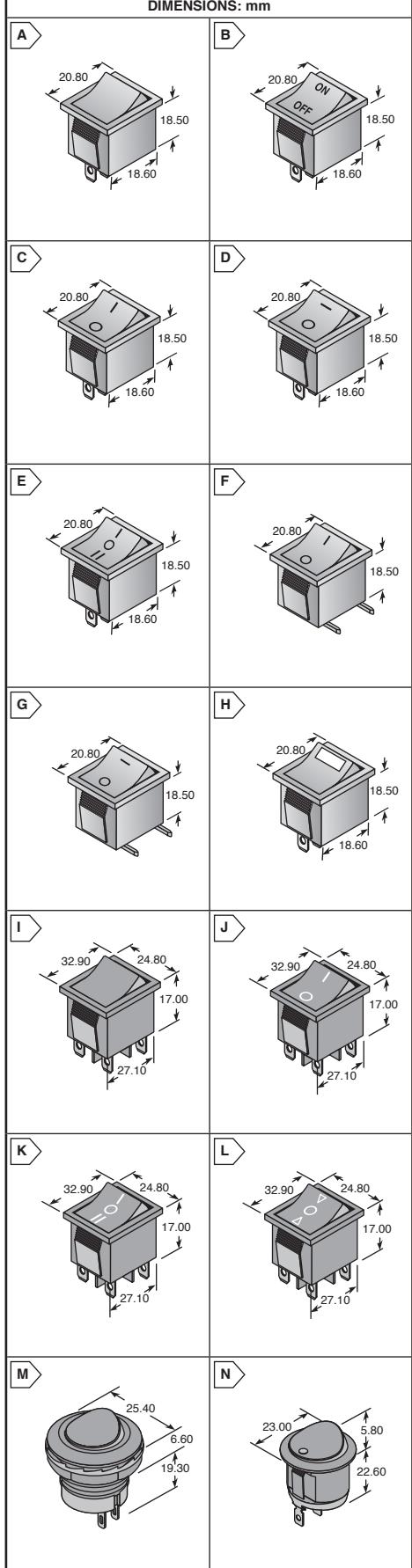
\* Dot marking

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	E-Switch Part No.	Fig.	Type	Circuit	Termin.	Price Each			
						1	10	25	50
612-RR3130A	RR3130ANOMARKING	M	SPST	On-Off	Solder	2.46	2.35	2.25	2.14
612-RR3130B	RR3130BNOMARKING	M	DPDT	On-On	Solder	3.45	3.37	3.21	3.05
* 612-RR3112ABLKBBLNAF	RR3112ABLKBBLNAF0	N	SPST	On-Off	Faston	1.24	1.14	1.09	1.04

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1915

# MARQUARDT Rocker Switches

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## 1550 SERIES ROCKER SWITCHES

- TO 16(4)A 250VAC
- Circuit: On/Off

• EN 60335 cap. 30 conform "G"

MOUSER STOCK NO.	Marquardt Part No.	Fig.	Contact Form	Miscellaneous	Actuator/LED Color	Termination	Price Each		
							1	10	25
979-1550.3609	1550.3609	A	SPST	Lower lying flange	Black/Red	Q.C.	9.15	8.77	8.33
* 979-1551.3102	1551.3102	A	SPST	Inrush Current (100A)	Black	Q.C.	2.45	2.36	2.22
979-1551.3103	1551.3103	A	SPST	Inrush Current (100A)	Black	Q.C.	2.62	2.53	2.38
979-1552.3102	1552.3102	B	DPST	Inrush Current (100A)	Black	Q.C.	3.68	3.53	3.36
979-1552.3602	1552.3602	B	DPST	Lower lying flange	Black	Q.C.	3.69	3.55	3.36
979-1552.4602	1552.4602	C	DPST	Lower lying flange	Black	Solder Pin	4.70	4.50	4.28
979-1555.3102	1555.3102	B	DPST	230V Lighting	Black/Red	Q.C.	5.56	5.33	5.06
979-1555.3104	1555.3104	B	DPST	230V Lighting	Black/Orange	Q.C.	5.47	5.25	4.98
979-1555.3108	1555.3108	B	DPST	230V Lighting	Black/Green	Q.C.	6.08	5.82	5.53
979-1555.3109	1555.3109	B	DPST	110V Lighting	Black/Green	Q.C.	5.82	5.57	5.30
979-1555.312	1555.312	B	DPST	110V Lighting	Black/Red	Q.C.	7.84	7.52	7.15

## 1800 SERIES ROCKER SWITCHES

- TO 12(4)A 250VAC
- Flammability Rating: UL94-V2
- Circuit: On/Off

For quantities greater than listed, call for quote.									
979-1800.1102	1800.1102	D	SPST	230V Lighting	Red Trans	Q.C.	3.68	3.53	3.35
979-1800.1108	1800.1108	D	SPST	230V Lighting	Green Trans	Q.C.	4.08	3.91	3.71
979-1801.1102	1801.1102	E	SPST	Inrush Current (50A)	Black	Q.C.	1.67	1.60	1.52
979-1801.1151	1801.1151	E	SPST	Flamm. UL94-V0	Black	Q.C.	3.29	3.16	3.00
979-1801.1908	1801.1908	E	SPST	Inrush Current (70A)	Black	Q.C.	2.02	1.95	1.85
979-1801.6122	1801.6122	F	SPST	Flamm. UL94-V0	Black	Solder Term.	2.17	2.10	1.99
979-1802.1102	1802.1102	G	DPST	Inrush Current (50A)	Black	Q.C.	2.74	2.63	2.50
979-1802.1123	1802.1123	G	DPST	Inrush Current (70A)	Black	Q.C.	3.47	3.33	3.16

## 1830 SERIES ROCKER SWITCHES

- TO 20(4)A 250VAC
- Circuit: On/Off

For quantities greater than listed, call for quote.									
979-1830.3112	1830.3112	H	SPST	230V Lighting	Red Trans	Q.C.	3.74	3.59	3.40
979-1831.1107	1831.1107	H	SPST	DIN 46244-A4.8 Plug	Black	Q.C.	2.20	2.11	2.01
979-1831.3312	1831.3312	H	SPST	Inrush Current (120A)	Black	Q.C.	2.44	2.34	2.22
979-1831.3402	1831.3402	H	SPST	DIN 46244-A6.3 Plug	Black	Q.C.	3.15	3.02	2.88
979-1831.3933	1831.3933	H	SPST	Inrush Current (120A)	Black	Q.C.	2.78	2.67	2.53
979-1832.1102	1832.1102	I	DPST	DIN 46244-A4.8 Plug	Black	Q.C.	3.74	3.58	3.41
979-1832.3312	1832.3312	I	DPST	Inrush Current (120A)	Black	Q.C.	4.38	4.21	3.99
979-1832.3602	1832.3602	I	DPST	Cover frame 33.2 long	Black	Q.C.	4.38	4.20	3.99
979-1835.3112	1835.3112	I	DPST	230V Lighting	Red Trans	Q.C.	6.48	6.22	5.90
979-1835.3118	1835.3118	I	DPST	230V Lighting	Green Trans	Q.C.	6.82	6.54	6.22

## 1855/1858 SERIES MINIATURE ROCKER SWITCHES

- TO 4(1)A 250VAC (Series 1855)
- TO 10(4)A 250VAC 1E4 (Series 1858)
- Circuit: On/Off

For quantities greater than listed, call for quote.									
979-1855.1102	1855.1102	J	DPST	230V Lighting	Red Trans	Q.C.	4.64	4.45	4.22
979-1855.1104	1855.1104	J	DPST	230V Lighting	Orange Trans	Q.C.	4.64	4.45	4.22
979-1855.1108	1855.1108	J	DPST	230V Lighting	Green Trans	Q.C.	5.09	4.89	4.64
979-1855.1122	1855.1122	J	DPST	110V Lighting	Green Trans	Q.C.	5.37	5.14	4.88
979-1858.0104	1858.0104	K	DPST	White Markings	Black	Solder Term.	3.02	2.90	2.76
979-1858.1102	1858.1102	L	DPST	No Markings	Black	Q.C.	2.95	2.83	2.70
979-1858.1103	1858.1103	L	DPST	White Markings	Black	Q.C.	2.78	2.67	2.54
979-1858.4205	1858.4205	M	DPST	White Markings	Black	Solder Pin	3.31	3.17	3.01

## 1881 SERIES ROUND ROCKER SWITCH

- TO 12(4)A 250VAC
- Circuit: On/Off

For quantities greater than listed, call for quote.									
979-1881.1104	1881.1104	N	SPST	Inrush Current (70A)	Red	Q.C.	2.12	2.02	1.93

## 1900 SERIES SMALLEST ROCKER SWITCHES

- TO 6(2)A 250VAC
- Circuit: On/Off

For quantities greater than listed, call for quote.									
979-1901.1102	1901.1102	O	SPST	21mm Bezel	Black	Q.C.	1.97	1.90	1.79
979-1901.1103	1901.1103	O	SPST	Silver Markings	Black	Q.C.	1.99	1.92	1.82
979-1911.1102	1911.1102	O	SPST	25mm bezel	Black	Q.C.	2.61	2.51	2.37

## 1935 SERIES ROCKER SWITCHES

- TO 20(4)A 250VAC
- Circuit: On/Off

For quantities greater than listed, call for quote.									
979-1932.3112	1932.3112	P	DPST	Inrush Current (120A)	Black	Q.C.	5.14	4.92	4.67
979-1935.3112	1935.3112	P	DPST	250V Lighting	Red Trans	Q.C.	7.08	6.79	6.44
979-1935.3113	1935.3113	P	DPST	250V Lighting	Colorless Trans	Q.C.	7.34	7.04	6.68
979-1935.3118	1935.3118	P	DPST	250V Lighting	Green Trans	Q.C.	7.76	7.44	7.07

## 3250 SERIES HARSH ENVIRONMENTS ROCKER SWITCHES

- TO 20(10)A 24VDC 1E5
- Circuit: On/Off

For quantities greater than listed, call for quote.									
979-3251.0002	3251.0002	Q	SPST	24V Lighting	Black/Red/Gr	Q.C.	24.89	23.87	22.65
979-3251.0004	3251.0004	Q	SPST	12V Lighting	Black/Green	Q.C.	28.51	27.36	25.96
979-3251.0005	3251.0005	Q	SPST	24V Lighting	Black/Green	Q.C.	22.58	21.64	20.55

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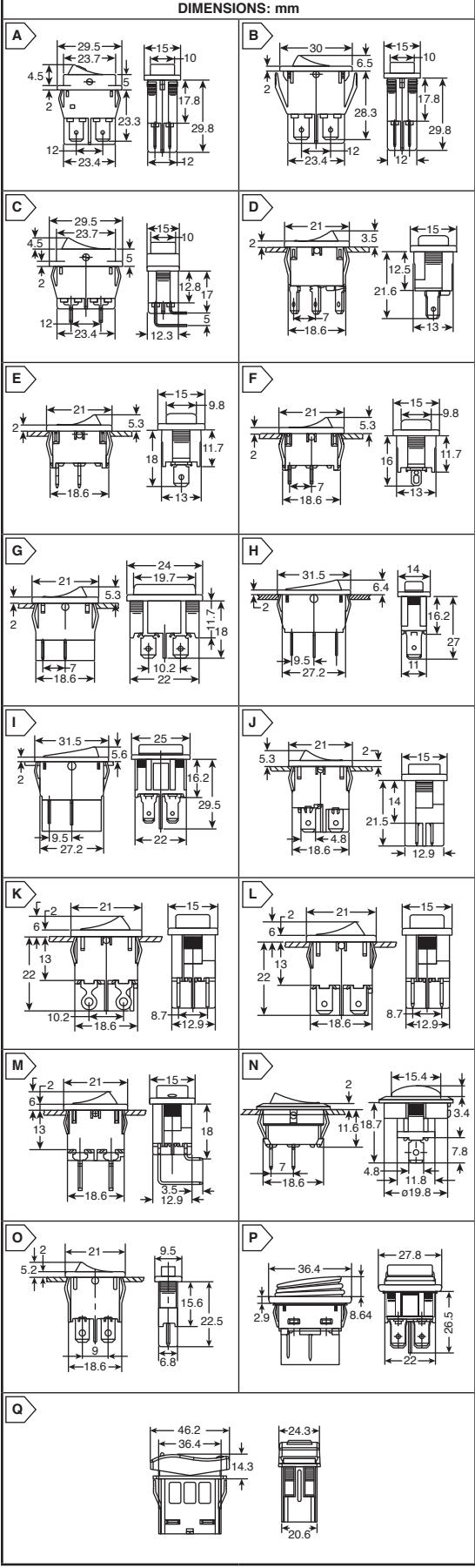
1916

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# NKK Rocker Switches

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**NKK**  
SWITCHES

## CW SERIES: SNAP-IN POWER ROCKERS

Power Rating: • CWSA & CWSB: 6A @ 250VAC • CWT: 6A @ 125V AC; 3A @ 250VAC



c CWT CWSA & CWSB

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Inscription	Termination	Price Each			
						1	25	50	100
633-CWSA12AANS	CWSA12AANS	A	SPDT On-None-On	None	Solder lug	1.80	1.77	1.74	1.69
633-CWSB11AAF	CWSB11AAF	B	SPST On-None-Off	None	Quick connect	3.41	2.08	1.85	1.81
633-CWSB11AA1F	CWSB11AA1F	B	SPST On-None-Off	Horizontal	Quick connect	1.80	1.68	1.63	1.58
633-CWSB11AA2F	CWSB11AA2F	B	SPST On-None-Off	Vertical	Quick connect	1.78	1.53	1.44	1.37
633-CWSB11AA3F	CWSB11AA3F	B	SPST On-None-Off	Dot	Quick connect	2.03	1.93	1.82	1.71
633-CWSB21AA1F	CWSB21AA1F	B	DPST On-None-Off	Horizontal	Quick connect	2.72	2.67	2.62	2.54
633-CWSB21AA2F	CWSB21AA2F	B	DPST On-None-Off	Vertical	Quick connect	2.72	2.67	2.62	2.19
633-CWT12AAS1	CWT12AAS1	C	SPDT On-None-On	None	Solder lug	2.11	1.71	1.60	1.52

## CW SERIES: ILLUMINATED SNAP-IN MINIATURE ROCKERS

### Single Element LED Specifications

Color	Red	Green
Forward Peak Current	30mA	30mA
Continuous Forward Current	20mA	20mA
Forward Voltage	1.95V	2.1V
Reverse Peak Voltage	5V	5V
Current Reduction Rate Above 25°C	0.41mA/C	0.39mA/C
Ambient Temperature Range	-10~+50°C	

### Neon Lamp Specifications

Color	Red	Green
Voltage AC	125V	125V
Internal Series Resistance	39KΩ	68KΩ
Current	1.4mA	0.6mA
Endurance (Hours)	15,000	8,000

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Illumination	Rocker Description	Price Each			
						1	25	50	100
<b>LED Illumination, Power Rating: 9A @ 125V AC or 6A @ 250V AC</b>									
633-CWSC11JCACS	CWSC11JCACS	D	SPST On-None-Off	Red	Clear/Red Diffuser	3.63	3.55	3.51	3.36
633-CWSC11JFAFS	CWSC11JFAFS	D	SPST On-None-Off	Green	Clear/Green Diffuser	3.63	3.57	3.51	3.40
633-CWSC21JCACS	CWSC21JCACS	D	DPST On-None-Off	Red	Clear/Red Diffuser	5.77	5.66	5.59	5.18
633-CWSC21JFAFS	CWSC21JFAFS	D	DPST On-None-Off	Green	Clear/Green Diffuser	6.28	6.18	6.08	5.18
<b>Neon Illumination, Power Rating: 9A @ 125V AC</b>									
633-CWSB21CACF	CWSB21CACF	E	DPST On-None-Off	Red	Red	2.88	2.77	2.68	2.60
633-CWSB21FAFF	CWSB21FAFF	E	DPST On-None-Off	Green	Green	3.69	3.64	3.58	3.35

## JW SERIES: HIGH INRUSH TV RATED ROCKERS

Power Rating:

### Terminations:

- JWM: TV-5 Rated 10A @ 125/250VAC
- JWL: TV-8 Rated 16A @ 125/250VAC
- JWM: .110" solder/quick connect
- JWL: .187" solder/quick connect



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Cap Color	Inscription	Price Each			
						1	25	50	100
633-JWM11RAA	JWM11RAA	F	SPST On-Off	Black	None	5.04	4.69	4.22	4.13
633-JWM11BA1-A	JWM11BA1-A	F	SPST On-Off	Black	Horizontal	7.27	6.88	6.67	6.48
633-JWM11BA2-A	JWM11BA2-A	F	SPST On-Off	Black	Vertical	7.27	6.88	6.67	6.48
633-JWM11RC2A	JWM11RC2A	F	SPST On-Off	Red	Vertical	6.12	5.56	5.23	4.88
633-JWM21BA1-A	JWM21BA1-A	F	DPST On-Off	Black	Horizontal	7.34	7.12	7.11	6.66
633-JWM21BA2-A	JWM21BA2-A	F	DPST On-Off	Black	Vertical	7.58	7.35	7.13	6.91
633-JWM21RA2A	JWM21RA2A	F	DPST On-Off	Black	Vertical	7.56	7.34	7.12	6.27
633-JWM22RAA	JWM22RAA	F	DPDT On-On	Black	None	9.27	8.06	6.59	6.17
633-JWM22BAA-A	JWM22BAA-A	F	DPST On-On	Black	None	9.60	8.74	8.22	7.70
633-JWM22RAA/UCV	JWM22RAA/UCV	F	DPDT On-On	Black	None	8.04	7.04	6.81	6.48
633-JWM22RCA/UCV	JWM22RCA/UCV	F	DPDT On-On	Black	None	8.60	7.30	7.08	6.72
633-JWM22RCA	JWM22RCA	F	DPDT On-On	Red	None	8.87	8.06	7.58	7.09
633-JWS11BAAF-A	JWS11BAAF-A	G	DPST On-Off	Black	None	5.75	5.53	5.24	4.95
633-JWS21BCA-A	JWS21BCA-A	G	DPST On-Off	Red	None	7.03	6.64	6.22	5.89
633-JWS21RAA	JWS21RAA	G	DPST On-Off	Black	None	5.10	4.77	4.49	4.21
633-JWL11RAA	JWL11RAA	H	SPST On-Off	Black	None	7.49	6.16	5.83	5.65
633-JWL11BA2-A	JWL11BA2-A	H	SPST On-Off	Black	None	9.00	8.52	8.28	8.03
633-JWL11BCA-H	JWL11BCA-H	H	SPST On-Off	Red	None	7.64	7.25	6.75	5.95
633-JWL11RA2A	JWL11RA2A	H	SPST On-Off	Black	Vertical	9.66	7.86	7.62	6.72
633-JWL21BA2-A	JWL21BA2-A	H	DPST On-Off	Black	None	10.64	10.53	10.43	10.34
633-JWL21RA1A	JWL21RA1A	H	DPST On-Off	Black	Horizontal	10.98	10.66	10.35	9.12
633-JWL21RA2A	JWL21RA2A	H	DPST On-Off	Black	Vertical	10.98	10.66	10.35	9.12
633-JWL22RAA	JWL22RAA	H	DPDT On-On	Black	None	10.75	9.75	9.16	8.57
633-JWL22BAA-A	JWL22BAA-A	H	DPDT On-On	Black	None	11.99	11.61	11.48	10.96
633-JWL22RCA	JWL22RCA	H	DPDT On-On	Red	None	12.79	11.60	10.90	10.19

### JWLW: IP67 of IEC60529 Standards

633-JWLW21RA1A	JWLW21RA1A	I	DPST On-Off	Black	Horizontal	12.54	11.39	10.45	9.36
633-JWLW21RC1A	JWLW21RC1A	I	DPST On-Off	Red	Horizontal	12.54	11.39	10.45	9.65
633-JWLW22RCA	JWLW22RCA	I	DPDT On-On	Red	None	13.48	11.79	11.72	10.44
633-JWMW11RA1A	JWMW11RA1A	F	SPST On-Off	Black	Horizontal	7.75	6.48	6.22	5.72
633-JWMW21RA2A	JWMW21RA2A	F	DPST On-Off	Black	Vertical	9.76	7.82	7.41	7.20

## SW SERIES: MEDIUM AND HIGH CAPACITY ROCKER SWITCHES

### Specifications:

- Solder and screw lug terminals available
- Screw lug includes screws and mounting hardware
- Long electrical and mechanical life
- Actuator Color: White

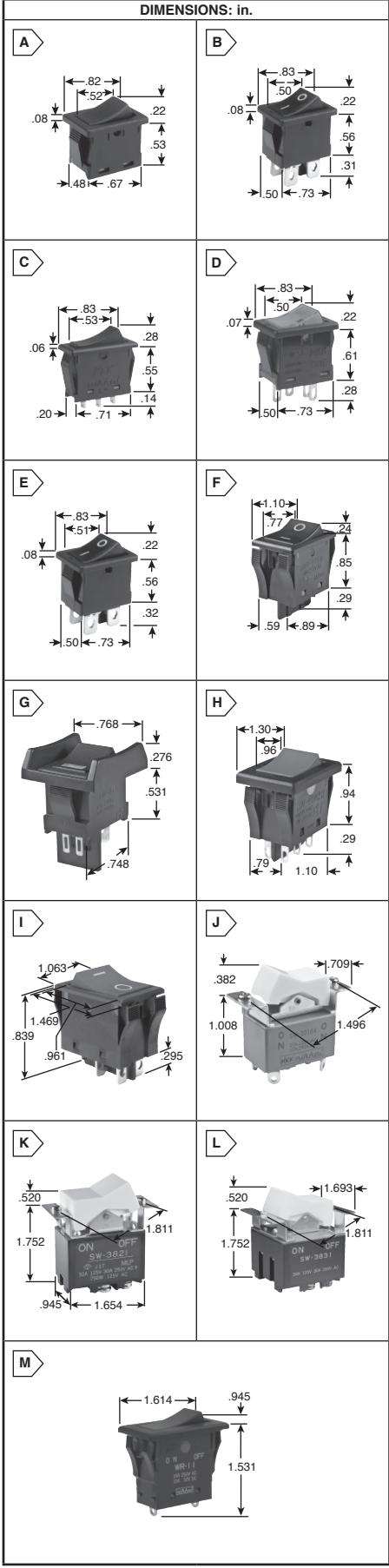


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For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Resistive Load (-) = Momentary	AC 125V AC 250V AC 30V	Inductive PF 0.6	Price Each			
							1	25	50	100
<b>Medium Capacity, Solder Lug Termination</b>										
633-SW3006A	SW3006A	J	DPDT On-None-On	20A	10A	20A	10A	6.60	5.99	5.50
633-SW3007A	SW3007A	J	DPDT On-Off-On	15A	6A	15A	10A	7.04	6.40	5.87
633-SW3008A	SW3008A	J	DPDT (On)-None-(On)	15A	6A	15A	10A	8.52	7.74	7.10
<b>High Capacity, Screw Lug Termination</b>										
633-SW3821	SW3821	K	DPST On-None-Off	30A	30A	30A	30A	25.24	22.91	21.04
633-SW3822	SW3822	K	DPDT On-None-On	30A	30A	30A	30A	26.18	23.76	21.82
633-SW3831	SW3831	L	3PST On-None-Off	30A	30A	30A	30A	37.84	34.34	31.54
633-SW3833	SW3833	L	3PDT On-Off-On	30A	30A	30A	30A	34.44	32.13	31.17



# ALCOSWITCH Slide Switches

**TE** Authorized  
connectivity Distributor

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## ASE/F SERIES: SLIDE SWITCHES

### Specifications:

- Terminal seal: Insert molded
- Contact resistance: 40mΩ max.
- Contact timing: Shorting
- Contact rating: Gold, 0.4VA; Silver, 300mA @ 115VAC

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Alcoswitch Part No.	Fig.	Dimension L	Contact Form	Contact Material	Price Each		
							1	10	25
<b>Extended Actuator, Open Ended Case, Natural</b>									
506-ASE2204	1825010-1	ASE2204	A	10.2	DPDT	Silver	5.10	5.00	4.55
506-ASE22G04	1825010-2	ASE22G04	A	10.2	DPDT	Gold	5.87	5.36	5.13
506-ASE4204	1-1825010-3	ASE4204	A	17.8	4PDT	Silver	3.74	3.58	3.35
506-ASE6204	3-1825010-7	ASE6204	A	25.4	6PDT	Silver	6.20	5.90	5.50
<b>Flush Actuator, Tape Seal, Sealed Case</b>									
506-ASF4204	2-1825011-1	ASF4204	B	17.8	4PDT	Silver	3.72	3.31	2.99

## MSS SERIES: INSTRUMENTATION GRADE SLIDE SWITCHES

- Contact rating: Gold: 0.4VA @ 20VDC  
Silver - 300mA @ 125VAC
- Contact material: Gold or silver over nickel
- Contact timing: Make-before-break

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Alcoswitch Part No.	Fig.	Contact Form	Mounting Style	Contact Material	Price Each		
							1	10	25
506-MSS120004	1825257-1	MSS120004	C	SPDT	Vertical	Silver	2.10	1.98	1.73
506-MSS2200G04	1825261-2	MSS2200G04	C	DPDT	Vertical	Gold	1.24	1.16	1.12
506-MSS2250R04	1571630-2	MSS2250R04	D	DPDT	Right angle	Silver	2.06	1.89	1.75
506-MSS420004	1825264-1	MSS420004	E	4PDT	Vertical	Silver	1.83	1.74	1.66
506-MSS4200G04	1825264-2	MSS4200G04	E	4PDT	Vertical	Gold	1.72	1.59	1.56

## SLS SERIES: MINIATURE, ROLLING CONTACT SLIDE SWITCHES

- Contact timing: Break-before-make
- Contact material: Ag over Ni over Cu alloy
- Contact rating: 250mA @ 125VAC

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Alcoswitch Part No.	Fig.	Contact Form	Mounting Style	Contact Material	Price Each		
							1	10	25
506-SLS121PC04	1825115-1	SLS121PC04	F	SPDT	Vertical	.90	.81	.73	
506-SLS121RA04	1825116-1	SLS121RA04	G	SPDT	Right angle	1.60	1.50	1.39	
506-SLS131PC04	1825117-1	SLS131PC04	H	SP3T	Vertical	4.08	3.62	3.29	
506-SLS131RA04	1825118-1	SLS131RA04	I	SP3T	Right angle	2.48	2.29	2.16	

## SSA SERIES: MICRO SIZE INSTRUMENTATION GRADE SLIDE SWITCHES

- Contact timing: Break-before-make
- Contact rating: Gold - 250mA @ 20VDC  
Silver - 100mA @ 30 VDC
- Case material: Polyester UL94V-0
- Contact material: Silver or gold plate

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Alcoswitch Part No.	Fig.	Contact Form	Contact Material	Price Each			
						1	10	25	
506-SSA12	1-1437575-4	SSA12	J	SPDT	Silver	1.36	1.27	1.16	
506-SSA12G	1-1437575-5	SSA12G	J	SPDT	Gold	2.91	2.59	2.35	
506-SSA22	1-1437575-6	SSA22	K	DPDT	Silver	2.40	2.29	2.19	
506-SSA22G	1-1437575-7	SSA22G	K	DPDT	Gold	3.45	3.33	3.05	

## TSS SERIES: SLIDE SWITCHES

- Case material: Polyester UL94V-0
- Contact material: Cu with Au over Ni
- Contact rating: 250mA @ 20VDC
- Contact timing: Non-shorting
- Switch function: On-None-On

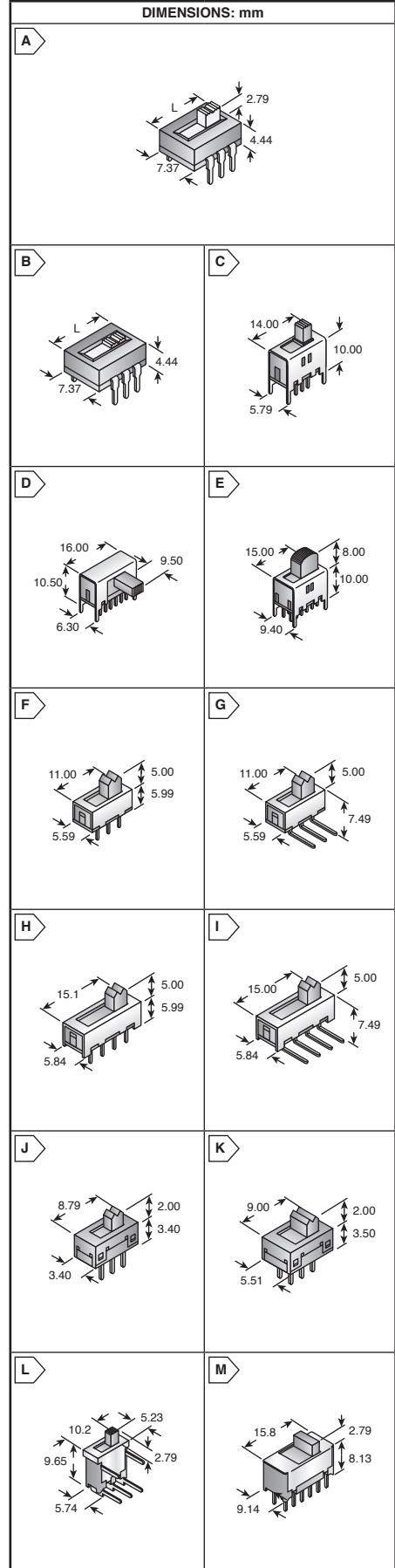
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Alcoswitch Part No.	Fig.	Contact Form	Mounting Style	Price Each			
						1	10	25	
506-TSS11DGRA04	1571984-1	TSS11DGRA04	L	SPDT	Right angle	5.63	4.99	4.54	
506-TSS41NGPC	2-1437579-5	TSS41NGPC	M	4PDT	Vertical	16.10	14.64	14.27	

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1918

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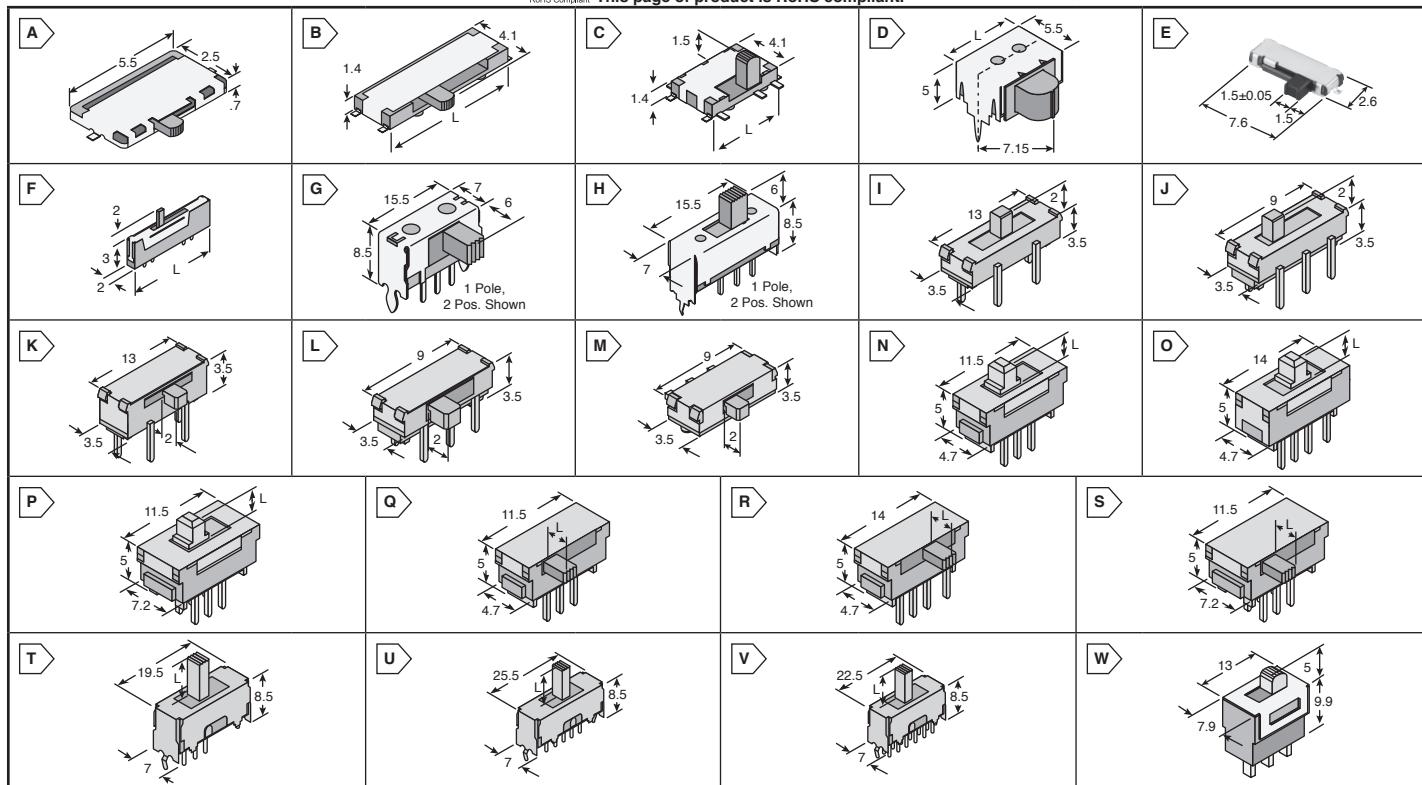
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# ALPS Slide Switches

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**ALPS**



DIMENSIONS: mm

## SLIDE SWITCHES

**ALPS**

**Slide Switches**

MOUSER STOCK NO.	Alps Part No.	Fig.	Travel (mm)	No. of Poles	No. of Pos.	Contact Rating	Mounting Style	Actuation Direction	Changeover Timing	Location	Dim. L (mm)	Features	Price Each			
													1	50	100	500
688-SSAJ110100	SSAJ110100	A	1.4	1	2	10mA @ 5VDC	SMD	Horizontal	Not Specified	Yes	-	Compact	.46	1.31	1.17	1.11
688-SSAJ120100	SSAJ120100	A	1.4	1	2	10mA @ 5VDC	SMD	Horizontal	Not Specified	No	-	Compact	.69	.593	.455	.385
688-Ssss811101	SSS811101	B	1.5	1	2	0.3A @ 4VDC	SMD	Horizontal	Not specified	Yes	6.7	With ground	.71	.50	.45	.33
688-Ssss810201	SSS810201	B	1.5	1	2	0.3A @ 4VDC	SMD	Horizontal	Not specified	Yes	9.7	With ground	.99	.70	.63	.47
688-Ssss820201	SSS820201	C	1.5	2	2	0.3A @ 4VDC	SMD	Vertical	Not specified	Yes	6.7	With ground	1.16	.825	.737	.55
688-Ssss820501	SSS820501	C	1.5	2	3	0.3A @ 4VDC	SMD	Vertical	Not specified	Yes	9.7	With ground	1.31	.934	.835	.626
688-SSAC120100	SSAC120100	D	1.5	2	2	1mA @ 5VDC	PCB	Horizontal	Non-shorting	-	9.5	With external knob	.49	.35	.18	.14
688-SSAC120200	SSAC120200	D	1.5	2	3	1mA @ 5VDC	PCB	Horizontal	Not specified	-	11	With external knob	.60	.421	.379	.284
688-SSAL120100	SSAL120100	E	2.0	1	2	10mA @ 5VDC	SMD	Horizontal	Not specified	No	7.6	-	.86	.78	.691	.656
688-SSAL220100	SSAL220100	E	2.0	1	2	10mA @ 5VDC	SMD	Horizontal	Not specified	No	7.6	-	.86	.78	.691	.656
688-Ssss711403	SSS711403	F	2.0	1	3	0.3A @ 4VDC	PCB	Horizontal	Non-shorting	-	12.5	Standard type	1.58	1.12	1.00	.746
688-Ssss7A0101	SSS7A0101	F	2.0	1	3	0.3A @ 4VDC	PCB	Horizontal	Non-shorting	-	12.5	Single-side recoil	2.19	1.89	1.59	1.40
688-Sssf111800	SSSF111800	G	2.0	1	2	0.1A @ 30VDC	PCB	Horizontal	Non-shorting	-	-	Large size, general purpose	1.06	.75	.40	.39
688-Sssf114900	SSSF114900	G	2.0	1	3	0.1A @ 30VDC	PCB	Horizontal	Non-shorting	-	-	Large size, general purpose	1.20	.85	.46	.44
688-Sssf121900	SSSF121900	G	2.0	2	2	0.1A @ 30VDC	PCB	Horizontal	Non-shorting	-	-	Large size, general purpose	1.41	.99	.542	.522
688-Sssf011700	SSSF011700	H	2.0	1	2	0.1A @ 30VDC	PCB	Vertical	Non-shorting	-	-	Large size, general purpose	1.06	.75	.40	.39
688-Sssf014800	SSSF014800	H	2.0	1	3	0.1A @ 30VDC	PCB	Vertical	Non-shorting	-	-	Large size, general purpose	1.20	.85	.46	.44
688-Sssf021500	SSSF021500	H	2.0	2	2	0.1A @ 30VDC	PCB	Vertical	Non-shorting	-	-	Large size, general purpose	1.41	1.00	.54	.52
688-Ssss211900	SSS211900	I	2.0	1	3	0.3A @ 6VDC	PCB	Vertical	Non-shorting	-	-	High density mounting	1.16	.823	.439	.428
688-Ssss227000	SSS227000	J	2.0	2	2	0.3A @ 6VDC	PCB	Vertical	Non-shorting	-	-	High density mounting	1.15	.818	.47	.45
688-Ssss212200	SSS212200	K	2.0	1	3	0.3A @ 6VDC	PCB	Horizontal	Non-shorting	-	-	High density mounting	1.16	.823	.439	.428
688-Ssss223200	SSS223200	L	2.0	2	2	0.3A @ 6VDC	PCB	Horizontal	Non-shorting	-	-	High density mounting	1.15	.817	.736	.541
688-Ssss211603	SSS211603	M	2.0	1	2	0.3A @ 6VDC	SMD	Horizontal	Non-shorting	-	-	High density mounting	.43	.379	.342	.31
688-Ssss912000	SSS912000	N	2.0	1	2	0.1A @ 12VDC	PCB	Vertical	Non-shorting	-	2	High operability	.85	.60	.38	.34
688-Ssss912500	SSS912500	N	2.0	1	2	0.1A @ 12VDC	PCB	Vertical	Non-shorting	-	4	High operability	.76	.539	.485	.359
688-Ssss919500	SSS919500	O	2.0	1	3	0.1A @ 12VDC	PCB	Vertical	Not specified	-	2	High operability	.91	.649	.398	.38
688-Ssss919800	SSS919800	O	2.0	1	3	0.1A @ 12VDC	PCB	Vertical	Not specified	-	4	High operability	.99	.70	.43	.41
688-Ssss922000	SSS922000	P	2.0	2	2	0.1A @ 12VDC	PCB	Vertical	Non-shorting	-	2	High operability	1.07	.763	.686	.505
688-Ssss922500	SSS922500	P	2.0	2	2	0.1A @ 12VDC	PCB	Vertical	Non-shorting	-	4	High operability	1.13	.80	.72	.53
688-Ssss916900	SSS916900	Q	2.0	1	2	0.1A @ 12VDC	PCB	Horizontal	Non-shorting	-	2	High operability	.84	.599	.539	.399
688-Ssss916400	SSS916400	Q	2.0	1	2	0.1A @ 12VDC	PCB	Horizontal	Non-shorting	-	4	High operability	.85	.60	.35	.25
688-Ssss91B900	SSS91B900	R	2.0	1	3	0.1A @ 12VDC	PCB	Horizontal	Not specified	-	2	High operability	.91	.649	.398	.38
688-Ssss91B600	SSS91B600	R	2.0	1	3	0.1A @ 12VDC	PCB	Horizontal	Not specified	-	4	High operability	.99	.70	.43	.38
688-Ssss926400	SSS926400	S	2.0	2	2	0.1A @ 12VDC	PCB	Horizontal	Non-shorting	-	2	High operability	1.07	.763	.686	.505
688-Ssss925800	SSS925800	S	2.0	2	2	0.1A @ 12VDC	PCB	Horizontal	Non-shorting	-	4	High operability	1.07	.763	.686	.505
688-Sssu011700	SSSU011700	T	3.0	1	2	0.1A @ 30VDC	Snap-in PCB	Vertical	Non-shorting	-	6	Large size, general purpose	.95	.674	.602	.449
688-Sssu012200	SSSU012200	T	3.0	1	2	0.1A @ 30VDC	Snap-in PCB	Vertical	Non-shorting	-	9	Large size, general purpose	.95	.674	.602	.449
688-Sssu014800	SSSU014800	U	3.0	1	3	0.1A @ 30VDC	Snap-in PCB	Vertical	Non-shorting	-	6	Large size, general purpose	1.29	.917	.82	.615
688-Sssu022800	SSSU022800	T	3.0	2	2	0.1A @ 30VDC	Snap-in PCB	Vertical	Non-shorting	-	9	Large size, general purpose	1.64	1.16	1.05	.77
688-Sssu042100	SSSU042100	V	3.0	4	2	0.1A @ 30VDC	Snap-in PCB	Vertical	Non-shorting	-	9	Large size, general purpose	5.09	3.61	3.23	2.40

## POWER SLIDE SWITCH

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Alps Part No.	Fig.	Travel (mm)	Contact Form	Contact Rating	Mounting Style	Actuation Direction	Operating Force	Features	Price Each			
										1	50	100	500
688-Dkta20100	SDKTA20100	W	2.2	SPDT	6A @ 125 VAC	PCB	Vertical	0.98±3.92N	Smooth sliding operation	3.16	2.23	2.01	1.49

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# C&K Slide Switches

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## AYZ SERIES: MINIATURE SLIDE SWITCHES

### Specifications:

- Dielectric Strength: 0.1kV @ 50Hz/1 Min.
- Max Switching Voltage: 12VDC
- PC thru-hole termination
- Max Switching Power: 1.2VA
- Max. Switching Current: 100mA
- Silver plated contacts

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit	Price Each			
					1	25	50	100
611-AYZ0102AGRLC	AYZ0102AGRLC	A	SPDT	On-On	.85	.819	.764	.728
611-AYZ0202AGRLC	AYZ0202AGRLC	B	DPDT	On-On	1.22	1.19	1.11	1.06

## ES SERIES: SEALED TINY SLIDE SWITCHES

### Specifications:

- Actuator Height: .121"
- Mechanical and Electrical Life: 40,000 make-and-break cycles at full load
- Contact Rating: 0.4VA Max. @ 20VAC or DC Max.
- Lead free
- Dielectric Strength: 500Vrms Min.



LEAD-FREE

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit	Price Each			
					1	25	50	100
<b>PC Thru-Hole</b>								
611-ES21MCBE	ES21MCBE	C	DPDT	On-None-On	6.47	6.17	5.78	5.55
<b>Right-Angle PC Thru-Hole</b>								
611-ES22MABE	ES22MABE	D	DPST	Off-None-On	8.65	8.27	7.72	7.42
611-ES01MABE	ES01MABE	E	SPDT	On-None-On	5.84	5.62	5.27	5.07
<b>Right-Angle Surface Mount</b>								
611-ES03MSABE	ES03MSABE	F	SPDT	On-Off-On	6.70	5.86	5.60	5.21

## OS SERIES: MINIATURE SLIDE SWITCHES

### Specifications:

- Dielectric Strength: 500VAC for 1 minute
- Mechanical and Electrical Life: 10,000 cycles
- Contact Rating: 0.2A @ 30VDC
- PC and panel mounting
- \* Non-Shorting \*\*: Shorting
- Shorting or Non-shorting contacts
- Variety of actuators and terminations

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit	Price Each			
					1	25	50	100
<b>Vertical Termination</b>								
* 611-OS102011MS2QN1	OS102011MS2QN1	G	SPDT	On-On	.38	.369	.334	.312
** 611-OS102011MS2QS1	OS102011MS2QS1	G	SPDT	On-On	.39	.32	.301	.272
611-OS103011MS8QP1	OS103011MS8QP1	H	SP3T	On-On-On	.46	.429	.383	.366
611-OS103012MU1QP1	OS103012MU1QP1	I	SP3T	On-On-On	.58	.556	.525	.508
611-OS103012MU2QP1	OS103012MU2QP1	J	SP3T	On-On-On	.58	.576	.526	.495
* 611-OS202011MS2QN1	OS202011MS2QN1	K	DPDT	On-On	.68	.56	.509	.482
** 611-OS202011MS2QS1	OS202011MS2QS1	K	DPDT	On-On	.63	.51	.462	.45
* 611-OS202011MV4QN1	OS202011MV4QN1	L	DPDT	On-On	.61	.569	.545	.522
* 611-OS202013MT5QN1	OS202013MT5QN1	M	DPDT	On-On	.56	.473	.398	.346
* 611-OS202013MT8QN1	OS202013MT8QN1	N	DPDT	On-On	.59	.568	.537	.481
611-OS203011MS1QP1	OS203011MS1QP1	O	DP3T	On-On-On	.79	.67	.618	.592
* 611-OS203013MT6QN1	OS203013MT6QN1	P	DP3T	On-On-On	.39	.381	.329	.304
<b>Right-Angle Termination</b>								
611-OS102011MA1QN1	OS102011MA1QN1	Q	SPDT	On-On	.40	.353	.309	.298
** 611-OS102011MA1QS1	OS102011MA1QS1	Q	SPDT	On-On	.43	.353	.314	.293
611-OS103011MA7QP1	OS103011MA7QP1	R	SP3T	On-On-On	.47	.44	.397	.378
* 611-OS202011MA0QN1	OS202011MA0QN1	S	DPDT	On-On	.62	.518	.453	.43
** 611-OS202011MA0QS1	OS202011MA0QS1	S	DPDT	On-On	.48	.41	.369	.29
611-OS203011MA2QP1	OS203011MA2QP1	T	DP3T	On-On-On	.53	.505	.474	.427

## LP SERIES: MINIATURE SNAP-IN SLIDE SWITCHES

### Specifications:

- Dielectric Strength: 1000Vrms Min. @ sea level
- Easy Assembly - Snap-In Mounting
- Contact Rating: 6A @ 125VAC
- Contamination resistant - extended actuator

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit	Price Each			
					1	25	50	100
611-LP02C31T203DQ	LP02C31T203DQ	U	SPDT	On-Off	3.46	2.79	2.56	2.47
611-LP22C31T203DQ	LP22C31T203DQ	U	DPDT	On-Off	4.12	3.68	3.28	3.20

## SK SERIES: SIDE KNOB SLIDE SWITCHES

### Features:

- 10,000 cycles
- Fully automatic assembly and inspection

### Typical Applications:

- Volume control switch for phone

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit	Rating	Price Each			
						1	25	100	250
611-SK12C0405SG1.5RT	SK-12C0405-SG 1.5 RT	V	SPDT	On-On	0.3A @ 4VDC	.96	.866	.77	.654
611-SK-12F17-G7	SK-12F17-G 7	W	SPDT	On-On	0.3A @ 30VDC	.52	.488	.416	.405
611-SK-13D26-G.6.5KGY	SK-13D26-G 6.5 K G Y	X	SP3T	On-On-On	0.3A @ 30VDC	.65	.546	.52	.507
611-SK-14D01-G6	SK-14D01-G 6	Y	4P4T	On-On-On-On	0.3A @ 30VDC	.31	.286	.244	.237
611-SK-14D07-VG6	SK-14D07-VG 6	Y	SP4T	On-On-On-On	0.3A @ 30VDC	.45	.42	.36	.351
611-SK-23H11-G9S	SK-23H11-G 9 S	Z	DP3T	On-On	0.3A @ 30VDC	1.00	.84	.80	.78

## SS SERIES: SLIDE SWITCHES

### Features:

- Miniature slide switch
- 10,000 cycles

### Typical Applications:

- Industrial control, sensor control machine, etc.

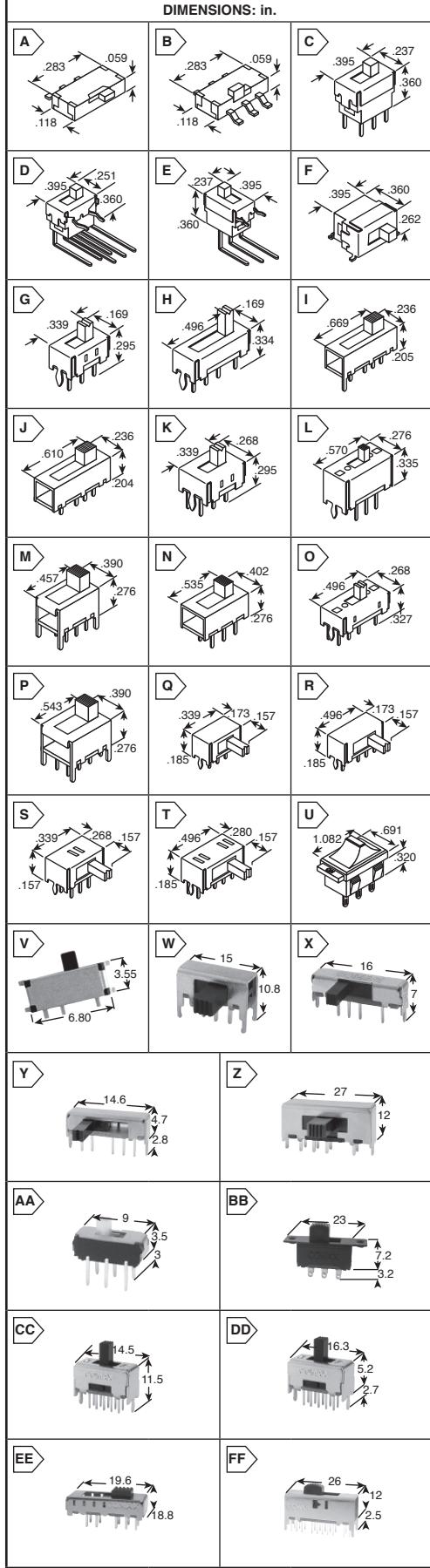
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit	Rating	Price Each			
						1	25	100	250
611-SS-22D0205-G2	SS-22D0205-G 2	AA	DPDT	On-On	0.3A @ 6VDC	.85	.80	.682	.664
611-SS-22F02-DG6L	SS-22F02-DG 6 (L)	BB	DPDT	On-On	0.3A @ 30VDC	.70	.658	.56	.546
611-SS-23D28-G5NS	SS-23D28-G 5 NS	CC	DP3T	On-On-On	0.3A @ 30VDC	.75	.63	.60	.585
611-SS-23E06-G5	SS-23E06-G 5	DD	DP3T	On-On-On	0.3A @ 30VDC	.72	.676	.576	.561
611-SS-24E06-TG5P	SS-24E06-TG 5 (P)	EE	DP4T	On-On-On-On	0.3A @ 30VDC	.80	.75	.64	.624
611-SS-44D04-G4	SS-44D04-G 4	FF	DP4T	On-On-On-On	0.3A @ 30VDC	1.10	.924	.88	.858

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1920

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# C&K Slide Switches

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## JSX SERIES: SUB-MINIATURE SLIDE SWITCHES

### Features/Benefits:

- Low profile
- SPDT momentary action
- Long electrical and mechanical life

### Typical Applications:

- On/Off touch screens
- Handheld games
- Remote controls
- Instrumentation

### Specifications:

- Mounting Angle: Horizontal
- Illumination: Not illuminated
- Travel: 2 mm

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Contact Rating	Contact Material	Price Each			
						1	25	50	100
611-JSX08001SAQNL	JSX08001SAQNL	A	SPDT	10mA@5VDC	BeCu,silver-plated	.94	.84	.785	.748

## 1000 SERIES: MINIATURE SLIDE SWITCHES

### Features:

- Epoxy terminal seal makes these compatible with bottom-wash cleaning

### Specifications:

- Contact Material: B- Cu alloy, with Au plate over Ni plate, Au plate terminal
- Q- Cu alloy, with Ag plate, Ag plate terminal
- Contact Rating: B- 0.4VA @ 20VAC or DC max.
- Q- 6A @ 120VAC or 28VDC



### Applications:

- Instrumentation
- Computer peripherals

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit	Contact Material	Price Each			
						1	25	50	100
<b>PC Thru-Hole</b>									
611-1101M2S3CBE2	1101M2S3CBE2	B	SPDT	On-None-On	B	3.76	3.64	3.20	3.12
611-1101M2S3CQE2	1101M2S3CQE2	B	SPDT	On-None-On	Q	3.68	3.43	3.12	3.04
611-1201M2S3CBE2	1201M2S3CBE2	C	DPDT	On-None-On	B	6.69	6.48	5.98	5.74
611-1201M2S3CQE2	1201M2S3CQE2	C	DPDT	On-None-On	Q	6.48	6.13	5.86	5.62
<b>Right-Angle PC Thru-Hole</b>									
611-1101M2S3ABE2	1101M2S3ABE2	D	SPDT	On-None-On	B	4.21	3.86	3.55	3.51
611-1101M2S3AQE2	1101M2S3AQE2	D	SPDT	On-None-On	Q	4.12	3.97	3.49	3.44
611-1101M2S3AV2BE2	1101M2S3AV2BE2	E	SPDT	On-None-On	B	4.21	3.88	3.55	3.51
611-1101M2S3AV2QE2	1101M2S3AV2QE2	E	SPDT	On-None-On	Q	4.12	3.96	3.49	3.44
<b>V-Bracket</b>									
611-1101M2S2V3GE2	1101M2S2V3GE2	F	SPDT	On-None-On	B	5.18	4.82	4.15	4.04
<b>Solder Lug</b>									
611-1101M1S3ZQE2	1101M1S3ZQE2	F	SPDT	On-None-On	Q	3.57	3.36	3.03	2.83

## L SERIES: MINIATURE SLIDE SWITCHES

### Features:

- Positive detent

### Specifications:

- Contact Material: Q- Cu alloy, with Ag plate, Ag plate terminal
- Contact Rating: Q- 4A @ 120VAC or 28VDC
- Actuator Height: PC thru-hole models - 200"; Right-angle PC thru-hole models - .335"
- (-) = Momentary



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit	Contact Material	Price Each			
						1	25	100	250
<b>PC Thru-Hole</b>									
611-L202011MS02Q	L202011MS02Q	G	DPDT	On-Off	Q	2.90	2.81	2.40	2.37
611-L203011MS02Q	L203011MS02Q	H	DP3T	On-On-On	Q	3.08	2.79	2.54	2.51
<b>Right-Angle PC Thru-Hole</b>									
611-L102011ML04B	L102011ML04B	H	SPDT	On-None-On	B	2.74	2.57	2.27	2.14
611-L102011ML04Q	L102011ML04Q	H	SPDT	On-None-On	Q	1.88	1.79	1.57	1.50
611-L102011MS02B	L102011MS02B	H	SPDT	On-None-On	B	2.74	2.57	2.27	2.14
611-L204121MS02Q	L204121MS02Q	H	DP4T	On-None-On	Q	3.69	3.43	2.74	2.64
611-L102021ML04Q	L102021ML04Q	I	SPDT	On-None-On	Q	1.83	1.59	1.46	1.42
611-L202021MA04Q	L202021MA04Q	J	DPDT	On-None-On	Q	3.74	3.62	2.97	2.92
611-L212132MV02Q	L212132MV02Q	K	DPDT	(On)-None-On	Q	4.31	4.07	3.50	3.23

## S SERIES: POWER SLIDE SWITCHES

### Features:

- Enclosed housing

### Specifications:

- Contact Material: Q- Cu alloy, with Ag plate, Ag plate terminal
- Dielectric Strength: 1000 Vrms min. @ sea level
- Electrical Life: 10,000 cycles @ full load



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit	Contact Material	Price Each			
						1	25	100	250
<b>PC Thru-Hole</b>									
611-S202031MS02Q	S202031MS02Q	L	DPDT	6	Q	2.64	2.50	2.19	2.13
<b>Panel Mount with Mounting Ears</b>									
611-S101031SS03Q	S101031SS03Q	M	SPST	6	Q	2.01	1.86	1.60	1.56
611-S602031SS03Q	S602031SS03Q	M	DPDT	12	Q	3.01	2.64	2.39	2.35

## TS SERIES: TINY SLIDE SWITCHES

### Features:

- Epoxy terminal seal makes these compatible with bottom-wash cleaning

### Specifications:

- Contact Material: B- Cu alloy, with Au plate over Ni plate, Au plate terminal
- Contact Rating: B- 0.4VA @ 20VAC or DC max.
- Dielectric Strength: 1000 Vrms min. @ sea level
- Electrical Life: TS01 models - 60,000 cycles @ full load
- TS03 models - 30,000 cycles @ full load



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit	Contact Material	Price Each			
						1	25	100	250
<b>PC Thru-Hole</b>									
611-TS01CBE	TS01CBE	N	SPDT	On-None-On	B	4.15	4.10	3.51	3.46
<b>Right-Angle PC Thru-Hole</b>									
611-TS01ABE	TS01ABE	O	SPDT	On-None-On	B	4.51	4.35	3.81	3.76

## V SERIES: POWER AND LINE VOLTAGE SELECT SLIDE SWITCHES

### Applications:

- Appliances

### Specifications:

- Contact Material: Q- Cu alloy, w/ Ag plate, Ag plate terminal
- Contact Form: DPDT On-On

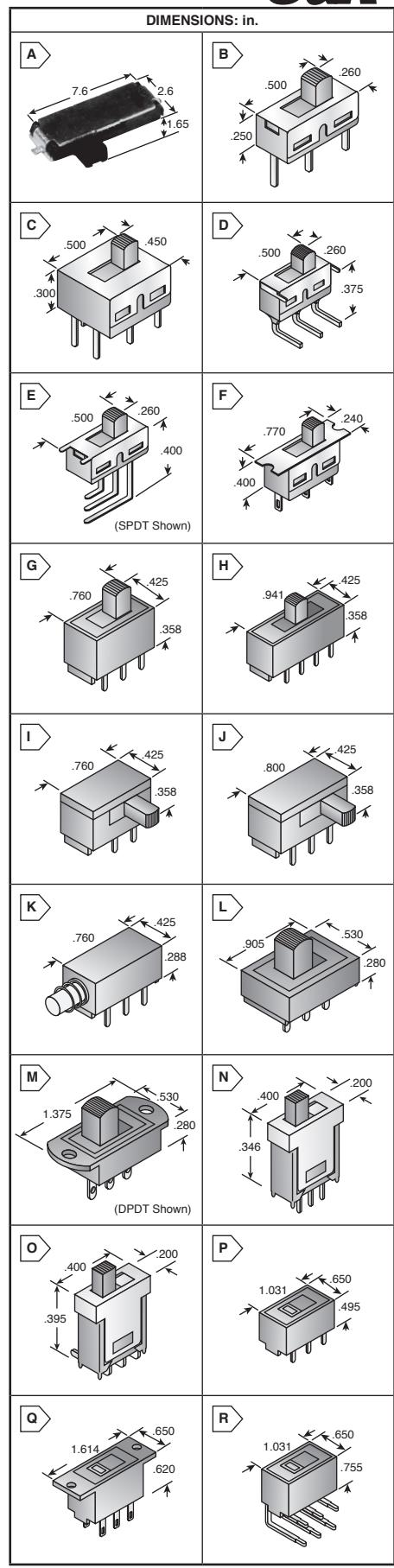


For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Contact Form	Circuit	Price Each			
					1	25	100	250
611-V80212MS02Q	V80212MS02Q	P	DPDT	PC thru-hole	3.99	3.88	3.10	2.96
611-V80212SS05Q	V80212SS05Q	Q	DPDT	Mounting ears, QC	3.59	3.48	3.13	3.08
611-V80212MA08Q	V80212MA08Q	R	DPDT	R/A PC thru-hole	4.89	4.50	4.08	4.02

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1921

# NKK Slide Switches

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**NKK**  
SWITCHES

## SS SERIES: ULTRAMINIATURE PCB SLIDE SWITCHES

- Power rating: 0.1A @ 30VDC
- Crisp Actuation
- Polyamide housing
- .100" x .100" terminal spacing
- Top or Side Actuation
- (metric spacing also available, call for quote)
- Compact and low profile design

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Actuation	Price Each		
					1	25	50
633-SS12SDP2	SS12SDP2	A	SPDT On-None-On	Top	1.14	1.08	.99
633-SS12SDH2	SS12SDH2	B	SPDT On-None-On	Side	1.35	1.08	1.00
633-SS14MDP2	SS14MDP2	C	SP3T On-On-On	Top	1.70	1.32	1.26
633-SS14MDH2	SS14MDH2	D	SP3T On-On-On	Side	1.51	1.46	1.41
633-SS22SDP2	SS22SDP2	E	DPDT On-None-On	Top	1.16	1.12	1.08
633-SS22SDH2	SS22SDH2	F	DPDT On-None-On	Side	2.00	1.55	1.47

## MS SERIES: MINIATURE SLIDE SWITCHES

- Power rating: Silver 6A @ 125VAC & 3A @ 250VAC
- Gold 0.4VA max. @ 28VAC/DC max.
- Solder lug or straight PC terminals
- UL94V-0 case

### Right Angle PC

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Mounting	Contact Material	Price Each	
						1	25
633-MS13ASW30	MS13ASW30	G	SPDT On-Off-On	Support Bracket	Silver	3.88	3.53
633-MS23ASG30	MS23ASG30	H	DPDT On-Off-On	Support Bracket	Gold	6.84	6.21

### Solder Lug

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Mounting	Contact Material	Price Each	
						1	25
633-MS22AFW01	MS22AFW01	I	DPDT On-None-On	Panel Mount	Silver	4.00	3.63

### Straight PC

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Mounting	Contact Material	Price Each	
						1	25
633-MS12ANG03	MS12ANG03	J	SPDT On-None-On	Straight PC	Gold	4.07	3.46
633-MS13ANW03	MS13ANW03	J	SPDT On-Off-On	Straight PC	Silver	4.64	3.59
633-MS22ANW03	MS22ANW03	K	DPDT On-None-On	Straight PC	Silver	4.28	3.89

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Mounting	Contact Material	Price Each	
						1	25
633-MS12ASW40	MS12ASW40	L	SPDT On-None-On	Support Bracket	Silver	3.72	3.38

## SS SERIES: ILLUMINATED ULTRAMINIATURE SLIDE SWITCHES

- Power rating: 0.1A @ 30VDC
- Crisp Actuation
- Polyamide housing
- .100" x .100" terminal spacing
- Top or Side Actuation
- (metric spacing also available, call for quote)
- Compact and low profile design
- Bright LED illumination

### Top Actuation

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Type	LED Color	Price Each			
					1	25	50	100
633-SS12SDP2LF	SS12SDP2LF	M	SPDT On-None-On	Green	7.76	6.99	6.21	5.43

### Side Actuation

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Type	LED Color	Price Each			
					1	25	50	100
633-SS12SDH2LF	SS12SDH2LF	N	SPDT On-None-On	Green	7.17	7.14	6.34	5.54

## MS SERIES: ILLUMINATED SOLDER LUG MINIATURE SLIDE SWITCHES

- Power rating: 6A @ 125VAC or 3A @ 250VAC
- Bright LED illumination
- Solder Lug or Straight PC Terminals
- UL94V-0 case

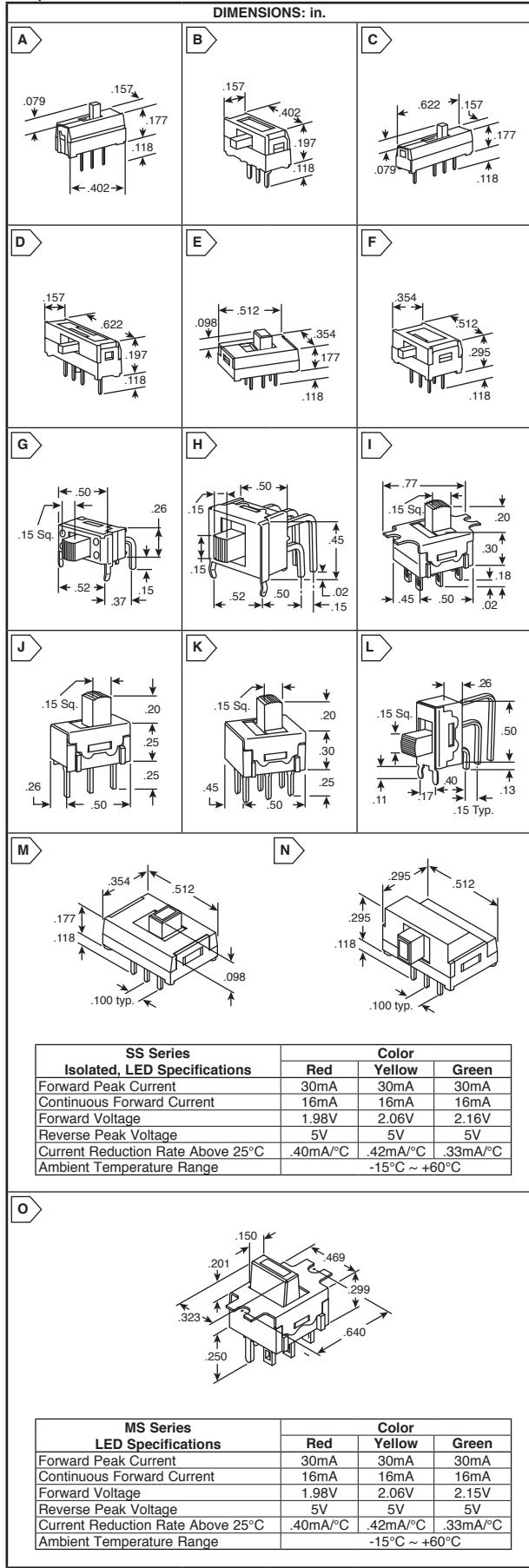
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	LED Color	Price Each		
					1	25	50
633-MS13LFW01C	MS13LFW01C	O	SPDT On-Off-On	Red	10.67	8.40	7.90
633-MS13LFW01E	MS13LFW01E	O	SPDT On-Off-On	Yellow	10.67	8.40	7.90
633-MS13LFW01F	MS13LFW01F	O	SPDT On-Off-On	Green	9.99	9.59	8.99

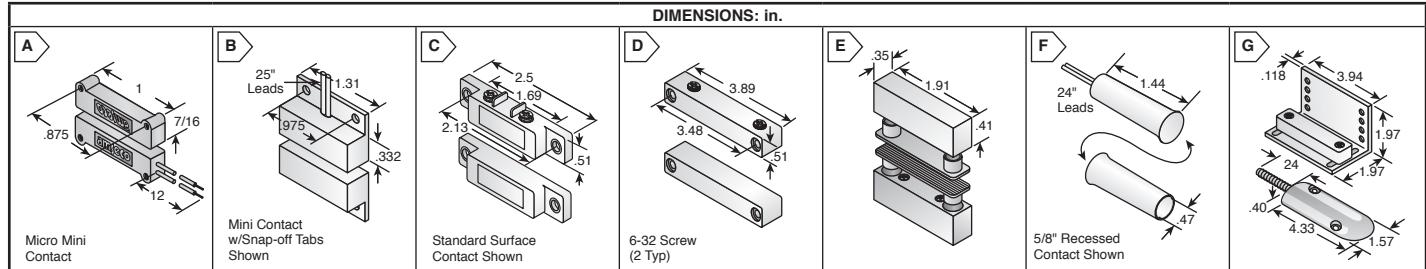
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1922

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# Magnetic Contacts



## SURFACE MOUNT MAGNETIC CONTACTS

### Micro Mini Contact

- 12" leads AWG #22 (UL1061)
  - Self adhesive and nail mount
  - Operating Gap: 1/2"
  - Magnet: Alnico 5
- For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	Price Each				
				1	10	50	100	200+
507-AMS-9B	505-90B	A	Brown	3.81	3.43	3.04	2.90	Call for Quote
507-AMS-9G	505-90G	A	Gray	2.43	2.29	2.20	2.13	
507-AMS-9I	505-90I	A	Ivory	2.43	2.29	2.20	2.13	

### Mini Contact with Snap-Off Tabs and Center Leads (N/O)

- 24" leads AWG #22 (UL1061)
  - Self adhesive and screw mount
  - Operating Gap: 3/4"
  - Magnet: Alnico 5
- For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	Price Each				
				1	10	50	100	200+
507-AMS-10B	505-101-BC	B	Brown	2.59	2.43	2.36	2.20	Call for Quote
507-AMS-10G	505-101-GC	B	Gray	2.59	2.43	2.36	2.20	
507-AMS-10W	505-101-WC	B	White	2.59	2.43	2.36	2.20	

### Mini Contact with Snap-Off Tabs and Side Leads (N/O)

- 24" leads AWG #22 (UL1061)
  - Self adhesive and screw mount
  - Operating Gap: 3/4"
  - Magnet: Alnico 5
- For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	Price Each				
				1	10	50	100	200+
507-AMS-10GS	505-101-GS	B	Gray	2.59	2.43	2.36	2.20	Call for Quote
507-AMS-10WS	505-101-WS	B	White	2.59	2.43	2.36	2.20	

### Standard Surface Contact (N/O)

- Operating Gap: 3/4"
  - Magnet: Ferrite
- For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	Price Each				
				1	10	50	100	200+
507-AMS-39B	505-391B	C	Brown	5.88	5.29	4.70	4.10	Call for Quote
507-AMS-39G	505-391G	C	Gray	2.80	2.73	2.55	2.40	
507-AMS-39W	505-391W	C	White	2.84	2.77	2.59	2.44	

Magnet Only

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	1	10	50	100	200+
507-AMS-505-392W	505-392W	-	White	1.23	1.15	1.12	1.08	Call for Quote

### Industrial Magnetic Contact (N/O)

- Operating Gap: 2"
  - Magnet: Alnico 5
- For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	Price Each				
				1	10	50	100	200+
507-AMS-37B	505-371B	D	Brown	7.93	7.51	6.94	6.46	Call for Quote
507-AMS-37	505-371G	D	Gray	6.11	5.95	5.72	5.35	

### Magnetic Contact with Cover (N/O)

- Operating Gap: 3/4"
  - Magnet: Alnico 5
  - 3/4" self-adhesive or screw mount
- For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	Price Each				
				1	10	50	100	200+
507-AMS-37B	505-371B	E	Brown	2.93	2.75	2.65	2.57	Call for Quote
507-AMS-37	505-371G	E	White	2.85	2.67	2.58	2.50	

Magnet Only

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	1	10	50	100	200+
507-AMS-505-392W	505-392W	-	White	1.85	1.81	1.67	1.57	Call for Quote

Magnet Only

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	1	10	50	100	200+
507-AMS-505-392W	505-392W	-	White	1.85	1.81	1.67	1.57	Call for Quote

Magnet Only

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	1	10	50	100	200+
507-AMS-505-392W	505-392W	-	White	1.85	1.81	1.67	1.57	Call for Quote

Magnet Only

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	1	10	50	100	200+
507-AMS-505-392W	505-392W	-	White	1.85	1.81	1.67	1.57	Call for Quote

Magnet Only

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	1	10	50	100	200+
507-AMS-505-392W	505-392W	-	White	1.85	1.81	1.67	1.57	Call for Quote

Magnet Only

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	1	10	50	100	200+
507-AMS-505-392W	505-392W	-	White	1.85	1.81	1.67	1.57	Call for Quote

Magnet Only

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	1	10	50	100	200+
507-AMS-505-392W	505-392W	-	White	1.85	1.81	1.67	1.57	Call for Quote

Magnet Only

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	1	10	50	100	200+
507-AMS-505-392W	505-392W	-	White	1.85	1.81	1.67	1.57	Call for Quote

Magnet Only

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	1	10	50	100	200+
507-AMS-505-392W	505-392W	-	White	1.85	1.81	1.67	1.57	Call for Quote

Magnet Only

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	1	10	50	100	200+
507-AMS-505-392W	505-392W	-	White	1.85	1.81	1.67	1.57	Call for Quote

Magnet Only

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	1	10	50	100	200+
507-AMS-505-392W	505-392W	-	White	1.85	1.81	1.67	1.57	Call for Quote

Magnet Only

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	1	10	50	100	200+
507-AMS-505-392W	505-392W	-	White	1.85	1.81	1.67	1.57	Call for Quote

Magnet Only

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	1	10	50	100	200+
507-AMS-505-392W	505-392W	-	White	1.85	1.81	1.67	1.57	Call for Quote

Magnet Only

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	1	10	50	100	200+
507-AMS-505-392W	505-392W	-	White	1.85	1.81	1.67	1.57	Call for Quote

Magnet Only

MOUSER STOCK NO.	Amseco Part No.	Fig.	Color	1	10	50	100	200+
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# HAMLIN Reed Switches and Magnets



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**H A M L I N**

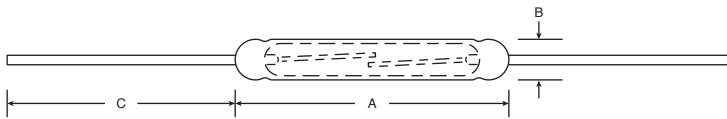
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## MAGNETIC/REED SWITCHES

Switches are activated by a magnetic field from either a magnet or coil. Contacts are hermetically sealed in inert gas to provide long life with stable electrical and operating characteristics. NO = Normally Open; CO = Changeover. Combination of switching voltage and current should not exceed wattage rating.

### Applications:

- Reed relays
- Telecoms
- Household appliances
- Office equipment
- Limit switching
- Security



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Contact Form	Voltage		Operate & Release Time (ms)	Pull-In Range (AT)	Switch Dimensions: mm (in.)		Price Each						
		Switching	Breakdown			Glass Body Size	Lead	Length (A) x Diameter (B)	Length (C)	1	10			
<b>Mfr. Mfr. Part No.</b>														
<b>DRR-129 Standard Series - Big, High Power</b>														
934-DRR-12942-48	1 Form A (SPST-NO)	240VAC	600VDC	4.5, 2.5	42 to 48	50.8 (2) x 5.25 (0.207)	12.7 (0.5)	8.95	7.55	6.31	5.15			
934-DRR-12942-83	1 Form A (SPST-NO)	240VAC	600VDC	4.5, 2.5	42 to 83	50.8 (2) x 5.25 (0.207)	12.7 (0.5)	4.42	3.74	3.12	2.55			
934-DRR-12947-68	1 Form A (SPST-NO)	240VAC	600VDC	4.5, 2.5	47 to 68	50.8 (2) x 5.25 (0.207)	12.7 (0.5)	7.93	6.71	5.61	4.57			
934-DRR-12967-73	1 Form A (SPST-NO)	240VAC	600VDC	4.5, 2.5	67 to 73	50.8 (2) x 5.25 (0.207)	12.7 (0.5)	8.95	7.55	6.31	5.15			
<b>DRR-DTH Non-Standard (Axial), Magnetic Series - Big Power Form C (SPDT)</b>														
934-DRR-DTH75-80	1 Form C (SPDT)	500VDC	1200VDC	4.5, 7	75 to 80	39.67 (1.562) x 5.53 (0.21)	25.4 (1)	22.78	19.27	16.12	13.14			
<b>DRT-DTH Non-Standard (Axial), Magnetic Series - Big High Power Form C (SPDT)</b>														
934-DRT-DTH50-65	1 Form C (SPDT)	500VDC	1000VDC	5.5, 8	50 to 65	39.67 (1.562) x 5.53 (0.21)	25.4 (1)	26.94	22.80	19.06	15.54			
<b>FLEX-14 Sub-miniature Series - Flexible Leads (14mm glass body)</b>														
934-FLEX-1410-15	1 Form A (SPST-NO)	200VDC	250VDC	0.55, 0.2	10 to 15	14 (0.551) x 2.28 (0.09)	14.8 (0.583)	1.39	1.18	.983	.802			
934-FLEX-1415-20	1 Form A (SPST-NO)	200VDC	250VDC	0.55, 0.2	15 to 20	14 (0.551) x 2.28 (0.09)	14.8 (0.583)	1.22	1.03	.866	.706			
<b>HA15-2 Sub-miniature Series</b>														
934-HA15-217-23	1 Form A (SPST-NO)	265 VAC/200VDC	400VDC	0.6, 0.2	17 to 23	15.24 (0.6) x 2.28 (0.09)	12.19 (0.48)	2.12	1.80	1.50	1.22			
934-HA15-222-28	1 Form A (SPST-NO)	265 VAC/200VDC	450VDC	0.6, 0.2	22 to 28	15.24 (0.6) x 2.28 (0.09)	12.19 (0.48)	2.34	1.98	1.65	1.35			
<b>MARR-5 Miniature HV Series - Key Features: Very High Voltage</b>														
934-MARR-517-23	1 Form A (SPST-NO)	1000VDC	2000VDC	0.75, 0.3	17 to 23	19.69 (0.775) x 2.66 (0.105)	17.39 (0.685)	5.24	4.42	3.70	3.02			
934-MARR-522-33	1 Form A (SPST-NO)	1000VDC	2000VDC	0.75, 0.3	22 to 33	19.69 (0.775) x 2.66 (0.105)	17.39 (0.685)	2.56	2.17	1.81	1.48			
<b>MDCG-4 Sub-miniature Changeover Series - Key Features: General Purpose Switch</b>														
934-MDCG-412-18	1 Form A (SPST-NO)	200VDC	250VDC	0.6, 0.2	12 to 18	15.24 (0.6) x 2.28 (0.09)	12.19 (0.48)	1.58	1.33	1.11	.907			
934-MDCG-412-23	1 Form A (SPST-NO)	200VDC	250VDC	0.6, 0.2	12 to 23	15.24 (0.6) x 2.28 (0.09)	12.19 (0.48)	1.58	1.33	1.11	.907			
934-MDCG-412-33	1 Form A (SPST-NO)	200VDC	250VDC	0.6, 0.2	12 to 33	15.24 (0.6) x 2.28 (0.09)	12.19 (0.48)	1.39	1.18	.989	.806			
934-MDCG-427-33	1 Form A (SPST-NO)	200VDC	250VDC	0.6, 0.2	27 to 33	15.24 (0.6) x 2.28 (0.09)	12.19 (0.48)	1.39	1.18	.989	.806			
<b>MDDR-DT Miniature Surface Mount Series - Small Form C (SPDT)</b>														
934-MDDR-DT15-20F	1 Form C (SPDT)	175VDC	200VDC	0.7, 1	15 to 20	14.73 (0.58) x 2.54 (0.1)	17.78 (0.7)	2.73	2.31	1.93	1.57			
934-MDDR-DT15-25F	1 Form C (SPDT)	175VDC	200VDC	0.7, 1	15 to 25	14.73 (0.58) x 2.54 (0.1)	17.78 (0.7)	6.31	5.32	4.45	3.63			
934-MDDR-DT25-30F	1 Form C (SPDT)	175VDC	200VDC	0.7, 1	25 to 30	14.73 (0.58) x 2.54 (0.1)	17.78 (0.7)	5.59	4.73	3.95	3.22			
934-MDDR-DT30-35U	1 Form C (SPDT)	175VDC	200VDC	0.7, 1	30 to 35	14.73 (0.58) x 2.54 (0.1)	17.78 (0.7)	5.49	4.64	3.88	3.16			
<b>MDSM-10/A Sub-miniature Surface Mount Series</b>														
934-MDSM-4R12-18	1 Form A (SPST-NO)	200VDC	250VDC	0.6, 0.2	12 to 18	15.24 (0.6) x 2.28 (0.09)	2.34 (0.92)	1.22	1.03	.866	.706			
<b>MDSR-Sub-miniature Series - Very Small (10mm glass body)</b>														
934-MDSR-10AW10-15	1 Form A (SPST-NO)	200VDC	250VDC	0.5, 0.1	10 to 15	10.16 (0.4) x 1.8 (0.071)	15.11 (0.595)	1.91	1.61	1.35	1.10			
934-MDSR-10AW15-20	1 Form A (SPST-NO)	200VDC	250VDC	0.5, 0.1	15 to 20	10.16 (0.4) x 1.8 (0.071)	15.11 (0.595)	1.91	1.61	1.35	1.10			
934-MDSR-10AW20-25	1 Form A (SPST-NO)	200VDC	250VDC	0.5, 0.1	20 to 25	10.16 (0.4) x 1.8 (0.071)	15.11 (0.595)	1.91	1.61	1.35	1.10			
<b>MDSR-4 Sub-miniature Series</b>														
934-MDSR-412-23	1 Form A (SPST-NO)	200VDC	250VDC	0.6, 0.2	12 to 23	15.24 (0.6) x 2.28 (0.09)	12.19 (0.48)	1.39	1.18	.989	.806			
934-MDSR-422-38	1 Form A (SPST-NO)	200VDC	250VDC	0.6, 0.2	22 to 38	15.24 (0.6) x 2.28 (0.09)	12.19 (0.48)	1.39	1.18	.989	.806			
934-MDSR-427-33	1 Form A (SPST-NO)	200VDC	250VDC	0.6, 0.2	27 to 33	15.24 (0.6) x 2.28 (0.09)	12.19 (0.48)	1.39	1.18	.989	.806			
934-MDSR-432-38	1 Form A (SPST-NO)	200VDC	250VDC	0.6, 0.2	32 to 38	15.24 (0.6) x 2.28 (0.09)	12.19 (0.48)	1.39	1.18	.989	.806			
<b>MDSR-7 Sub-miniature Series - Small (12.7mm glass body)</b>														
934-MDSR-710-15	1 Form A (SPST-NO)	200VDC	250VDC	0.6, 0.2	10 to 15	12.7 (0.5) x 1.8 (0.071)	13.46 (0.53)	1.59	1.34	1.12	.919			
934-MDSR-710-20	1 Form A (SPST-NO)	200VDC	250VDC	0.6, 0.2	10 to 20	12.7 (0.5) x 1.8 (0.071)	13.46 (0.53)	1.16	.986	.825	.672			
934-MDSR-715-20	1 Form A (SPST-NO)	200VDC	250VDC	0.6, 0.2	15 to 20	12.7 (0.5) x 1.8 (0.071)	13.46 (0.53)	1.59	1.34	1.12	.919			
934-MDSR-720-25	1 Form A (SPST-NO)	200VDC	250VDC	0.6, 0.2	20 to 25	12.7 (0.5) x 1.8 (0.071)	13.46 (0.53)	1.59	1.34	1.12	.919			
<b>MITI-3V1 Ultra-miniature Series - Ultra Small (7mm glass body)</b>														
934-MITI-3V16-12.5	1 Form A (SPST-NO)	170VDC	175 VDC	0.45, 0.2	6 to 12.5	7 (0.276) x 1.8 (0.071)	19.5 (0.778)	3.04	2.57	2.15	1.75			
<b>MLRR-3 Miniature CD Series - Long Leads, Switching Load/Life</b>														
934-MLRR-317-23	1 Form A (SPST-NO)	200VDC	250VDC	0.7, 0.2	17 to 23	15.24 (0.6) x 2.66 (0.105)	20.19 (0.795)	1.59	1.34	1.12	.919			
934-MLRR-322-28	1 Form A (SPST-NO)	200VDC	250VDC	0.7, 0.2	22 to 28	15.24 (0.6) x 2.66 (0.105)	20.19 (0.795)	1.59	1.34	1.12	.919			
934-MLRR-332-38	1 Form A (SPST-NO)	200VDC	250VDC	0.7, 0.2	32 to 38	15.24 (0.6) x 2.66 (0.105)	20.19 (0.795)	1.59	1.34	1.12	.919			
<b>MLRR-4 Sub-miniature CD Series - Small Hysteresis (Differential)</b>														
934-MLRR-417-23	1 Form A (SPST-NO)	200VDC	250VDC	0.6, 0.2	17 to 23	15.24 (0.6) x 2.54 (0.1)	12.19 (0.48)	1.43	1.21	1.01	.831			
934-MLRR-422-28	1 Form A (SPST-NO)	200VDC	250VDC	0.6, 0.2	22 to 28	15.24 (0.6) x 2.54 (0.1)	12.19 (0.48)	1.69	1.43	1.19	.975			
934-MLRR-427-33	1 Form A (SPST-NO)	200VDC	250VDC	0.6, 0.2	27 to 33	15.24 (0.6) x 2.54 (0.1)	12.19 (0.48)	1.69	1.43	1.19	.975			
<b>MRPR-3 Miniature Power Series - High Power</b>														
934-MRPR-317-23	1 Form A (SPST-NO)	300VDC	300VDC	0.75, 0.3	17 to 23	19.69 (0.775) x 2.84 (0.112)	18.16 (0.715)	1.85	1.56	1.31	1.06			
934-MRPR-327-33	1 Form A (SPST-NO)	300VDC	300VDC	0.75, 0.3	22 to 28	19.69 (0.775) x 2.84 (0.112)	18.16 (0.715)	3.15	2.66	2.23	1.81			
934-MRPR-332-38	1 Form A (SPST-NO)	300VDC	300VDC	0.75, 0.3	32 to 38	19.69 (0.775) x 2.84 (0.112)	18.16 (0.715)	3.15	2.66	2.23	1.81			
<b>MRPR-8 Miniature HV Series - 240VAC switching, High Power</b>														
934-MRPR-817-23	1 Form A (SPST-NO)	265VAC/250VDC	750VDC	0.75, 0.3	17 to 23	20.32 (0.8) x 2.84 (0.112)	18.16 (0.715)	4.11	3.47	2.90	2.36			
934-MRPR-822-38	1 Form A (SPST-NO)	265VAC/250VDC	750VDC	0.75, 0.3	22 to 38	20.32 (0.8) x 2.84 (0.112)	18.16 (0.715)	1.78	1.51	1.26	1.03			

## MAGNETS

These interchangeable magnets are for use with above reed switches. Not UL recognized.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Hamlin Part No.	Dimensions: in.		Gauss at Pole Reference	Pull-In (AT)	Price Each			
		1	10			1	10	50	100
934-CM-1	CM-1	-	-	-	-	1.98	1.67	1.40	1.14
934-315	315	0.12 Diameter/0.59	-	1000	10-38	3.67	3.09	2.59	2.11
934-420	420	0.15 Diameter/0.78	-	1150	10-38	1.53	1.29	1.08	.881
934-625	625	0.23 Diameter/0.98	-	1500	10-68	8.91	7.51	6.28	5.12
934-H-31	H-31	0.062 Square x 0.50	-	1300	10-38	1.63	1.38	1.15	.941
934-H-32	H-32	0.19 Square x 1.00	-	1400					

# MEDER Reed Switches



This page of product is RoHS compliant.

<p>(The basic hermetically sealed 1 Form A (normally open) Reed Switch and its component makeup.)</p>	<p><b>Energy Efficient</b> A reed switch draws zero power and requires no circuitry in its normally open or off state. A permanent magnet is used to change the state of reed contacts with absolutely no power consumption.</p> <p><b>Sustainable</b> With no wearing parts, load switching under 5 volts at 10mA, the reed switch will reliably operate into the billions of operations for an extended life expectancy.</p> <p><b>Eco-Friendly</b> The reed switch emits zero gases or particles into the air. Its hermetic glass seal both protects it while providing an environmental barrier making it eco-friendly.</p>	
<p>(The 1 Form C (single pole double throw) three lead Reed Switch and its component makeup.)</p>	<p>(The 1 Form C (single pole double throw) three lead Reed Switch and its component makeup.)</p>	

## MEDER REED SWITCHES

### Features:

- High breakdown voltage
- Super ultra-miniature
- Super ultra-miniature SMD
- High power
- Miniature high-performance
- Miniature offset-type
- Long life
- Miniature wide differential
- Miniature offset-type long reach
- Form A = normal open contact (N.O.)
- Form C = change over contact (S.P.D.T.)
- AT = Ampere Turns; Parameter that describes magnetic sensitivity.



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MEDER Part No.	Dimensions (mm)			Switching Voltage (V)	Contact Form	Glass Body Length (mm)	Pull-In Excitation (Reference Value)(AT)	Price Each			
		A	B	C					1	10	25	100
876-KSK-1A04-1015	JKSK-1A04-1015	4.1	0.15	34.5	30	1 Form A	4.1mm	AT 1015	4.32	3.59	2.99	2.89
876-KSK-1A35-1015	JKSK-1A35-1015	10.5	0.71	34.5	20	1 Form A	10.5mm	AT 1015	.88	.76	.73	.66
876-KSK-1A35-1520	JKSK-1A35-1520	10.5	0.71	34.5	20	1 Form A	10.5mm	AT 1520	.88	.76	.73	.66
876-KSK-1A52-2530	JKSK-1A52-2530	21.0	2.8	55.4	30	1 Form A	21mm	AT 2025	1.29	1.22	1.15	1.10
876-KSK-1A52-3040	JKSK-1A52-3040	21.0	0.108	55.2	50	1 Form A	21mm	AT 3040	1.29	1.22	1.15	1.10
876-KSK-1A66-1015	JKSK-1A66-1015	14.0	0.087	44.1	10	1 Form A	14mm	AT 1015	.73	.70	.66	.594
876-KSK-1A66/3-1015	JKSK-1A66/3-1015	14.0	2.2	44.1	10	1 Form A	14mm	AT 1015	.80	.71	.58	.49
876-KSK-1A66-1520	JKSK-1A66-1520	14.0	0.087	44.1	10	1 Form A	14mm	AT 1520	.94	.82	.79	.71
876-KSK-1A66/3-1520	JKSK-1A66/3-1520	14.0	2.2	44.3	20	1 Form A	14mm	AT 1520	.80	.71	.58	.49
876-KSK-1A66-2030	JKSK-1A66-2030	14.0	0.087	44.1	10	1 Form A	14mm	AT 2030	.76	.72	.68	.64
876-KSK-1A66/3-2030	JKSK-1A66/3-2030	14.0	0.5	44.3	10	1 Form A	14mm	AT 2030	.80	.71	.58	.49
876-KSK-1A80-1015	JKSK-1A80-1015	7.0	0.071	35.6	10	1 Form A	7mm	AT 1015	1.45	1.03	.984	.883
876-KSK-1A80-1520	JKSK-1A80-1520	7.0	0.071	35.6	10	1 Form A	7mm	AT 1520	1.45	1.03	.984	.883
876-KSK-1A80-2030	JKSK-1A80-2030	7.0	0.071	35.6	10	1 Form A	7mm	AT 2030	1.56	1.33	1.25	1.12
876-KSK-1A85-2025	JKSK-1A85-2025	21.0	0.108	55.5	100	1 Form A	21mm	AT 2025	1.60	1.45	1.37	1.19
876-KSK-1A85-2530	JKSK-1A85-2530	21.0	0.108	55.5	100	1 Form A	21mm	AT 2530	1.66	1.52	1.42	1.23
876-KSK-1A87-1015	JKSK-1A87-1015	10.0	0.079	35.5	10	1 Form A	10mm	AT 1015	.92	.89	.84	.76
876-KSK-1C90U-1015	JKSK-1C90U-1015	14.0	0.100	56.1	20	1 Form C	14mm	AT 1015	2.74	2.60	2.45	2.32
876-KSK-1C90U-1520	JKSK-1C90U-1520	14.0	0.100	56.1	20	1 Form C	14mm	AT 1520	2.74	2.60	2.45	2.32
876-KSK-1C90U-2034	JKSK-1C90U-2034	14.0	0.5	56.1	10	1 Form C	14mm	AT 2034	4.03	3.81	3.59	3.05
876-KSK-1C90F-1015	JKSK-1C90F-1015	14.0	0.100	54.5	20	1 Form C	14mm	AT 1015	2.99	2.60	2.38	1.95
876-KSK-1C90F-1520	JKSK-1C90F-1520	14.0	0.100	54.5	20	1 Form C	14mm	AT 1520	2.99	2.60	2.38	1.95
876-KSK-1C90F-2025	JKSK-1C90F-2025	14.0	0.100	54.5	20	1 Form C	14mm	AT 2025	2.99	2.60	2.38	1.95

## OKI REED SWITCHES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MEDER Part No.	Dimensions (mm)			Switching Voltage (V)	Contact Form	Glass Body Length (mm)	Pull-In Excitation (Reference Value)(AT)	Price Each			
		A	B	C					1	10	25	100
876-ORD211-1015	ORD211-1015	10.0	0.6	44.1	24	1 Form A	10mm	AT 1015	.69	.63	.57	.53
876-ORD211-1520	ORD211-1520	10.0	0.6	44.1	24	1 Form A	10mm	AT 1520	.67	.61	.55	.52
876-ORD211-2030	ORD211-2030	10.0	0.6	44.1	24	1 Form A	10mm	AT 2030	.67	.61	.55	.52
876-ORD213-1015	ORD213-1015	7.0	0.3	35.8	24	1 Form A	7mm	AT 1015	.99	.90	.82	.77
876-ORD213-1520	ORD213-1520	7.0	0.3	35.8	24	1 Form A	7mm	AT 1520	.99	.90	.82	.77
876-ORD213-2030	ORD213-2030	7.0	0.3	35.8	24	1 Form A	7mm	AT 2030	.99	.90	.82	.77
876-ORD213S-1-1015	ORD213S-1-1015	10.2	0.5	1.8	24	1 Form A	10.2mm	AT 1015	1.27	1.15	1.04	.989
876-ORD219-1015	ORD219-1015	12.0	0.5	44.3	100	1 Form A	12mm	AT 1015	.61	.56	.50	.48
876-ORD2210V-2025	ORD2210V-2025	21.0	0.6	55.4	100	1 Form A	21mm	AT 2025	1.13	1.02	.93	.87
876-ORD2211-2030	ORD2211-2030	16.5	0.6	44.1	100	1 Form A	16.5mm	AT 2030	1.14	1.04	.938	.883
876-ORD2221-2030	ORD2221-2030	13.0	0.21	44.2	100	1 Form A	13mm	AT 2030	1.31	1.18	1.07	1.01
876-ORD228VL-1015	ORD228VL-1015	14.0	0.5	44.3	100	1 Form A	14mm	AT 1015	.57	.51	.47	.44
876-ORD228VL-1520	ORD228VL-1520	14.0	0.5	44.3	100	1 Form A	14mm	AT 1520	.58	.519	.479	.448
876-ORD228VL-2030	ORD228VL-2030	14.0	0.5	44.3	100	1 Form A	14mm	AT 2030	.58	.519	.479	.448
876-ORD311-1015	ORD311-1015	7.0	0.33	35.8	10	1 Form A	7mm	AT 1015	.98	.89	.80	.76
876-ORD9215-1015	ORD9215-1015	17.0	0.5	44.1	10	1 Form A	17mm	AT 1015	.56	.51	.46	.44
876-ORD324-1015	ORD324-1015	14.0	0.5	44.3	10	1 Form A	14.0mm	AT 1015	.99	.69	.47	.41
876-ORD324-1520	ORD324-1520	14.0	0.5	44.3	10	1 Form A	14mm	AT 1520	.46	.429	.389	.369
876-ORD9215-1520	ORD9215-1520	17.0	0.5	44.1	10	1 Form A	17mm	AT 1520	.56	.51	.46	.44
876-ORD324-1015	ORD324-1015	14.0	0.5	44.3	10	1 Form A	14mm	AT 1015	.99	.69	.47	.41
876-ORD325-1015	ORD325-1015	17.0	0.5	44.1	10	1 Form A	17mm	AT 1015	1.22	.85	.73	.57
876-ORD325-1520	ORD325-1520	17.0	0.5	44.1	15	1 Form A	17mm	AT 1520	1.22	.85	.73	.57
876-ORT551-1015	ORT551-1015	14.0	0.5	56.1	3	1 Form C	14mm	AT 1015	2.01	1.82	1.65	1.56
876-ORT551-1-1015	ORT551-1-1015	14.0	0.5	56.1	3	1 Form C	14mm	AT 1015	2.30	2.08	1.88	1.77

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## AD SERIES DIP SWITCHES

### Specifications:

- Contact rating: 0.4VA @ 20VDC max.
- Contact resistance: 50mΩ max.
- Dielectric strength: 500VAC
- Life expectancy: 1000 cycles
- High pressure wiping contact allows aqueous or solvent cleaning without tape seal
- Polyester base, cover, and actuator material
- Gas-tight contacts

MOUSER STOCK NO.	Alcoswitch Part No.	Alcoswitch Part No.	Fig.	Dimension "A" (mm)	Number of Positions	Price Each			
						1	10	25	50
<b>Through-hole with Extended Actuator</b>									
506-ADE0204	1825057-1	ADE0204	A	7.06	2	1.50	1.47	1.40	1.34
506-ADE0404	1825057-3	ADE0404	A	12.14	4	.80	.70	.66	.637
506-ADE0504	1825057-4	ADE0504	A	14.68	5	1.93	1.76	1.61	1.54
506-ADE0604	1825057-5	ADE0604	A	17.22	6	.90	.79	.74	.71
506-ADE0804	1825057-7	ADE0804	A	22.3	8	1.10	.96	.92	.88
<b>Through-hole with Flush Actuator</b>									
506-ADF0204	1825002-1	ADF0204	B	7.06	2	1.13	1.04	.99	.95
506-ADF0404	1825002-5	ADF0404	B	12.14	4	.74	.69	.61	.585
506-ADF0604	1825002-9	ADF0604	B	17.22	6	.99	.945	.899	.855
506-ADF0804	1-1825002-3	ADF0804	B	22.3	8	1.01	.86	.81	.79
<b>Through-hole with Piano Actuator (Lever Down "On")</b>									
506-ADP0204	1571999-1	ADP0204	C	7.06	2	2.10	1.90	1.77	1.65
506-ADP0404	1571999-6	ADP0404	C	12.14	4	1.35	1.32	1.29	1.14

## GD SERIES LOW PROFILE DIP & SIP SWITCHES

### Specifications:

- Contact rating: 0.4VA @ 24VDC max.
- Contact resistance: 100mΩ max.
- Contact material: Au over Ni over Cu alloy
- Tape seal standard

MOUSER STOCK NO.	Alcoswitch Part No.	Alcoswitch Part No.	Fig.	Dimension "A" (mm)	Number of Positions	Price Each			
						1	10	25	50
<b>2.54mm Pitch: Slide Actuator</b>									
506-GDS0404	1825006-5	GDS0404	D	10.02	4	3.45	3.15	2.94	2.69
506-GDS0604	1825006-9	GDS0604	D	15.09	6	5.07	4.85	4.45	4.25
<b>1.27mm Pitch: Rocker Actuator</b>									
506-GDH02S04	1571983-1	GDH02S04	E	3.66	2	2.60	2.46	2.39	2.32
506-GDH06S04	1571983-8	GDH06S04	E	8.75	6	2.77	2.69	2.61	2.53
506-GDH08S04	1-1571983-0	GDH08S04	E	11.29	8	5.25	5.09	4.90	4.68
506-GDH10S04	1-1571983-3	GDH10S04	E	13.82	10	5.60	5.49	5.04	4.58
<b>1.27mm Pitch: Recessed Rocker Actuator</b>									
506-GDH02SA04	1977830-1	GDH02SA04	F	3.37	2	1.86	1.71	1.60	1.49
506-GDH04SA04	1977830-2	GDH04SA04	F	6.21	4	2.16	1.94	1.83	1.71
506-GDH06SA04	1977830-3	GDH06SA04	F	8.75	6	2.27	2.04	1.93	1.79
506-GDH08SA04	1977830-4	GDH08SA04	F	11.29	8	2.61	2.35	2.21	2.06
506-GDH10SA04	1977830-5	GDH10SA04	F	13.83	10	3.56	3.20	3.02	2.81

## 7000 SERIES PREMIUM DIP SWITCHES

- Current and voltage rating: Non-switching-1.0A max. @ 50VDC
- Housing: Glass-filled polyester, UL94V-0 rated
- Spring contacts and leads: BeCu alloy with Au over Ni plating
- Pitch: 2.54mm

MOUSER STOCK NO.	Alcoswitch Part No.	Fig.	Actuator Style	Dimension "A" (mm)	Number of Positions	Price Each			
						1	10	25	50
<b>Sealed</b>									
506-154358025	1-5435802-5	G	Piano	12.19	4	2.90	2.80	2.70	2.50
506-54358029	5435802-9	G	Piano	22.352	8	1.80	1.79	1.65	1.61
506-2-5435802-0	2-5435802-0	G	Piano	27.432	10	2.41	2.23	2.04	1.90
571-44351669	4-435166-9	H	Rocker	12.19	4	2.63	2.38	2.17	1.95
<b>Unsealed</b>									
506-1-5435802-0	1-5435802-0	G	Piano	7.112	2	6.57	6.02	5.47	5.26
506-5435802-3	5435802-3	G	Piano	12.19	4	2.39	2.28	2.20	2.06
571-54358021	5435802-1	G	Piano	22.352	8	1.53	1.44	1.35	1.21
506-5435166-2	5435166-2	H	Rocker	12.19	4	4.69	4.33	4.14	3.97
506-54351665	5435166-5	H	Rocker	22.352	8	5.09	4.73	4.32	4.02

## 7100 SERIES STANDARD DIP SWITCHES

- Current/voltage rating: Non-switching-1.0A max. @ 40VDC
- Dielectric withstanding voltage: 500VDC min.
- Capacitance: 5pF max.
- Housing: Glass-filled polyester, UL94V-0 rated, blue
- Rocker: Polyester UL94V-0 rated, white
- Spring contacts and leads: Cu alloy with Au over Ni plating

MOUSER STOCK NO.	Alcoswitch Part No.	Fig.	Type	Dimension "A" (mm)	Number of Positions	Price Each			
						1	10	25	50
<b>Standard Profile</b>									
571-254356409	2-5435640-9	H	Unsealed	7.112	2	4.02	3.78	3.44	3.27
506-54356402	5435640-2	H	Unsealed	12.19	4	1.07	1.03	.965	.932
571-54356405	5435640-5	H	Unsealed	22.352	8	1.01	.99	.88	.819
506-354356405	3-5435640-5	H	Sealed	7.112	4	.69	.68	.62	.60
571-354356407	3-5435640-7	H	Sealed	17.27	6	1.52	1.43	1.37	1.28
571-3-5435640-9	3-5435640-9	H	Sealed	22.352	8	1.30	1.26	1.19	1.09
<b>Low Profile</b>									
571-354356684	3-5435668-4	I	Sealed	12.19	4	2.94	2.80	2.66	2.50

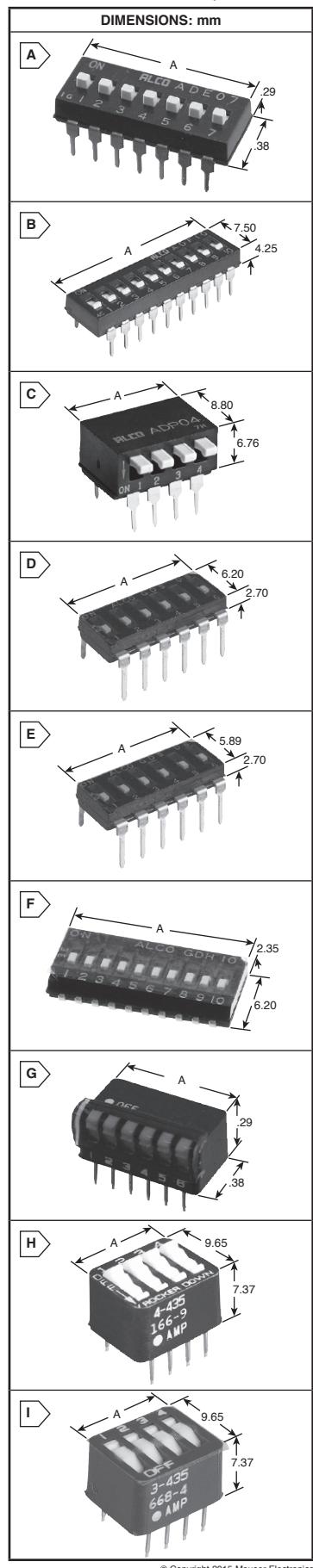
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# C&K DIP Switches

RoHS Compliant

## LOW PROFILE DIP SWITCHES (CONT.)



### BD SERIES: STANDARD PROFILE DIP SWITCHES

#### Specifications:

- Traditional full profile
- Contact rating: Carry: 100mA Max. @ 50 VDC
- with extended actuator
- Switch: 100mA Max. @ 5 VDC or
- 25mA Max. @ 25 VDC
- SPST

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	No. of Pos.	Dim. A (in.)	Price Each			
				1	25	50	100
<b>Open Base</b>							
611-BD01	A	1	.18	1.11	1.01	.972	.923
611-BD02	A	2	.28	1.51	1.37	1.31	1.23
611-BD03	A	3	.38	1.51	1.37	1.31	1.23
611-BD04	A	4	.48	1.46	1.34	1.22	1.17
611-BD05	A	5	.58	1.68	1.67	1.50	1.50
611-BD06	A	6	.68	1.73	1.57	1.50	1.41
611-BD07	A	7	.78	1.81	1.67	1.62	1.55
611-BD08	A	8	.88	1.81	1.60	1.47	1.44
611-BD09	A	9	.98	1.99	1.80	1.71	1.67
611-BD10	A	10	1.08	2.05	1.82	1.76	1.72
611-BD12	A	12	1.28	2.12	2.00	1.88	1.84
<b>Open Base and Right Angle Terminal Style</b>							
611-BD02AV	B	2	.28	2.65	2.46	2.28	2.22
611-BD04AV	B	4	.48	2.58	2.40	2.34	2.06
611-BD08AV	B	8	.88	2.80	2.62	2.55	2.24

### BPA SERIES: SIDE ACTUATED DIP SWITCHES

#### Specifications:

- Contact rating: 100mA Max. @ 5VDC or 25mA Max. @ 24VDC
- SPST

For quantities greater than listed, call for quote.

Thru-hole							
MOUSER STOCK NO.	Fig.	No. of Pos.	Dim. A (in.)	Style	Price Each		
Mfr.	Mfr. Part No.	Fig.	No. of Pos.	Dim. A (in.)	1	25	50
611-BPA02B	C	2	.28	1.23	1.13	1.08	1.02
611-BPA04B	C	4	.48	1.42	1.33	1.26	1.24
611-BPA05B	C	5	.578	1.59	1.35	1.35	1.32
611-BPA06B	C	6	.68	1.78	1.61	1.50	1.47
611-BPA08B	C	8	.878	1.84	1.57	1.55	1.52
611-BPA10B	C	10	1.078	1.95	1.83	1.72	1.68
Surface Mount							
611-BPA02SB	D	2	.28	1.17	1.03	1.01	.99
611-BPA04SB	D	4	.48	1.56	1.43	1.39	1.33
611-BPA05SB	D	5	.578	1.74	1.51	1.48	1.44
611-BPA07SB	D	7	.778	2.89	2.78	2.65	2.41
611-BPA08SB	D	8	.878	1.89	1.80	1.67	1.63
611-BPA10SB	D	10	1.078	2.21	2.00	1.90	1.85

### LOW PROFILE DIP SWITCHES

#### Features/Benefits:

- Low profile design saves space
- Tape and reel packaging available
- Thru-hole and surface mount models
- Sealed with top tape

#### SD Series

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	No. of Pos.	Dim. A (in.)	Style	Price Each			
					1	25	50	100
<b>Flush Actuator</b>								
611-SD04H05BD	E	4	.458	SMT, No Tape	2.74	2.55	2.42	
611-SD06H05BD	E	6	.658	SMT, No Tape	3.28	3.05	2.91	
<b>Extended Actuator</b>								
611-SD04H1BD	E	4	.429	Thru-Hole, No Tape	1.91	1.77	1.69	
611-SD08H1BD	E	8	.406	Thru-Hole, No Tape	2.47	2.31	2.19	
611-SD05H1SB	E	5	.555	SMT, Tape Seal	3.14	2.93	2.78	
611-SD06H1SB	E	6	.658	SMT, Tape Seal	3.37	3.14	2.98	
611-SD08H1B	E	8	.858	Thru-Hole, Tape Seal	2.59	2.41	2.30	
611-SD10H1B	E	10	1.058	Thru-Hole, Tape Seal	2.96	2.75	2.62	
611-SD10H1SB	E	10	1.058	SMT, No Tape	4.12	3.83	3.65	

#### SDA Series

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	No. of Pos.	Dim. A (in.)	Style	Price Each			
					1	25	50	100
<b>Flush Actuator</b>								
611-SDA02H0BD	F	2	.278	Thru-Hole, No Tape	.94	.814	.774	
611-SDA03H0BD	F	3	.378	Thru-Hole, No Tape	1.15	.921	.90	
611-SDA04H0BD	F	4	.476	Thru-Hole, No Tape	1.22	1.15	1.06	
611-SDA05H0BD	F	5	.578	Thru-Hole, No Tape	1.28	1.14	1.11	
611-SDA06H0BD	F	6	.676	Thru-Hole, No Tape	1.31	1.21	1.14	
611-SDA08H0BD	F	8	.876	Thru-Hole, No Tape	1.44	1.38	1.29	
611-SDA09H0BD	F	9	.978	Thru-Hole, No Tape	1.75	1.47	1.34	
611-SDA01H0B	F	1	.178	Thru-Hole, No Tape	1.05	.968	.926	
611-SDA04H0B	F	4	.476	Thru-Hole, No Tape	1.32	1.14	1.11	
611-SDA07H0B	F	7	.778	Thru-Hole, No Tape	1.69	1.62	1.52	
611-SDA08H0B	F	8	.876	Thru-Hole, No Tape	1.58	1.53	1.42	
611-SDA09H0B	F	9	.978	Thru-Hole, No Tape	3.02	2.40	1.95	
611-SDA02H0SB	G	2	.278	SMT, Tape Seal	1.40	1.31	1.25	
611-SDA04H0SB	G	4	.476	SMT, Tape Seal	1.87	1.61	1.58	
611-SDA07H0SB	G	7	.778	SMT, Tape Seal	2.06	1.83	1.77	
611-SDA08H0SB	G	8	.876	SMT, Tape Seal	2.21	2.15	1.95	
611-SDA10H0SB	G	10	1.076	SMT, Tape Seal	2.51	2.43	2.26	
611-SDA12H0B	G	12	1.279	SMT, Tape Seal	2.03	1.81	1.75	
611-SDA02H0SBD	G	2	.278	SMT, No Tape	1.35	1.20	1.14	
611-SDA08H0SBD	G	8	.876	SMT, No Tape	2.12	1.96	1.82	
611-SDA09H0SBD	G	9	.978	SMT, No Tape	4.11	3.27	2.66	
611-SDA10H0SBD	G	10	.076	SMT, No Tape	2.50	2.17	2.10	
<b>Extended Actuator</b>								
611-SDA02H1BD	E	2	.278	Thru-Hole, No Tape	.94	.88	.819	
611-SDA03H1BD	E	3	.378	Thru-Hole, No Tape	1.14	1.10	1.00	
611-SDA04H1BD	E	4	.476	Thru-Hole, No Tape	1.20	1.08	1.00	
611-SDA05H1BD	E	5	.578	Thru-Hole, No Tape	1.28	1.19	1.11	

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For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	No. of Pos.	Dim. A (in.)	Style	Price Each			
					1	25	50	100
<b>Extended Actuator (Cont.)</b>								
611-SDA06H1BD	E	6	.676	Thru-Hole, No Tape	1.31	1.21	1.14	
611-SDA07H1BD	E	7	.778	Thru-Hole, No Tape	1.38	1.25	1.17	
611-SDA08H1BD	E	8	.876	Thru-Hole, No Tape	1.44	1.43	1.26	
611-SDA09H1BD	E	9	.978	Thru-Hole, No Tape	1.68	1.45	1.42	
611-SDA10H1BD	E	10	1.076	Thru-Hole, No Tape	1.80	1.56	1.53	
611-SDA12H1BD	E	12	1.279	Thru-Hole, No Tape	1.91	1.72	1.64	
611-SDA02H1SBD	H	2	.278	SMT, No Tape	1.17	.852	.805	
611-SDA03H1SBD	H	3	.378	SMT, No Tape	1.65	1.43	1.40	
611-SDA04H1SBD	H	4	.476	SMT, No Tape	1.65	1.53	1.46	
611-SDA05H1SBD	H	5	.578	SMT, No Tape	1.90	1.63	1.61	
611-SDA06H1SBD	H	6	.676	SMT, No Tape	1.94	1.79	1.67	
611-SDA07H1SBD	H	7	.778	SMT, No Tape	1.94	1.84	1.74	
611-SDA08H1SBD	H	8	.876	SMT, No Tape	2.05	1.93	1.82	
611-SDA09H1SBD	H	9	.978	SMT, No Tape	2.30	2.23	2.03	
611-SDA10H1SBD	H	10	1.076	SMT, No Tape	2.50	2.31	2.15	
611-SDA12H1SBD	H	12	1.279	SMT, No Tape	2.65	2.46	2.32	

### TDA SERIES: ULTRA-MINIATURE SMT HALF-PITCH DIP SWITCHES

• Bifurcated contact for increased electrical reliability

• Process sealed for surface mount soldering and washable processing

• Reel Quantity Available

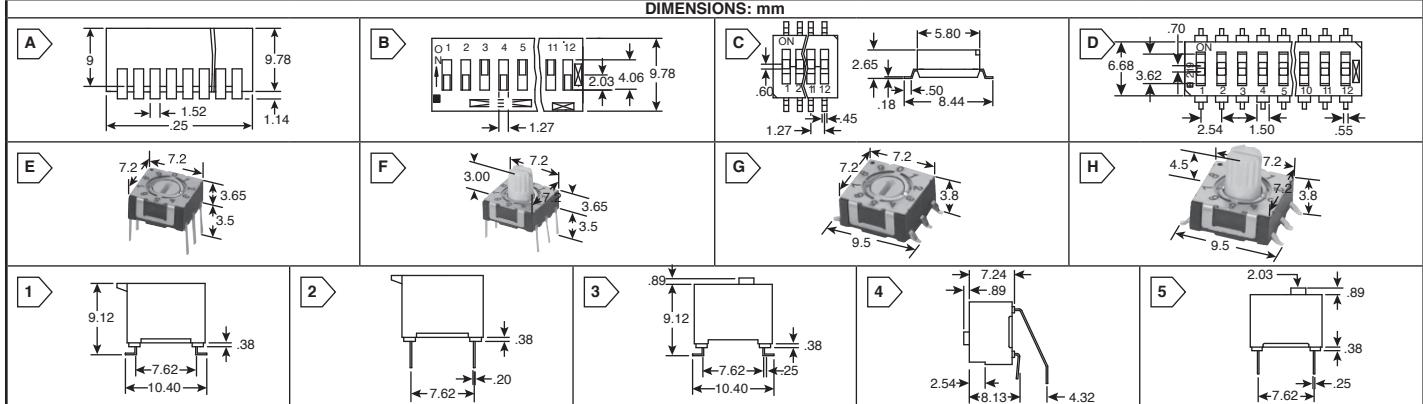
MOUSER STOCK NO.	Fig.	No. of Pos.	Dim. A (in.)	Price Each				
				1	25	50	100	
<b>611-TDA01H0S1R</b>								
611-TDA02H0S1	K	2	.144	2.01	1.78	1.71	1.54	
611-TDA04H0S1	K	4	.244	2.05	1.82	1.79	1.78	
611-TDA06H0S1	K	6	.344	2.43	2.18	2.10	1.98	
611-TDA08H0S1	K	8	.444	2.68	2.56	2.45	2.16	
611-TDA08H0S1R	K	8	.444	3.13	2.95	2.81	2.51	
611-TDA10H0S1	K	10	.544	3.79	3.60	3.43	3.09	

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# DIP Switches

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## DIMENSIONS: mm



### CTS SERIES 193/194/195 SIDE ACTUATED DIP SWITCHES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CTS Part No.	Fig.	Length (mm)	No. of Pos.	Price Each		
					1	10	100
<b>Surface Mount</b>							
774-1932MS	1932MS	A1	7.26	2	1.29	1.03	.902
774-1933MS	1933MS	A1	9.80	3	1.39	1.11	.977
774-1934MS	1934MS	A1	12.34	4	1.59	1.28	1.17
<b>Thru-Hole</b>							
774-1944MST	1944MST	A2	12.34	4	1.06	.987	.888
774-1948MST	1948MST	A2	22.50	8	1.36	1.26	1.13
774-1952MST	1952MST	A2	7.26	2	.78	.725	.657
774-1953MST	1953MST	A2	9.80	3	.88	.824	.741
774-1954MST	1954MST	A2	12.34	4	.85	.79	.713
774-1957MST	1957MST	A2	19.96	7	1.18	1.09	.979
774-19510MST	19510MST	A2	27.58	10	1.24	1.15	1.04

### CTS SERIES 204 SMD MULTI-FUNCTIONAL DIP SWITCHES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CTS Part No.	Fig.	Length (mm)	No. of Pos.	Price Each		
					1	10	100
<b>Half Pitch</b>							
774-2042ST	2042ST	B3	7.26	2	1.32	1.06	.949
774-2044ST	2044ST	B3	12.34	4	1.41	1.13	1.01
774-2045ST	2045ST	B3	14.88	5	1.46	1.17	1.04
774-2046ST	2046ST	B3	17.42	6	1.52	1.21	1.08
774-2047ST	2047ST	B3	19.96	7	1.57	1.26	1.12
774-2048ST	2048ST	B3	22.50	8	1.61	1.29	1.15

### CTS SERIES 206RA RIGHT ANGLE PANEL DIP SWITCHES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CTS Part No.	Fig.	Length (mm)	No. of Pos.	Price Each		
					1	10	100
<b>Standard</b>							
774-2062RAST	2062RAST	B4	7.26	2	1.10	1.01	.915
774-2065RAST	2065RAST	B4	14.88	5	1.25	1.15	1.04
774-2066RAST	2066RAST	B4	17.42	6	1.32	1.21	1.10
774-2067RAST	2067RAST	B4	19.96	7	1.38	1.27	1.15
774-2068RAST	2068RAST	B4	22.50	8	1.42	1.31	1.18
774-2069RAST	2069RAST	B4	25.04	9	1.46	1.34	1.22
774-20610RAST	20610RAST	B4	27.58	10	1.58	1.45	1.31

### CTS SERIES 206/208 MULTI-FUNCTIONAL THRU-HOLE DIP SWITCHES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CTS Part No.	Fig.	Length (mm)	No. of Pos.	Price Each		
					1	10	100
<b>Unsealed</b>							
774-2063	2063	B5	9.80	3	1.01	.93	.84
774-2064	2064	B5	12.34	4	.75	.705	.64
774-2068	2068	B5	22.50	8	.88	.812	.731
774-20610	20610	B5	27.58	10	1.09	1.00	.91
774-206214	206214	B5	22.50	4	1.62	1.49	1.35
<b>Sealed</b>							
774-2062ST	2062ST	B5	7.26	2	.87	.806	.728
774-2063ST	2063ST	B5	9.80	3	.90	.833	.75
774-2064ST	2064ST	B5	12.34	4	.91	.835	.754
774-2065ST	2065ST	B5	14.88	5	1.00	.919	.837
774-2067ST	2067ST	B5	19.96	7	1.06	.985	.892
774-2068ST	2068ST	B5	22.50	8	1.05	.975	.886
774-20610ST	20610ST	B5	27.58	10	1.19	1.10	.99
774-20612ST	20612ST	B5	32.66	12	1.38	1.28	1.15
<b>Unsealed</b>							
774-2082	2082	B5	7.26	2	.97	.90	.81
774-2083	2083	B5	9.80	3	.90	.83	.75

### OMRON A6A SERIES: SUBMINIATURE DIP SWITCHES FOR HIGH-DENSITY PACKAGING

#### Specifications:

- Switching capacity: 100mA @ 28VDC
- Contact resistance: 200MΩ Max.
- Dielectric strength: 500VAC
- Insulation resistance: 10MΩ Min. (@ 250VDC)
- A slider lock and rotating PCB system achieve stable contact reliability
- Sealed construction equivalent to IP64 prevents flux penetration and provides high-contact reliability

MOUSER STOCK NO.	Omron Part No.	Output Code Type	Number of Positions	Type	Shaft Dimensions (mm)		
					1	25	50
653-A6A-10R	A6A-10R	BCD 1-2-4-8	10	Standard (cone)	-	6.75	6.07
653-A6A-10RW	A6A-10RW	BCD 1-2-4-8	10	Thumbwheel	7.3	7.26	6.41
653-A6A-10CW	A6A-10CW	BCD 1-2-4-8 complement	10	Thumbwheel	7.3	7.70	6.41
653-A6A-16R	A6A-16R	BCD Hexadecimal 1-2-4-8	16	Standard (cone)	-	6.40	5.75
653-A6A-16RS	A6A-16RS	BCD Hexadecimal 1-2-4-8	16	Extended Shaft	7.3	7.97	7.16

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1928

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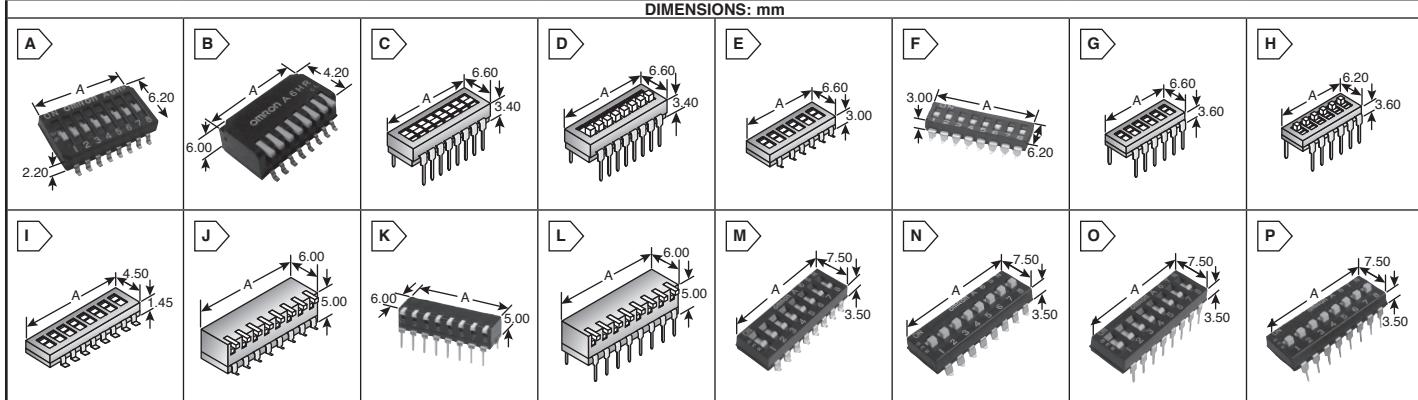
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# OMRON DIP Switches

OMRON

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DIMENSIONS: mm



## A6HF/HR SERIES: HALF-PITCH DIP SWITCHES

### Specifications:

- Switching capacity: 25mA @ 24VDC
- Operating force: 500gf Max.
- Dielectric strength: 300VAC

### Features:

- Gold-plated twin contacts
- Temperature-resistant resin allows peak reflow temperatures of 260°C.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Number of Positions	Dimension A (mm)	Price Each			
					1	25	50	100
<b>SMT, Slide-Type</b>								
653-A6HF-4102	A6HF-4102	A	4	6.21	2.78	2.69	2.54	2.23
653-A6HF-8102	A6HF-8102	A	8	11.29	5.13	4.89	4.37	3.95
<b>SMT, Piano-Type</b>								
653-A6HR-4104	A6HR-4104	B	4	6.21	4.19	3.89	3.72	3.57
653-A6HR-8104	A6HR-8104	B	9	11.29	6.10	5.67	5.42	5.19

## A6D SERIES: SUBMINIATURE DIP SWITCHES

### Specifications:

- Switching capacity: 30mA @ 30VDC
- Operating force: 500gf Max.
- Dielectric strength: 500VAC

### Features:

- Space-saving and IP64 sealed construction
- Smooth, sure switching action enables comfortable operation.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Number of Positions	Dimension A (mm)	Price Each			
					1	25	50	100
<b>Thru-Hole, Top-Actuated, Sealed</b>								
653-A6D-2100	A6D-2100	C	2	7.10	2.92	2.62	2.33	2.10
653-A6D-4100	A6D-4100	C	4	12.20	2.74	2.57	2.45	2.23
653-A6D-8100	A6D-8100	C	8	22.40	3.02	2.72	2.42	2.23
<b>Thru-Hole, Raised Actuator, Sealed</b>								
653-A6D-2103	A6D-2103	D	2	7.10	3.06	2.86	2.62	2.36

## A6S/T SERIES: SLIDE DIP SWITCHES

### Specifications:

- Switching capacity: 25mA @ 24VDC
- Operating force: 30gf
- Dielectric strength: 500VAC

### Features:

- Gold-plated twin contacts and a slide-type, self-cleaning mechanism ensure high-reliability.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Number of Positions	Dimension A (mm)	Price Each			
					1	25	50	100
<b>SMT, Flat-Actuated</b>								
653-A6S-2101-H	A6S-2101-H	E	2	6.02	1.23	1.11	.981	.882
653-A6S-4101-H	A6S-4101-H	E	4	11.10	1.45	1.30	1.27	1.17
653-A6S-8101-H	A6S-8101-H	E	8	21.26	2.01	1.80	1.60	1.55
<b>SMT, Flat-Actuated, Sealed</b>								
653-A6S-2102-H	A6S-2102-H	E	2	6.02	1.43	1.36	1.27	1.24
653-A6S-4102-H	A6S-4102-H	E	4	11.10	1.49	1.33	1.18	1.06
653-A6S-6102-H	A6S-6102-H	E	6	16.18	1.94	1.74	1.51	1.39
653-A6S-8102-H	A6S-8102-H	E	8	21.26	1.87	1.78	1.66	1.62
<b>SMT, Raised Actuator</b>								
653-A6S-2104-H	A6S-2104-H	F	2	6.02	1.02	.92	.847	.776
653-A6S-4104-H	A6S-4104-H	F	4	11.10	1.45	1.30	1.16	1.04
653-A6S-5104-H	A6S-5104-H	F	5	13.64	1.65	1.48	1.31	1.18
653-A6S-6104-H	A6S-6104-H	F	6	16.18	1.39	1.26	1.11	1.03
653-A6S-8104-H	A6S-8104-H	F	8	21.26	2.10	1.89	1.68	1.51
<b>Thru-Hole, Flat-Actuated, Sealed</b>								
653-A6T-2102	A6T-2102	G	2	6.02	1.16	1.04	.928	.835
653-A6T-4102	A6T-4102	G	4	11.10	1.28	1.14	1.02	.919
<b>Thru-Hole, Raised Actuator</b>								
653-A6T-1104	A6T-1104	H	1	3.48	1.13	1.01	.902	.819
653-A6T-2104	A6T-2104	H	2	6.02	1.09	1.00	.89	.801
653-A6T-3104	A6T-3104	H	3	8.56	1.41	1.29	1.19	1.10
653-A6T-4104	A6T-4104	H	4	11.10	1.10	.993	.882	.793
653-A6T-6104	A6T-6104	H	6	16.18	1.38	1.24	1.10	.995
653-A6T-8104	A6T-8104	H	8	21.26	1.77	1.59	1.41	1.27



## A6H SERIES: HALF-PITCH DIP SWITCHES

### Specifications:

- Switching capacity: 25mA @ 24VDC
- Operating force: 30gf
- Dielectric strength: 300VAC

### Features:

- Ultra-low profile of 1.55mm
- Half-pitch (1.27mm) design
- Compact and reduced mounting space

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Number of Positions	Dimension A (mm)	Price Each			
					1	25	50	100
<b>SMT, Flat-Actuated</b>								
653-A6H-4101	A6H-4101	I	4	6.31	2.33	2.09	1.86	1.67
653-A6H-6101	A6H-6101	I	6	8.85	2.58	2.31	2.06	1.85
653-A6H-8101	A6H-8101	I	8	11.39	3.07	2.76	2.45	2.21
653-A6H-0101	A6H-0101	I	10	13.93	2.81	2.69	2.56	2.26
<b>SMT, Flat-Actuated, Sealed</b>								
653-A6H-4102	A6H-4102	I	4	6.31	2.41	2.17	1.93	1.73
653-A6H-8102	A6H-8102	I	8	11.39	2.66	2.54	2.35	2.12
653-A6H-0102	A6H-0102	I	10	13.93	2.88	2.76	2.63	2.32

## A6SR/TR SERIES: PIANO DIP SWITCHES

### Specifications:

- Switching capacity: 25mA @ 24VDC
- Operating force: 795gf Max.
- Dielectric strength: 500VAC

### Features:

- Low-profile design with a height of only 5mm
- Pitch of 2.54mm for end-stackable mounting
- Gold-plated twin contacts

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Number of Positions	Dimension A (mm)	Price Each			
					1	25	50	100
<b>SMT, Long Lever</b>								
653-A6SR-2104	A6SR-2104	J	2	4.98	1.79	1.60	1.43	1.34
653-A6SR-4104	A6SR-4104	J	4	10.06	1.79	1.60	1.43	1.28
653-A6SR-8104	A6SR-8104	J	8	25.30	2.24	2.17	2.07	1.99
<b>Thru-Hole, Short Lever</b>								
653-A6TR-4101	A6TR-4101	K	4	10.06	1.79	1.60	1.43	1.28
<b>Thru-Hole, Long Lever</b>								
653-A6TR-2104	A6TR-2104	L	2	4.98	1.79	1.60	1.43	1.28
653-A6TR-8104	A6TR-8104	L	8	20.22	2.24	2.18	2.07	1.94

## A6SN/TN SERIES: SLIDE DIP SWITCHES

### Specifications:

- Knife-edge structure with high-contact pressure mechanism assures high-reliability and enables washing without seal.

### Features:

- Knife-edge structure with high-contact pressure mechanism assures high-reliability and enables washing without seal.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Number of Positions	Dimension A (mm)	Price Each			
					1	25	50	100
<b>SMT, Flat-Actuated</b>								
653-A6SN-2101	A6SN-2101	M	2	7.00	1.47	1.42	1.32	1.29
653-A6SN-4101	A6SN-4101	M	4	12.10	2.24	2.04	1.81	1.63
653-A6SN-8101	A6SN-8101	M	8	22.30	2.73	2.65	2.56	2.52
<b>SMT, Raised Actuator</b>								
653-A6SN-2104	A6SN-2104	N	2	7.00	2.13	1.93	1.79	1.64
653-A6SN-4104	A6SN-4104	N	4	12.10	2.24	2.04	1.81	1.63
653-A6SN-6104	A6SN-6104	N	6	17.20	3.38	3.01	2.70	2.44
653-A6SN-8104	A6SN-8104	N	8	22.30	4.70	4.23	3.76	3.38
<b>Thru-Hole, Flat-Actuated</b>								
653-A6TN-2101	A6TN-2101	O	2	7.00	1.41	1.26	1.12	1.01
653-A6TN-4101	A6TN-4101	O	4	12.10	1.41	1.26	1.12	1.01
6								

# Rotary Switches

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## APEM ROTARY DIP SWITCHES

### Specifications:

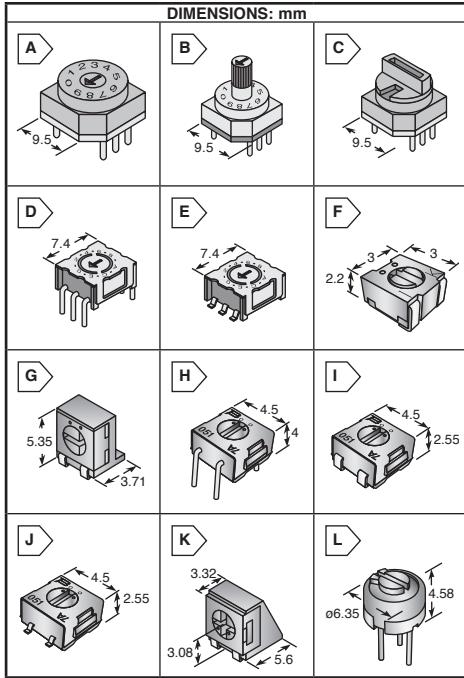
- Operating voltage: 24VDC max
- Contact rating, static: 400mA max

### Features:

- 3+3 terminal layout
- Completely sealed for process compatibility
- Clockwise or counterclockwise settable
- Solder coated terminals

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Apem Part No.	Fig.	No. of Positions	Description	Price Each			
					1	25	50	100
<b>Thru-Hole</b>								
642-PT65101	PT65101	A	10	True Binary coded decimal	4.36	4.16	3.96	3.56
642-PT65106	PT65106	A	16	Complimentary binary coded decimal	4.95	4.72	4.50	4.05
642-PT65301	PT65301	B	10	True Binary coded decimal	5.69	5.30	5.03	4.24
642-PT65303	PT65303	B	16	Complimentary binary coded hexadecimal	6.12	5.70	5.41	4.56
642-PT65501	PT65501	C	10	True Binary coded decimal	5.65	5.39	5.14	4.62
642-PT65503	PT65503	C	16	Complimentary binary coded hexadecimal	6.13	5.70	5.42	4.56
642-P36101	P36101	D	10	True Binary coded decimal	5.38	4.81	3.60	3.35
642-P36103	P36103	D	16	Complimentary binary coded hexadecimal	4.16	3.98	3.78	3.40
<b>Surface Mount</b>								
642-P36S101	P36S101	E	10	True Binary coded decimal	4.40	4.20	4.00	3.60
642-P36S103	P36S103	E	16	Complimentary binary coded decimal	4.51	4.12	3.92	3.53



## BOURNS® SEALED ROTARY SWITCHES

### Specifications:

- Contact Form: SPST
- Max. Current Rating: 100mA
- Max. Voltage Rating: 16V
- Contact Timing: Non-Shorting
- Rotational Life: 2000 cycles

### Features:

- Tape and Reel packaging on surface mount terminal types.

### Applications:

- Security Systems
- Portable Electronics
- Instrumentation

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Bourns Part No.	Fig.	Size (mm)	Terminal Type	Package Quantity	Price Each			
						1	10	50	100
652-7813J-1-023E	7813J-1-023E	F	3	SMD J-Hook	1000	1.76	1.51	1.27	1.15
652-7813S-1-023E	7813S-1-023E	G	3	SMD Right angle	200	1.94	1.68	1.56	1.43
652-7814H-1-023	7814H-1-023	H	4	Through-hole	100	1.94	1.60	1.40	1.30
652-7814J-1-023E	7814J-1-023E	I	4	SMD J-Hook	500	1.76	1.52	1.42	1.29
652-7814G-1-023E	7814G-1-023E	J	4	SMD Gull wing	500	1.76	1.52	1.42	1.29
652-7814Z-1-023E	7814Z-1-023E	K	4	SMD Right angle	200	1.94	1.68	1.56	1.43
652-7829S-1-023LF	7829S-1-023LF	L	.06	Right angle through hole	50	1.66	1.38	1.25	1.12



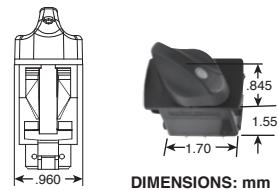
## V SERIES: QUICK CONNECT KNOB TYPE ROTARY SWITCHES

- Patented mechanism translates rotary into linear motion
- PC Board supports LED and surface mount resistors

- IP67 sealing protection above panel
- Secondary CAM for definitive detent positions

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Carling Technologies Part No.	Contact Form	Contact Rating	Price Each			
				1	10	25	50
691-RV21D2BC00B-K4C	RV21D2BC00B-K4C	DPST, On-None-Off	20A @ 12VDC	28.14	25.60	23.46	21.66
691-RV24D2CC0CB-K4C	RV24D2CC0CB-K4C	DPDT, On-None-On	20A @ 12VDC	34.36	31.26	28.65	26.45
691-RV26D2DC0CB-K4C	RV26D2DC0CB-K4C	DPDT, On-Off-On	20A @ 12VDC	34.27	31.18	28.58	26.38



## C&K CD SERIES: 8MM ULTRA-MINIATURE CODED ROTARY

### Specifications:

- Process sealed to withstand soldering and cleaning
- Contact rating: 0.4VA max. @ 20VAC or VDC max.
- Mechanical and Electrical life: 20,000 actuations
- Dielectric Strength: 250V RMS min.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Pos.	Code Configuration	Price Each				
Mfr. Mfr. Part No.				1	25	50	100	
<b>PC Thru-Hole</b>								
611-CD10RM0CB	A	10	Binary Coded Decimal, True	4.36	4.00	3.79	3.41	
611-CD16RM0AB	B	16	Hexadecimal, True	4.36	3.72	3.50	3.32	
<b>Surface Mount</b>								
611-CD16RM0SB	C	16	Hexadecimal, True	5.19	4.92	4.71	4.23	

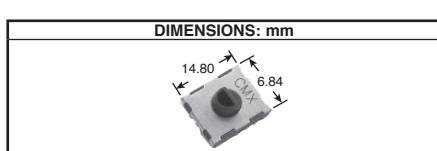
Type	Position	Code							
		C	1	2	4	8	0	1	2
BCD	0	*							
BCD	1		*	*					
BCD	2		*	*	*				
BCD	3		*	*	*	*			
BCD	4			*	*	*			
BCD	5		*	*	*	*			
BCD	6		*	*	*	*			
BCD	7		*	*	*	*			
Hexadecimal	8		*	*	*	*			
Hexadecimal	9		*	*	*	*			
Hexadecimal	A		*	*	*	*			
Hexadecimal	B		*	*	*	*			
Hexadecimal	C		*	*	*	*			
Hexadecimal	D		*	*	*	*			
Hexadecimal	E		*	*	*	*			
Hexadecimal	F		*	*	*	*			

Type	Position	Code							
		C	1	2	4	8	0	1	2
Complement	0	*							
Complement	1		*	*	*	*			
Complement	2		*	*	*	*			
Complement	3		*	*	*	*			
Complement	4		*	*	*	*			
Complement	5		*	*	*	*			
Complement	6		*	*	*	*			
Complement	7		*	*	*	*			
Complement	8		*	*	*	*			
Complement	9		*	*	*	*			
Complement	A		*	*	*	*			
Complement	B		*	*	*	*			
Complement	C		*	*	*	*			
Complement	D		*	*	*	*			
Complement	E		*	*	*	*			
Complement	F		*	*	*	*			

## C&K RW SERIES: SUB-MINIATURE ROTARY SWITCH

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Pos.	Terminal Type	Contact Form	Current Rating	Voltage Rating	Price Each			
							1	25	100	250
<b>Right Angle, PC Thru-Hole</b>										
611-CRD10RM0AB	E	16	Hexadecimal, Complement	5.41	5.21	4.91	4.42			
<b>Surface Mount</b>										
611-CRD10RM0SB	F	10	Binary Coded Decimal, True	5.01	4.71	4.35	3.92			
611-CRD16RM0SB	F	16	Hexadecimal, True	5.49	5.07	4.78	4.30			
611-CRD16CM0SBR	F	16	Hexadecimal Complement	5.06	4.73	4.45	4.16			



# Rotary Switches

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## C6 SERIES: .92" UNSEALED ADJUSTABLE STOP ENCLOSED ROTARY SWITCHES

### Specifications:

- Shaft diameter: .250"
- Current and Voltage Rating: 1A @28VDC; 1A @125VAC
- Current carrying capacity: 5A
- Dielectric Strength: 1000VAC
- Insulation Material: Polyester

- Terminals and contacts: Brass with silver plate
- Termination: Solder lug
- Index: Molded live spring detent
- Non-shorting
- Stops set at 2 pos.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Electroswitch Part No.	Fig.	Poles	Active Positions	Poles/Deck	No. of Decks	Index Angle	Price Each			
								1	10	25	50
690-C6P0112N-A	C6P0112N-A	A1	01	02-12	1	1	30°	6.31	6.18	5.79	5.40
690-C6P0206N-A	C6P0206N-A	A2	02	02-06	2	1	30°	6.67	6.54	6.13	5.72
690-C6P0403N-A	C6P0403N-A	A3	04	02-03	4	1	30°	7.78	7.62	7.15	6.67

### D2 SERIES: 1" DIAMETER OPEN FRAME ROTARY SWITCHES

### Specifications:

- Shaft diameter: .250"
- Current and Voltage Rating: .55A @28VDC; 25A @115VAC
- Current carrying capacity: 7A
- Dielectric Strength: 750VAC
- Insulation Material: Dialyl phthalate

- Clips and rotors: Brass with silver plate
- Termination: Solder lug
- Index: Dual-ball, side thrust design
- Non-shorting

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Electroswitch Part No.	Fig.	Poles	Active Positions	Poles/Deck	No. of Decks	Index Angle	Price Each			
								1	10	25	50
690-D2D0112N	D2D0112N	B1	01	02-12	1	1	30°	29.50	26.96	25.28	23.60
690-D2D0305N	D2D0305N	B2	03	02-05	3	1	30°	35.11	32.10	30.09	28.08

### SECTION ASSEMBLIES FOR D2 SERIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Electroswitch Part No.	Poles	No. of Positions	Poles/Sections	Index Angle	Price Each			
						1	10	25	50
690-D2D-51	D2D-51	01	02-12	1	30°	16.14	15.83	14.85	13.86

### D4 SERIES: 1.437" DIAMETER CERAMIC OPEN FRAME ROTARY SWITCHES

### Specifications:

- Shaft diameter: .250"
- Make I Break Current/Voltage Rating: 1.5A @28VDC; 0.5A @115VAC
- Current carrying capacity: 9A
- Dielectric Strength: 1000VAC
- Insulation Material: Ceramic

- Clips and rotors: Silver alloy
- Termination: Solder lug
- Index: Single-ball, hill and valley
- Non-shorting

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Electroswitch Part No.	Fig.	Poles	Active Positions	Poles/Deck	No. of Decks	Index Angle	Price Each			
								1	10	25	50
690-D4C0212N	D4C0212N	C	02	02-12	1	2	30°	80.50	79.02	74.09	69.15
690-D4C0312N	D4C0312N	C	03	02-12	1	3	30°	104.10	99.67	95.52	91.80
690-D4C0412N	D4C0412N	C	04	02-12	1	4	30°	138.55	132.61	127.13	122.12

### KNOBS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Electroswitch Part No.	Fig.	Description				Price Each			
			1	10	25	50	1	10	25	50
690-1202BJ	1202BJ	D	Round knob with spun silver cap, set screw	5.10	4.84	4.80	4.56			
690-1930BP	1930BP	E	Large round knob with skirt, set screw	4.76	4.52	4.48	4.26			
690-1914N	1914N	F	Round knob with brass insert, set screw	6.29	5.97	5.92	5.63			



For quantities greater than listed, call for quote.

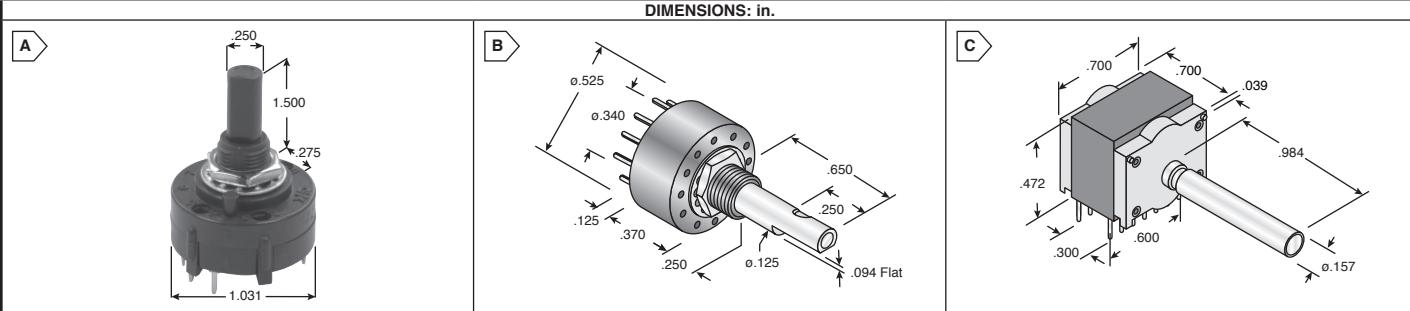
MOUSER STOCK NO.	Phoenix Contact Part No.	Control Type	Index Angle (°)	Number of Connections	Number of Positions	Price Each			
						1	10	25	50
651-3069700	3069700	Voltmeter changeover	45°	8	4	46.70	41.79	40.69	39.35
651-3069701	3069701	Voltmeter changeover	45°	12	7	59.23	53.00	51.60	49.91
651-3069702	3069702	Voltmeter changeover	45°	8	3	46.70	41.79	40.69	39.35
651-3069703	3069703	Amp meter changeover	90°	20	4	79.43	71.07	69.20	66.92
651-3069704	3069704	Amp meter changeover	90°	12	4	59.23	53.00	51.60	49.91
651-3069705	3069705	Controller switch	30°	4	3	34.12	30.52	29.72	28.75
651-3069706	3069706	Control off switch	60°	4	2	29.25	26.18	25.49	24.65
651-3069707	3069707	Control off switch	60°	4	2	34.12	30.52	29.72	28.75
651-3069708	3069708	Control off switch	60°	8	2	41.78	37.39	36.40	35.21
651-3069709	3069709	Control off switch	60°	8	2	46.70	41.79	40.69	39.35
651-3069710	3069710	Changeover switch	60°	4	3	34.12	30.52	29.72	28.75
651-3069711	3069711	Changeover switch	60°	8	3	46.70	41.79	40.69	39.35
651-3069712	3069712	Changeover switch	60°	12	3	59.23	53.00	51.60	49.91
651-3069713	3069713	Changeover switch	60°	16	3	71.76	64.21	62.52	60.46
651-3069714	3069714	Changeover switch	60°	4	2	34.12	30.52	29.72	28.75
651-3069715	3069715	Changeover switch	60°	8	2	46.70	41.79	40.69	39.35
651-3069716	3069716	Control step switch	60°	4	4	41.78	37.39	36.40	35.21
651-3069717	3069717	Control step switch	45°	8	3	34.12	30.52	29.72	28.75
651-3069718	3069718	Control step switch	60°	12	3	59.23	53.00	51.60	49.91
651-3069719	3069719	Changeover switch	90°	4	2	34.12	30.52	29.72	28.75
651-3069720	3069720	Changeover switch	90°	8	2	46.70	41.79	40.69	39.35
651-3069721	3069721	Control step switch	60°	16	4	70.70	63.26	61.60	59.57
651-3069722	3069722	Changeover switch	60°	4	2	34.12	30.52	29.72	28.75
651-3069723	3069723	Changeover switch	30°	4	3	34.12	30.52	29.72	28.75
651-3069724	3069724	Changeover switch	30°	8	3	46.70	41.79	40.69	39.35
651-3069725	3069725	Changeover switch	90°	4	2	34.12	30.52	29.72	28.75
651-3069726	3069726	Controller switch	60°	8	5	59.23	53.00	51.60	49.91

# C&K Rotary Switches

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DIMENSIONS: in.



## SERIES A: 1-4 POLE ROTARY SWITCHES

### Features/Benefits:

- Multi-pole and multi-position
- Positive detent
- Non-shorting contacts
- Panel and PCB mounting

### Specifications:

- Contact Rating: 2.5A @ 125VAC; 350mA @ 125VDC
- Dielectric Strength: 1000Vrms min. @ sea level
- Insulation Resistance:  $10^9\Omega$  min.
- Contact Material: Silver

### Typical Application:

- Automotive
- Major and small appliances
- Industrial equipment

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Number of Positions	Number of Poles	Terminals	Price Each			
						1	25	50	100
611-A121415RNQ	A21415RNQ	A	14	DP, 90° Index	PC Thru-hole	5.07	4.74	3.91	3.77
611-A10015RSCQ	A10015RSCQ	A	12	SP, 30° Index, no stops	PCB	5.63	5.34	4.77	4.62
* 611-A11205RNQ	A11205RNQ	A	12	SP, 30° Index	PCB	5.62	5.03	4.68	4.21
611-A112-15	A11215RNQ	A	12	SP, 30° Index	PCB	5.13	4.86	4.46	4.02
611-A11215RNQ	A11215RNQ	A	12	SP, 30° Index	Solder	5.13	4.93	4.36	3.91
611-A11015RNQ	A11015RNQ	A	10	SP, 30° Index	PC Thru-hole	5.27	4.91	4.20	4.09
611-A10905RNQ	A10905RNQ	A	9	SP, 30° Index	PC Thru-hole	5.45	5.08	4.73	4.52
611-A12515RNQ	A12515RNQ	A	8	SP, 45° Index	Solder	9.77	7.96	6.10	5.64
611-A10715RNQ	A10715RNQ	A	7	SP, 30° Index	PC Thru-hole	4.77	4.44	3.79	3.69
611-A10615RSQZ	A10615RSQZ	A	6	SP, 30° Index	Solder	4.38	4.14	3.71	3.59
611-A20615RNQ	A20615RNQ	A	6	DP, 30° Index	PCB	5.43	5.15	4.73	4.26
611-A10605RNQ	A10605RNQ	A	6	SP, 30° Index	PC Thru-hole	4.79	4.46	3.86	3.78
611-A20615RNQ	A20615RNQ	A	6	DP, 30° Index	Solder	5.67	5.07	4.73	4.26
611-A20503RNCGE	A20503RNCGE	A	5	DP, 30° Index	PC Thru-hole	11.47	10.69	9.17	8.92
611-A30405MNQ	A30405MNQ	A	4	3P, 30° Index	Solder lug	5.16	5.01	4.88	4.76
** 611-A30403RNQ	A30403RNQ	A	4	3P, 30° Index	Solder	5.85	5.25	4.87	4.38
611-A30415RNQ	A30415RNQ	A	4	3P, 30° Index	PCB	5.59	4.95	4.66	4.19
611-A30415RNQ	A30415RNQ	A	4	3P, 30° Index	Solder	5.59	5.42	4.66	4.20
611-A40315RNQ	A40315RNQ	A	3	4P, 30° Index	Solder	6.92	6.35	5.49	5.12
611-A402S1RNQBE	A402S1RNQBE	A	2	4PDT, 30° Index	PC Thru-hole	12.88	12.00	11.19	10.67

\*\* .50" Actuator shaft

\*\*\* .375" Actuator shaft

## SERIES M: HALF-INCH ROTARY SWITCHES

### Features/Benefits:

- Multi-pole and multi-positions
- Panel and PCB mounting
- Stainless steel actuator
- Non-shorting contacts

### Specifications:

- Contact Rating: Carry 6A cont.; Switch 250mA max. @ 125VAC or 28VDC
- Dielectric Strength: 600Vrms min. @ sea level
- Insulation Resistance:  $10^{10}\Omega$  min.
- Contact Material: Copper alloy, silver plated
- MA, MB, and MD supplied with stop pins; MD, ME, and MH supplied with stop rings

### Typical Application:

- Test equipment
- Industrial equipment
- Medical equipment

### Switches

MOUSER STOCK NO.	C&K Part No.	Fig.	Number of Positions	Number of Poles	Terminals	Price Each			
						1	25	50	100
611-MA00L1NCQD	MA00L1NCQD	B	10	SP, 36°	PCB	11.60	11.05	10.51	8.13
611-ME00L1NZQD	ME00L1NZQD	B	10	SP, 36°	Solder	9.77	8.97	8.86	7.81
611-MA00L1NZQD	MA00L1NZQD	B	10	SP, 36°	Solder	8.82	8.82	8.60	8.49
611-MD00L1NZQD	MD00L1NZQD	B	6	DP, 30°	Solder	11.17	10.28	10.13	8.94
611-MB00L1NZQD	MB00L1NZQD	B	5	DP, 36°	Solder	11.60	11.09	9.92	9.65

### Hardware

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Description	Price Each			
				1	25	50	100
611-537100000	537100000	-	Replacement stop pins	.27	.264	.258	.252

## SERIES MIL: 1-4 POLES RIGHT ANGLE ROTARY SWITCHES

### Features/Benefits:

- Bushing option for panel mount
- 1-4 poles per bank and up to 5 banks per switch
- Totally sealed, insert molded contact and terminals
- Low profile - 12mm above PCB

### Specifications:

- Contact Rating: Carry 1A; Switch 20mA, 1VA max.
- Dielectric Strength: 500Vrms
- Insulation Resistance:  $10^9\Omega$
- Contact Material: Brass, gold plated

### Typical Application:

- Telecom switching equipment
- Military communications
- Instrumentation
- Medical monitors

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	C&K Part No.	Fig.	Number of Positions	Number of Poles	Terminals	Price Each			
						1	25	50	100
611-MIL112SNSD25	MIL112SNSD25	C	12 no stop	1	No	34.99	32.44	29.66	28.74
611-MIL130B03NSD25	MIL130B03NSD25	C	3	3	No	40.43	37.48	34.27	33.20
611-MIL211B12NSD25	MIL211B12NSD25	C	12	1	No	64.53	59.84	54.72	53.01
611-MIL130B03NAD2	MIL130B03NAD25	C	3	3	Yes	47.46	44.01	40.24	38.98

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# ELECTROSWITCH Rotary Switches

RoHS Compliant



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## ADJUSTABLE STOP ENCLOSED ROTARY SWITCHES

### C1 Series: .865" Wide

#### Specifications:

- Shaft diameter: .125"
- Current & Voltage Rating: .25A @28VDC; 0.1A @125VAC
- Current carrying capacity: 6A
- Dielectric Strength: 600VAC
- Insulation Material: Dialyl phthalate

- Terminals and contacts: Brass with silver plate
- Index: Dual-ball, hill and valley
- Termination: Solder lug
- Stops set at 2 pos.
- Non-shorting

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Electroswitch Part No.	Fig.	Poles	Active Positions	Poles/Deck	No. of Decks	Index Angle	Price Each			
								1	10	25	50
690-C1D0206N-A	C1D0206N-A	A1	02	02-06	2	1	30°	24.01	23.57	22.10	20.62
690-C1D0304N-A	C1D0304N-A	A2	03	02-04	3	1	30°	28.10	27.56	25.84	24.12
690-C1D0212N-A	C1D0212N-A	A3	02	02-12	1	2	30°	32.08	30.71	29.44	28.27
690-C1D0406N-A	C1D0406N-A	A1	04	02-06	2	2	30°	35.43	34.78	32.60	30.41
690-C1D0604N-A	C1D0604N-A	A2	06	02-04	3	2	30°	26.29	25.18	24.15	23.19

### C3 Series: 1.2" Wide

#### Specifications:

- Shaft diameter: .125"
- Current & Voltage Rating: .25A @28VDC; 0.1A @125VAC
- Current carrying capacity: 6A
- Dielectric Strength: 600VAC
- Insulation Material: Polyester
- Terminals and contacts: Brass with silver plate

- Termination: PC terminals
- Index: Dual-ball, hill and valley
- 12 pin construction
- Stops set at 2 pos.
- Non-shorting

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Electroswitch Part No.	Fig.	Poles	Active Positions	Poles/Deck	No. of Decks	Index Angle	Price Each			
								1	10	25	50
690-C3P0304N-A	C3P0304N-A	B	03	02-04	3	1	30°	27.31	23.38	21.76	20.19

### C4 Series: 1.5" Diameter

#### Specifications:

- Shaft diameter: .250"
- Current & Voltage Rating: .5A @28VDC; 0.3A @125VAC
- Current carrying capacity: 15A
- Dielectric Strength: 1000VAC
- Insulation Material: Dialyl phthalate

- IP67 versions available. Please contact Mouser sales.
- Terminals and contacts: Brass with silver plate
- Termination: Solder lug
- Index: Dual-ball, hill and valley
- Stops set at 2 pos.
- Non-shorting

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Electroswitch Part No.	Fig.	Poles	Active Positions	Poles/Deck	No. of Decks	Index Angle	Price Each			
								1	10	25	50
690-C4D0112N-A	C4D0112N-A	C1	01	02-12	1	1	30°	19.08	16.06	15.46	14.77
690-C4D0206N-A	C4D0206N-A	C2	02	02-06	2	1	30°	16.23	15.72	15.02	14.38
690-C4D0304N-A	C4D0304N-A	C3	03	02-04	3	1	30°	19.53	18.69	17.93	17.22
690-C4D0212N-A	C4D0212N-A	C1	02	02-12	1	2	30°	24.58	22.54	21.81	21.13
690-C4D0406N-A	C4D0406N-A	C2	04	02-06	2	2	30°	25.37	24.07	21.81	21.15
690-C4D0604N-A	C4D0604N-A	C3	06	02-04	3	2	30°	27.95	22.35	21.00	19.55
690-C4D0312N-A	C4D0312N-A	C1	03	02-12	1	3	30°	31.73	29.19	25.99	25.18
690-C4D0606N-A	C4D0606N-A	C2	06	02-06	2	3	30°	33.27	31.84	30.54	29.32
690-C4D0904N-A	C4D0904N-A	C3	09	02-04	3	3	30°	34.35	32.15	30.14	29.64
690-C4D0412N-A	C4D0412N-A	C1	04	02-12	1	4	30°	38.95	37.27	35.74	34.33
690-C4D1204N-A	C4D1204N-A	C3	12	02-04	3	4	30°	42.83	40.97	39.30	37.75

### C5 Series: .92" Sealed

#### Specifications:

- Internal and external seals for washability
- Shaft diameter: .250"
- Current and Voltage Rating: 1A @28VDC; 1A @125VAC
- Current carrying capacity: 5A
- Dielectric Strength: 500VAC
- Insulation Material: Polyester
- Terminals and contacts: Brass with silver plate

- Termination: Solder lug
- Index: Molded live spring detent
- Non-shorting
- Stops set at 2 pos.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Electroswitch Part No.	Fig.	Poles	Active Positions	Poles/Sect.	No. of Sect.	Index Angle	Price Each			
								1	10	25	50
690-C5P0112N-A	C5P0112N-A	D1	01	02-12	1	1	30°	7.86	7.21	6.64	6.44
690-C5P0206N-A	C5P0206N-A	D2	02	02-06	2	1	30°	8.65	7.92	7.32	7.10
690-C5P0304N-A	C5P0304N-A	D3	03	02-04	3	1	30°	9.39	8.66	8.00	7.74
690-C5P0403N-A	C5P0403N-A	D4	04	02-03	4	1	30°	9.56	9.01	8.32	8.07

### KNOBS

\*: Designed for knobs w/ a .125" shaft dia.

\*\*: Designed for knobs w/ a .250" shaft dia.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Electroswitch Part No.	Fig.	Description				Price Each			
			1	10	25	50	1	10	25	50
* 690-1400R	1400R	E	Pointer knob with set screw	2.38	2.26	2.24	2.13			
* 690-1910DG	1910DG	F	Inner knob w/skirt & spun silver color cap	4.26	4.20	4.00	4.00			
** 690-1202BJ	1202BJ	G	Round knob w/spun silver cap, set screw	5.10	4.84	4.80	4.56			
*** 690-1930BP	1930BP	H	Large round knob with skirt, set screw	4.76	4.52	4.48	4.26			
*** 690-1914N	1914N	I	Round knob with brass insert, set screw	6.29	5.97	5.92	5.63			



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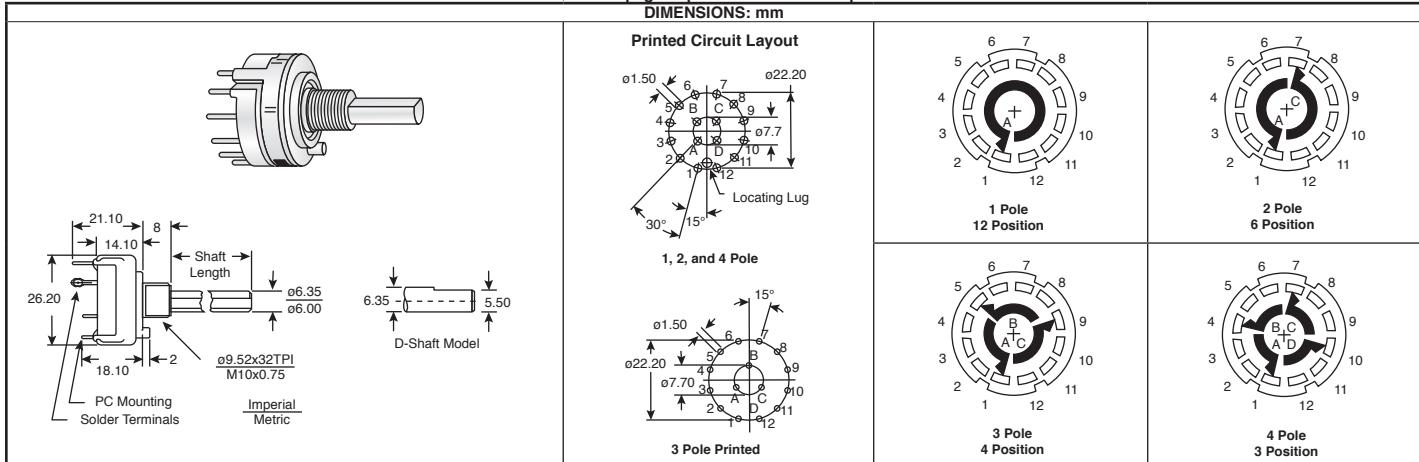
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# LORLIN Fully Enclosed Adjustable Rotary Switches

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**LORLIN**

DIMENSIONS: mm



## IMPERIAL ROTARY SWITCHES

### 6.35MM ROUND AND D-SHAFT

#### Features:

- Fully enclosed contacts
- Glass filled nylon
- Nylon design provides maximum shock hazard protection.

#### Specifications:

- Dielectric Strength: 1000VRMS
- Contact Resistance: less than 50mΩ max.
- Index Angle: 30°
- Contact Life: over 10,000 operations
- Rating: .15A/250VAC or DC
- Contact material: silver plated brass

#### Shorting D-Shaft

(Make-Before-Break)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Lorlin Part No.	Poles	Positions (User Selectable)	Shaft Length (mm)	Price Each				
					1	50	100	500	1000
<b>Solder Terminals</b>									
10WA324	CK1034	1	2 - 12	30.0	4.92	4.11	3.73	3.15	2.91
10WA325	CK1035	2	2 - 6	30.0	4.92	4.11	3.73	3.15	2.91
10WA364	CK1454	1	2 - 12	12.7	4.97	4.15	3.77	3.18	2.93
10WA365	CK1455	2	2 - 6	12.7	4.97	4.15	3.77	3.18	2.93
10WA366	CK1456	3	2 - 4	12.7	4.97	4.15	3.77	3.18	2.93
10WA367	CK1457	4	2 - 3	12.7	4.97	4.15	3.77	3.18	2.93
10WA355	CK2441	2	2 - 6	9.5	4.97	4.15	3.77	3.18	2.93
10WA356	CK2818	3	2 - 4	9.5	4.97	4.15	3.77	3.18	2.93
<b>PC Terminals</b>									
10WA344	CK1054	1	2 - 12	30.0	4.92	4.11	3.73	3.15	2.91
10WA345	CK1055	2	2 - 6	30.0	4.92	4.11	3.73	3.15	2.91
10WA346	CK1056	3	2 - 4	30.0	4.92	4.11	3.73	3.15	2.91
10WA347	CK1057	4	2 - 3	30.0	4.92	4.11	3.73	3.15	2.91

#### Shorting Round Shaft with Solder Terminals

(Make-Before-Break)

For quantities greater than listed, call for quote.

105-13571	CK1589	1	2 - 12	9.5	4.97	4.15	3.77	3.18	2.93
105-13572	CK1590	2	2 - 6	9.5	4.97	4.15	3.77	3.18	2.93
105-13573	CK1591	3	2 - 4	9.5	4.97	4.15	3.77	3.18	2.93
105-13574	CK1592	4	2 - 3	9.5	4.97	4.15	3.77	3.18	2.93

#### Non-Shorting Round Shaft

(Break-Before-Make)

For quantities greater than listed, call for quote.

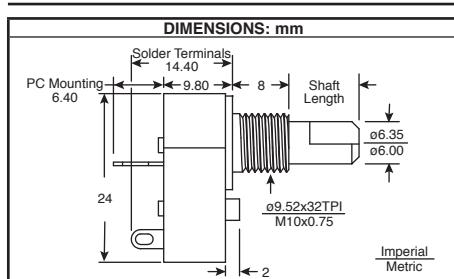
105-14571	CK1458	1	2 - 12	9.5	4.97	4.15	3.77	3.18	2.93
105-14572	CK1459	2	2 - 6	9.5	4.97	4.15	3.77	3.18	2.93
105-14573	CK1460	3	2 - 4	9.5	4.97	4.15	3.77	3.18	2.93
105-14574	CK1461	4	2 - 3	9.5	4.97	4.15	3.77	3.18	2.93

#### Non-Shorting D-Shaft, Continuous Rotation with PC Terminals

(Break-Before-Make)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Lorlin Part No.	Poles	Positions	Shaft Length (mm)	Price Each				
					1	50	100	500	1000
10WC404	CK2404	1	12	9.5	5.97	4.98	4.52	3.81	3.52
10WC444	CK1043	1	12	30.0	4.92	4.11	3.73	3.15	2.91



## ROUND SHAFT ROTARY SWITCHES

#### Features:

- Double pole single throw basic circuitry
- 45° Index Angle

#### Specifications:

- Contact Rating: 4/80A @250VAC, 10A/12VDC
- Proof Voltage: 3kV VAC (Initial)
- Insulation Resistance: >999 MΩ @ 500VDC (Initial)

#### Imperial - 6.35mm

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Lorlin Part No.	Circuit	Terminal Type	Shaft Length (mm)	Price Each				
					1	50	100	500	
10RMS110	RMS110	Off-On	Solder PCB	47.0	7.19	5.99	5.43	5.00	
10RMS115	RMS115	Off-On	PCB	30.0	6.42	5.35	4.86	4.47	

#### Metric - 6.00mm

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Lorlin Part No.	Circuit	Terminal Type	Shaft Length (mm)	Price Each				
					1	50	100	500	
10RMS103	RMS103	Off-On	Solder	47.0	7.19	5.99	5.43	5.00	
10RMS1130	RMS1130	Off-On	PCB	30.0	6.42	5.35	4.86	4.47	

# NKK Rotary Switches

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## MR SERIES: HALF-INCH PROCESS SEALED ROTARY SWITCHES

- Power rating: 125VAC for MRA, MRX, & MRY;  
28VAC for MRF & MRK
- Shaft actuated switches are supplied  
with knob and mounting hardware

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Poles and Circuits	Power Rating	Price Each			
					1	25	50	100
<b>Shaft Actuated w/ PC Terminals</b>								
633-MRA112A	MRA112-A	A	SP, 2-12 positions	250mA	9.83	9.45	9.21	8.37
633-MRA206A	MRA206-A	A	DP, 2-6 positions	250mA	13.82	12.09	11.90	11.44
633-MRA403A	MRA403-A	A	4P, 2-3 positions	250mA	15.31	14.03	13.60	12.71
<b>Low Profile Shaft Actuated w/ PC Terminals</b>								
633-MRK112A	MRK112-A	B	SP, 2-12 positions	0.4VA	11.80	10.32	9.52	9.14
633-MRK206A	MRK206-A	B	DP, 2-6 positions	0.4VA	14.74	13.38	12.29	11.80
633-MRK403A	MRK403-A	B	4P, 2-3 positions	0.4VA	15.31	14.03	13.60	12.71
<b>Shaft Actuated w/ PC Turret Terminals (Not Process Sealed)</b>								
633-MRX108A	MRX108A	C	SP, 2-8 positions	2A	15.62	14.18	13.02	12.50

## HIGH CAPACITY ROTARY SWITCHES

- Number of Positions: 2-11
- Nonshorting Circuits (Shorting Circuits are also available, call for details)
- D-Flat Shaft
- 30° Indexing
- HS, TS, and PS Series

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Pole	Number of Terminals	Termination	Price Each			
						1	25	50	100
<b>Resistive Load: 6A @ 125/250VAC</b>									
633-TS-1N	TS1N	D	1	1 COM, 11 LOAD	Screw terminals	37.96	34.45	31.64	30.37
633-TS-2N	TS2N	D	2	2 COM, 22 LOAD	Screw terminals	51.64	46.87	43.04	41.31
633-TS-3N	TS3N	D	3	3 COM, 33 LOAD	Screw terminals	65.72	59.64	54.77	52.57
633-TS-5N	TS5N	D	5	5 COM, 55 LOAD	Screw terminals	136.96	124.29	114.14	109.56
<b>Resistive Load: 12A @ 125VAC; 6A @ 250VAC</b>									
633-HS16-1N	HS16-1N	E	1	1 COM, 11 LOAD	Solder lug	22.22	20.17	18.52	17.78
633-HS16-2N	HS16-2N	E	2	2 COM, 22 LOAD	Solder lug	26.59	24.80	24.06	23.04
633-HS16-3N	HS16-3N	E	3	3 COM, 33 LOAD	Solder lug	42.24	38.34	35.20	33.79
633-HS16-4N	HS16-4N	E	4	4 COM, 44 LOAD	Solder lug	73.86	67.03	61.55	59.08
<b>Resistive Load: 30A @ 125/250VAC</b>									
633-PS-1N	PS1N	F	1	1 COM, 11 LOAD	Screw terminals	42.24	38.34	35.20	33.79
633-PS-3N	PS3N	F	3	3 COM, 33 LOAD	Screw terminals	95.42	86.59	79.52	76.33
633-PS-4N	PS4N	F	4	4 COM, 44 LOAD	Screw terminals	122.88	111.51	102.40	98.29
<b>Knobs</b>									
633-AT431	AT431	G		Large Knob, Black		3.46	3.43	3.30	3.08
633-AT432	AT432	H		Small Knob, Black		3.84	3.63	3.52	3.27

## FR SERIES: 10MM ULTRA-THIN DIP ROTARY SWITCHES

### Specifications:

- Power Rating: 100mA @ 5VDC switching;  
100mA @ 50VDC non-switching
- Contact resistance: 100mΩ max.
- Insulation resistance: 1000MΩ min. @ 250VDC
- Dielectric strength: 250VAC min. for 1 minute

### Features:

- Environmentally friendly
- Slim: .150" (3.8mm) body
- Highly visible legends
- Gold plated contacts
- Actuator knob available for screwdriver adjusted

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Terminal	Price Each			
					1	25	50	100
<b>Shaft Actuated</b>								
633-FR01KC10P	FR01KC10P	I	BCD, Complement	Straight PCB	3.18	2.87	2.65	2.56
633-FR01KR10P	FR01KR10P	I	BCD, Real	Straight PCB	3.00	2.70	2.50	2.41
633-FR01KR16P	FR01KR16P	I	Hexadecimal, Real	Straight PCB	3.00	2.70	2.50	2.41
633-FR01KR10H	FR01KR10H-S	J	BCD, Real	R/A PCB	4.07	3.10	2.93	2.77
633-FR01KR16H	FR01KR16H	J	Hexadecimal, Real	R/A PCB	3.94	3.18	3.16	2.77
<b>Screwdriver Actuated</b>								
633-FR01FC10P	FR01FC10P	K	BCD, Complement	Straight PCB	3.18	2.87	2.65	2.56
633-FR01FC16P	FR01FC16P	K	Hexadecimal, Complement	Straight PCB	3.00	2.70	2.50	2.41
633-FR01FR16P	FR01FR16P	K	Hexadecimal, Real	Straight PCB	3.00	2.70	2.50	2.41
633-FR01FR10H	FR01FR10H	L	BCD, Real	R/A PCB	3.73	3.36	2.99	2.62
<b>Snap-On Knob for Screwdriver Actuated</b>								
633-AT4180	AT4180	M	Snap-On Knob	-	.66	.59	.53	.51

## FRO2 SERIES: 10MM ULTRA-THIN SMT DIP ROTARIES

### Features:

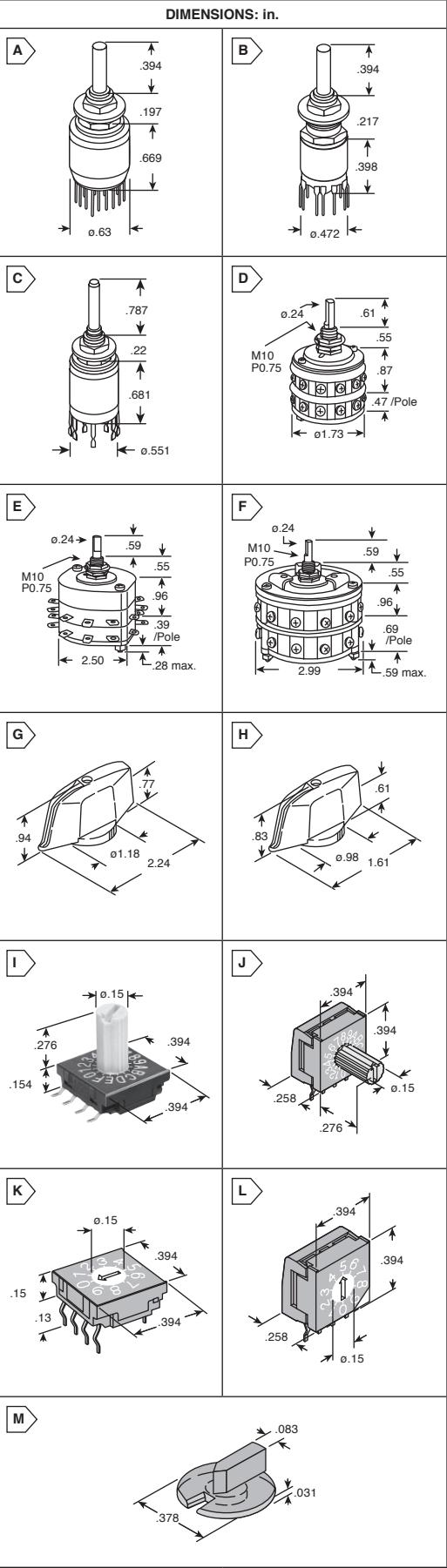
- Slim: .150" (3.8mm) body has the lower profile in the industry and allows close stacking of PC Boards.
- Highly visible legends and choice of screwed or shaft actuators with arrow position indication provide trouble free code setting.
- Detent mechanism gives crisp, positive action for accurate switch setting.
- Use of heat resistant resin allows infrared convection reflow soldering.
- Gull-winged terminals ensure mechanical stability during soldering and simplify solder joint inspection.
- Cam activated movable contact and gold contacts assure contact reliability and continuity

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Price Each				
				1	25	50	100	
<b>633-FR02KC16P-R</b>								
633-FR02KR10P-S	FR02KR10P-S	I	Complement Coded, Hexadecimal	4.00	3.09	2.83	2.72	
633-FR02KR16P-R	FR02KR16P-R	I	Real Coded, Decimal	4.00	3.09	2.83	2.72	
633-FR02KR16P-S	FR02KR16P-S	I	Real Coded, Hexadecimal	4.00	3.09	2.83	2.72	
633-FR02KC16P-S	FR02KC16P-S	I	Complement Coded, Hexadecimal	4.00	3.09	2.83	2.72	
633-FR02KC10P-R	FR02KC10P-R	I	Orange Actuator, Complement Coded, Decimal	4.18	3.23	2.96	2.84	

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1935

# OMRON Rotary DIP Switches

RoHS Compliant

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OMRON

## A6C SERIES: SEALED ROTARY DIP SWITCHES

### Specifications:

- Switching capacity: 100mA @ 30VDC
- Contact resistance: 200mΩ max.
- Insulation resistance: 100MΩ min. (@ 250VDC)
- Dielectric strength: 250VAC for 1 minute between terminals

### Features:

- Highly reliable subminiature DIP switch
- A precise rotary cam and contact driving mechanism achieves compactness for high-precision mounting
- Offset between terminal pins and side of case allows simple circuit inspection

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	No. of Positions	Actuator	Output Code 1-2-4-8	Price Each			
						1	25	50	100
653-A6C-10RN	A6C-10R(N)	A	10	Top	BCD	4.43	3.90	3.47	3.13
653-A6C-16RN	A6C-16R(N)	A	16	Top	BCD Hexadecimal	4.81	4.32	3.84	3.46
653-A6CV-10R	A6CV-10R	B	10	Side	BCD	6.26	5.63	5.01	4.51
653-A6CV-16R	A6CV-16R	B	16	Side	BCD Hexadecimal	6.62	5.95	5.29	4.76

## A6RS SERIES: SURFACE MOUNT ROTARY DIP SWITCHES

### Specifications:

- Switching capacity: 25mA @ 24VDC
- Contact resistance: 200mΩ max.
- Insulation resistance: 100MΩ min. (@ 250VDC)

### Features:

- Temperature-resistant resin allows use in peak reflow temperatures of 260°C
- Two different types of terminal arrangements are available to allow flexibility in the circuit design

\* Full reel is 250

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	No. of Positions	Actuator	Shaft	Terminal Arrangement	Output Code 1-2-4-8	Price Each			
								1	25	50	100
653-A6RS-101RF	A6RS-101RF	C	10	Top	Flat	4 x 1	BCD	3.28	3.14	2.85	2.56
653-A6RS-102RF	A6RS-102RF	C	10	Top	Flat	3 x 3	BCD	3.31	3.20	2.85	2.56
653-A6RS-161RF	A6RS-161RF	C	16	Top	Flat	4 x 1	BCD Hexadecimal	5.72	4.55	3.48	3.12
<b>Embossed Tape, Full reel is 750</b>											
653-A6RS-101RF-P	A6RS-101RF-P	C	10	Top	Flat	4 x 1	BCD	3.57	3.21	2.85	2.56
653-A6RS-102RF-P	A6RS-102RF-P	C	10	Top	Flat	3 x 3	BCD	3.57	3.21	2.85	2.56
653-A6RS-162RF-P	A6RS-162RF-P	C	16	Top	Flat	3 x 3	BCD Hexadecimal	3.81	3.43	3.04	2.74
* 653-A6RS-162RS-P	A6RS-162RS-P	D	16	Top	Extended	3 x 3	BCD Hexadecimal	4.85	4.36	3.87	3.49

## A6R/A6RV SERIES: LOW-COST ROTARY DIP SWITCHES

### Specifications:

- Switching capacity: 25mA @ 24VDC
- Contact resistance: 200mΩ max.
- Insulation resistance: 100MΩ min. (@ 250VDC)

### Features:

- The rotor has an O-ring sealed construction that prevents the ingress of dirt and dust
- Two different types of terminal arrangements are available for each model to allow flexibility of circuit design

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	No. of Positions	Actuator	Shaft	Terminal Arrangement	Output Code 1-2-4-8	Price Each			
								1	25	50	100
653-A6R-101RF	A6R-101RF	E	10	Top	Flat	4 x 1	BCD	3.33	2.98	2.66	2.39
653-A6R-102RF	A6R-102RF	E	10	Top	Flat	3 x 3	BCD	3.68	3.30	2.94	2.64
653-A6R-161RF	A6R-161RF	E	16	Top	Flat	4 x 1	BCD Hexadecimal	3.92	3.53	3.13	2.82
653-A6R-162RF	A6R-162RF	E	16	Top	Flat	3 x 3	BCD Hexadecimal	3.92	3.53	3.13	2.82
653-A6R-101RS	A6R-101RS	F	10	Top	Extended	4 x 1	BCD	4.04	3.64	3.23	2.91
653-A6R-102RS	A6R-102RS	F	10	Top	Extended	3 x 3	BCD	4.05	3.64	3.23	2.91
653-A6R-161RS	A6R-161RS	F	16	Top	Extended	4 x 1	BCD Hexadecimal	3.88	3.86	3.43	3.09
653-A6R-162RS	A6R-162RS	F	16	Top	Extended	3 x 3	BCD Hexadecimal	4.29	3.86	3.43	3.09
653-A6RV-102RF	A6RV-102RF	G	10	Side	Flat	3 x 3	BCD	4.09	3.75	3.33	3.00
653-A6RV-161RF	A6RV-161RF	G	16	Side	Flat	4 x 1	BCD Hexadecimal	4.00	3.79	3.52	3.17
653-A6RV-101RS	A6RV-101RS	H	10	Side	Extended	4 x 1	BCD	4.41	3.81	3.62	3.26
653-A6RV-102RS	A6RV-102RS	H	10	Side	Extended	3 x 3	BCD	4.45	4.08	3.63	3.26
653-A6RV-162RS	A6RV-162RS	H	16	Side	Extended	3 x 3	BCD Hexadecimal	4.21	4.02	3.82	3.44

## A6K/A6KS/A6KSV SERIES: MINIATURE ROTARY DIP SWITCHES

### Specifications:

- Contact resistance: 200mΩ max. (initial value)
- Insulation resistance: 100MΩ min.

### Features:

- Mounting space reduced by 50% compared with conventional models
- Gold-plated contacts ensure high reliability

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	No. of Positions	Actuator	Shaft	Terminal Arrangement	Output Code 1-2-4-8	Price Each			
								1	25	50	100
<b>Thru-Hole</b>											
653-A6K-162RF	A6K-162RF	I	16	Top	Flat	3 x 3	BCD Hexadecimal	5.92	5.32	4.73	4.26
653-A6KV-104RF	A6KV-104RF	J	10	Side	Flat	5 x 2	BCD	6.65	5.98	5.32	4.83
653-A6KV-164RF	A6KV-164RF	J	16	Side	Flat	5 x 2	BCD Hexadecimal	6.65	5.98	5.32	5.18
653-A6KV-164RS	A6KV-164RS	K	16	Side	Extended	5 x 2	BCD Hexadecimal	5.72	5.58	5.06	4.83
<b>SMT</b>											
653-A6KS-102RF	A6KS-102RF	L	10	Top	Flat	3 x 3	BCD	5.72	5.32	5.06	4.53
653-A6KS-162RF	A6KS-162RF	L	16	Top	Flat	3 x 3	BCD Hexadecimal	6.65	5.98	5.32	5.00
653-A6KS-164RF	A6KS-164RF	L	16	Top	Flat	5 x 2	BCD Hexadecimal	6.65	5.98	5.32	4.83
653-A6KS-102RS	A6KS-102RS	M	10	Top	Extended	3 x 3	BCD	6.66	5.99	5.32	4.79
653-A6KS-162RS	A6KS-162RS	M	16	Top	Extended	3 x 3	BCD Hexadecimal	6.65	5.98	5.32	4.78
653-A6KSV-104RF	A6KSV-104RF	N	10	Side	Flat	5 x 2	BCD	6.18	5.55	5.18	5.00
653-A6KSV-164RF	A6KSV-164RF	N	16	Side	Flat	5 x 2	BCD Hexadecimal	5.72	5.32	5.06	4.53
653-A6KSV-164RS	A6KSV-164RS	O	16	Side	Extended	5 x 2	BCD Hexadecimal	6.65	5.98	5.32	4.77

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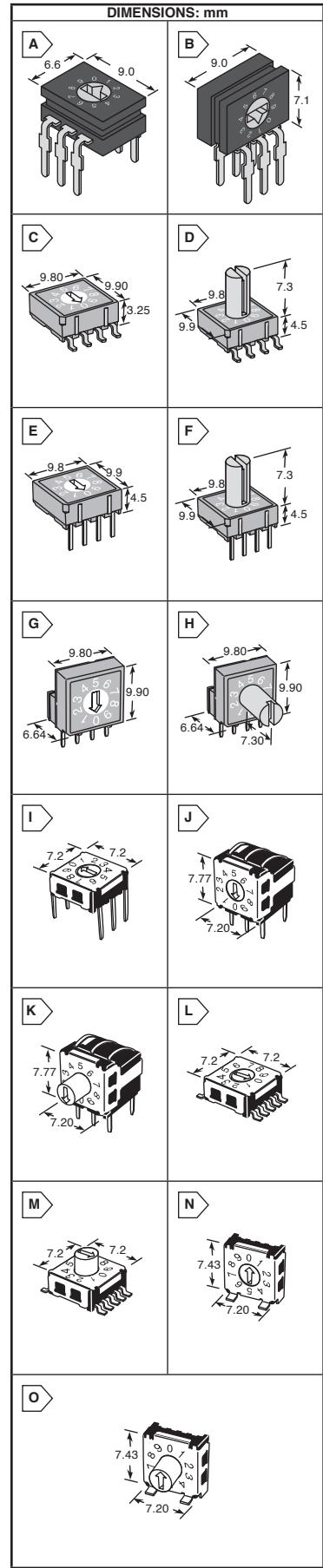


1936

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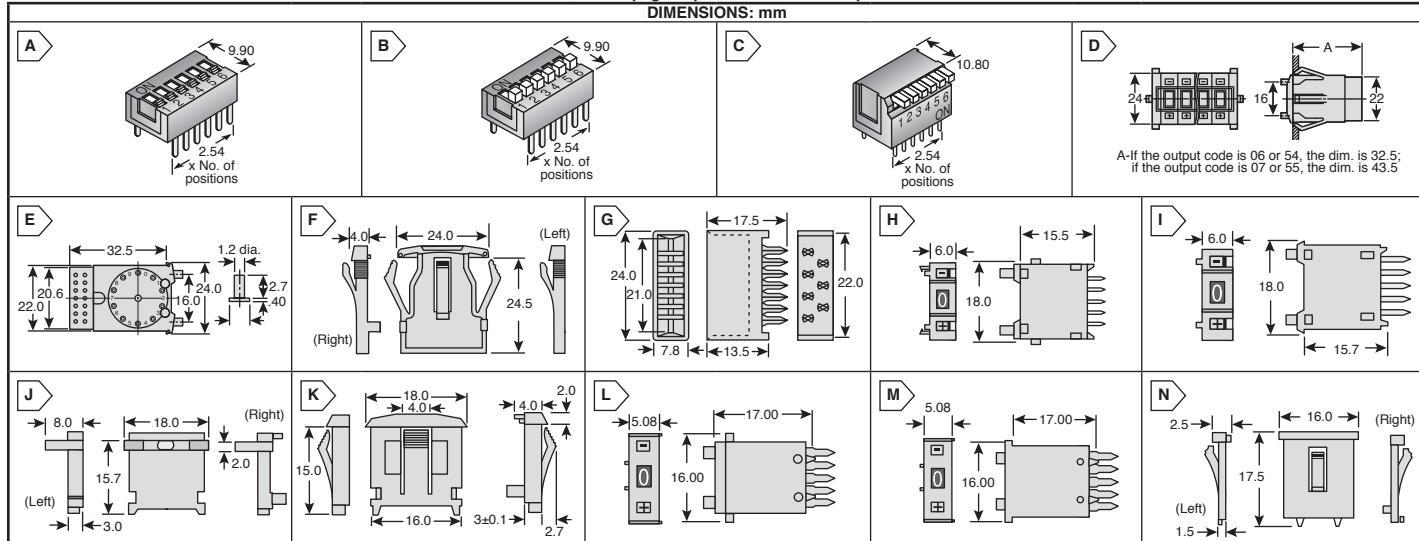


# OMRON DIP and Thumbwheel Switches

**OMRON**

RoHS Compliant This page of product is RoHS compliant.

DIMENSIONS: mm



## A6E/A6ER SERIES: DIP SWITCHES

### Specifications:

- Switching capacity: 25mA @ 24VDC
- Contact resistance: 200mΩ max.

### Features:

- The sealed bottom prevents flux penetration
- Gold-plated contacts ensure high reliability

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Length (mm)	Number of Positions	Actuator	Price Each			
						1	25	50	100
653-A6E2101	A6E-2101	A	6.64	2	Flat	2.01	1.81	1.60	1.44
653-A6E-4101	A6E-4101	A	11.72	4	Flat	2.33	2.09	1.86	1.67
653-A6E-4104	A6E-4104	B	11.72	4	Raised	2.41	2.16	1.92	1.73
653-A6E-5104	A6E-5104	B	14.26	5	Raised	2.77	2.49	2.21	1.99
653-A6E-8104	A6E-8104	B	21.88	8	Raised	2.64	2.38	2.12	1.90
653-A6ER-2104	A6ER-2104	C	6.64	2	Side (long-lever)	2.89	2.59	2.30	2.07
653-A6ER-4104	A6ER-4104	C	11.72	4	Side (long-lever)	3.88	3.48	3.10	2.79
653-A6ER-8104	A6ER-8104	C	21.88	8	Side (long-lever)	4.52	4.06	3.61	3.48

## A7BS SERIES: THUMBWHEEL SWITCHES

### Single Switch Unit

#### Specifications:

- Switching capacity: 0.1mA @ 28VDC
- Contact resistance: 300mΩ max.

#### Features:

- Character height of 4.8mm makes for easy-to-view display

\* With external stopper

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Mounting	Terminals	Color	Output Code Number	Price Each			
							1	25	50	100
653-A7BS-206-1	A7BS-206-1	D	Screw (front)	Solder	Black	06 (binary coded decimal)	7.91	7.55	7.33	6.96
653-A7BS-207-1	A7BS-207-1	D	Screw (front)	Solder	Black	07 (binary coded decimal, with diode)	13.39	12.05	10.71	9.63
* 653-A7BS-206-S	A7BS-206-S	E	Snap-in (front)	Solder	Light gray	06 (binary coded decimal)	9.02	8.42	7.96	7.51

### Accessories

MOUSER STOCK NO.	Omron Part No.	Fig.	Description			Price Each			
						1	25	50	100
653-A7B-M-1	A7B-M-1	F	Black end caps for A7BS (set of 2)			1.40	1.34	1.31	1.27
653-A7B-CP	A7B-CP	G	Connector for A7BS, PCB terminals			7.35	7.00	6.80	6.50

## A7CN SERIES: THUMBWHEEL SWITCHES

### Single Switch Unit

#### Specifications:

- Switching capacity: 0.1mA @ 28VDC
- Contact resistance: 200mΩ max.

#### Features:

- Compact

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Mounting	Terminals	Color	Output Code Number	Price Each			
							1	25	50	100
653-A7CN-106-1	A7CN-106-1	H	Screw (back)	PCB	Black	06 (binary coded decimal)	6.50	6.31	6.13	5.88
653-A7CN-206-1	A7CN-206-1	I	Snap-in (front)	PCB	Black	06 (binary coded decimal)	6.50	6.31	6.13	5.88

### Accessories

MOUSER STOCK NO.	Omron Part No.	Fig.	Mounting	Description			Price Each			
							1	25	50	100
653-A7CN-1M-1	A7CN-1M-1	J	Screw (back)	Black end caps for A7CN (set of 2)			1.21	1.09	.97	.87
653-A7CN-2M-1	A7CN-2M-1	K	Snap-in (front)	Black end caps for A7CN (set of 2)			.67	.66	.65	.64

## A7D SERIES: THUMBWHEEL SWITCHES

### Single Switch Unit

#### Specifications:

- Switching capacity: 0.1A @ 30VDC
- Contact resistance: 200mΩ max.

#### Features:

- Ultra-small, low-cost, push-operated switches
- All-in-one design means fewer parts required

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Mounting	Terminals	Color	Output Code Number	Price Each			
							1	25	50	100
653-A7D-106-1	A7D-106-1	L	Screw (back)	PCB	Black	06 (binary coded decimal)	7.68	6.91	6.14	5.58
653-A7D-206-1	A7D-206-1	M	Snap-in (front)	PCB	Black	06 (binary coded decimal)	7.68	6.91	6.14	5.53

### Accessories

MOUSER STOCK NO.	Omron Part No.	Fig.	Mounting	Description			Price Each			
							1	25	50	100
653-A7D-2M-1	A7D-2M-1	N	Snap-in (front)	Black end caps for A7D (set of 2)			1.08	.969	.867	.775

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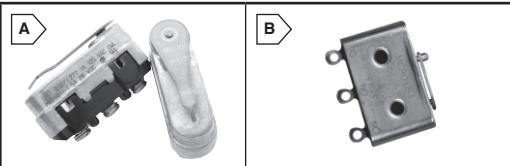
1937

# HONEYWELL DIN Rail Receiver and Limit Switches Honeywell

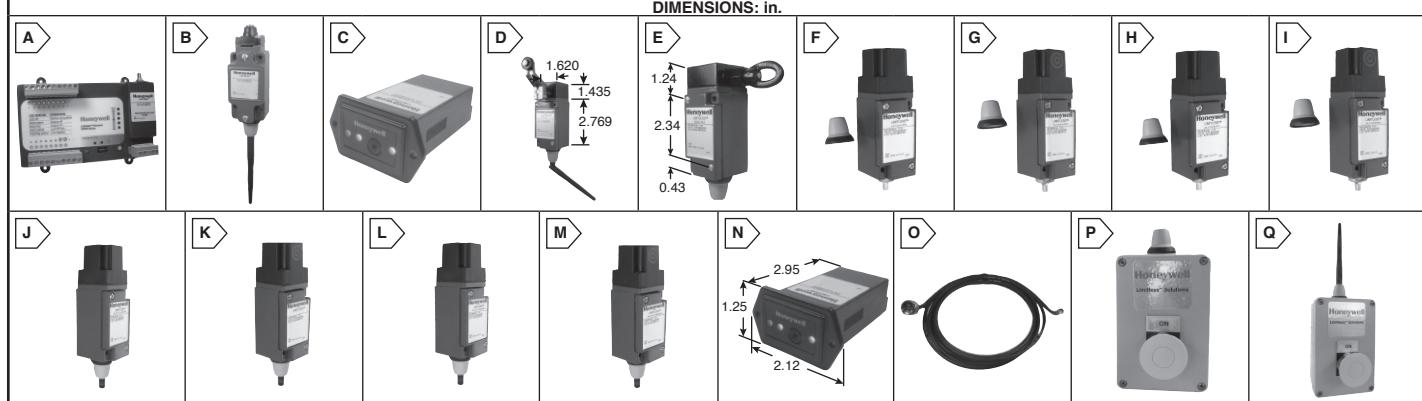
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## MICRO SWITCH™ SEALED AND HIGH TEMPERATURE SWITCHES

MOUSER STOCK NO.	Honeywell Part No.	Fig.	Contact Rating & Voltage	Actuator Type	Operating Force (Max.)	Lever Style	Price Each		
							1	10	50
785-1HS3	1HS3	A	115 Vac	Roller Lever	2.78 N	Screw	210.74	173.39	167.41
785-1SE1-T	1SE1-T	A	250 Vac	Pin Plunger	1.39 N	Solder	62.18	51.60	47.52
785-1SE1	1SE1	A	250 Vac	Pin Plunger	1.39 N	Leadwire	94.91	77.40	73.81
785-9HM1	9HM1	B	28 Vdc	Integral Lever	1.95 N	Solder	465.63	394.87	386.48
785-11HM1	11HM1	B	28 Vdc	Integral Lever	1.95 N	Solder	296.59	255.86	235.60



## DIMENSIONS: in.



## LIMITLESS™ DIN-RAIL RECEIVER - WDRR SERIES

### Benefits:

- Enables presence/absence detection in remote parts of applications/machinery, where wiring is costly or not feasible
- Ability to reconfigure and network multiple inputs, or point-to-point with personalized addresses which allows for adding, subtracting or relocating Limitless™ inputs easily
- Reduced installation/maintenance costs with no wiring to Limitless™ inputs conduit, strain, clips, connectors, connection boxes, etc.
- Eliminates issues with wire connection integrity on moving equipment
- LEDs indicate change of status, low battery RF signal loss pairing function & diagnostic functions
- Communications security per the IEEE 802.15.4 standard (16-bit PAN ID, 16-bit address and 128-bit security key)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Honeywell Part No.	Fig.		Description	Price Each		
					1	10	50
785-WDRR1A03A0A	WDRR1A03A0A	A		3.0dBi omni antenna with remote adhesive mounting with remote adhesive mounting with 9.8ft cable, US/Canada/Mexico	684.20	580.22	567.89

## LIMITLESS™ WGLA GLOBAL LIMIT SWITCHES AND WPMM MONITOR

### Features:

- Enables presence/absence detection in remote parts of applications or machinery, where wiring is an issue or not feasible
- Integration of existing wireless technology with proven reliability of Honeywell's MICRO SWITCH™ limit switch series
- Ability to reconfigure and network multiple switches or point-to-point personalized addresses, thus easily allowing adding, subtracting, or relocating Limitless™ switches
- Reduced installation/maintenance costs with no wires, conduit, strain relief, clips, connectors, or connection boxes
- Consumes ultra-low power to prolong battery life (replaceable)

- Long-range signal of 1000 ft/304 m line-of-sight in North America
- RF board operating in 2.4 GHz globally license-free frequency band; WPAN 802.15.4
- EN 50041 metal enclosure; IP67; NEMA 1, 4, 12, 13
- Full complement of operating heads and levers, as well as monitor/receivers and accessories

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Description	Price Each		
			1	10	50
785-WGLA1A01AA1B	B	Limitless™ Series WGLA Global Limit Switch, 2.1 dBi omni straight antenna, use in US/Canada, side rotary – momentary, standard lever with 19 mm x 6.35 mm [0.75 in x 0.25 in] steel rollers	368.80	338.49	314.60
785-WGLA1A01AC	B	Limitless™ Series WGLA Global Limit Switch, 2.1 dBi omni straight antenna, use in US/Canada, top roller plunger	389.49	336.01	309.40
785-WGLA1A01AD	B	Limitless™ Series WGLA Global Limit Switch, 2.1 dBi omni straight antenna, use in US/Canada, top roller lever	382.17	329.69	303.59
785-WGLA1A02AC	B	Limitless™ Series WGLA Global Limit Switch, 2.1 dBi omni tilt & swivel antenna, use in US/Canada, top roller plunger	393.63	339.58	312.69

### WPMM Series Monitors

MOUSER STOCK NO.	Fig.	Description	Price Each		
			1	10	50
785-WPMM1A03A	C	Limitless™ WPMM Series Monitor, 2.4 GHz, 3.0 dBi omni antenna with remote adhesive mounting with 9.8ft cable, for use in US/Canada	296.59	255.87	235.61
785-WPMM1A04A	C	Limitless™ WPMM Series Monitor, 2.4 GHz, 5.5 dBi omni antenna (tilt & swivel design) w/ remote magnetic mounting w/ 5ft cable, for use in US/Canada	330.74	285.33	262.73
785-WPMM1A05A	C	Limitless™ WPMM Series Monitor, 2.4 GHz, 5.5 dBi omni antenna (tilt & swivel design) w/ remote magnetic mounting w/ 10ft cable, for use in US/Canada	344.65	297.32	273.78
785-WPMM1A02A	C	Limitless™ WPMM Series Monitor, 2.4 GHz, 2.1 dBi omni antenna (tilt & swivel design), for use in US/Canada	265.07	243.28	226.12

## LIMITLESS™ WIRELESS HEAVY DUTY LIMIT SWITCHES - WLS SERIES



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Description	Price Each		
			1	10	50
785-WLS1A01AA2B	D	Limitless™ heavy-duty limit switch, 2.2 dBi straight antenna, US/Canada, momentary action, side rotary, adjustable 3.5 in lever with steel roller	393.13	345.29	326.30
785-WLS1A02AA1A	D	Limitless™ heavy-duty limit switch, 2.2 dBi tilt/swivel antenna, US/Canada, momentary action, side rotary, fixed 1.5 in lever with nylon roller	389.55	342.14	323.32
785-WLS1A02AA2A	D	Limitless™ heavy-duty limit switch, 2.2 dBi tilt/swivel antenna, US/Canada, momentary action, side rotary, adjustable 3.5 in lever with nylon roller	397.03	348.72	329.54

### WLS Series Wireless Heavy-Duty Limit Switches with Eyelet-Pull

MOUSER STOCK NO.	Fig.	Description	Price Each		
			1	10	50
785-WLS1A1AQ-4P01	E	Limitless™ WLS Series heavy-duty limit switch w/ 7lb low-force eyelet pull operating head assembled w/ actuator to left side, 0 dBi omni antenna, for use in US/Canada, and Mexico	401.28	352.45	333.06
785-WLS1A1BQ-4P01	E	Limitless™ WLS Series heavy-duty limit switch w/ 7lb low-force eyelet pull operating head assembled w/ actuator to left side, 0 dBi omni antenna, for use in all other approved countries	407.67	327.89	324.00

### Wireless WLS Series Non-Contact Switches

MOUSER STOCK NO.	Fig.	Description	Price Each		
			1	10	50
785-WLS1A00AQRS1	F	Limitless™ WLS Series Non-Contact Switch with no antenna and a top sensing target, for use in US, Canada, and Mexico	426.00	374.15	353.58
785-WLS1A00AQRS2	G	Limitless™ WLS Series Non-Contact Switch with no antenna and a side sensing target, for use in US, Canada, and Mexico	426.00	374.15	353.58
785-WLS1A00BQRS1	H	Limitless™ WLS Series Non-Contact Switch with no antenna and a top sensing target, for use in all other approved countries	425.99	374.15	353.58
785-WLS1A00BQRS2	I	Limitless™ WLS Series Non-Contact Switch with no antenna and a side sensing target, for use in all other approved countries	425.99	374.15	353.58
785-WLS1A11AQRS1	J	Limitless™ WLS Series Non-Contact Switch with a 0 dBi antenna and a top sensing target, for use in US, Canada, and Mexico	528.16	453.88	414.98
785-WLS1A11AQRS2	K	Limitless™ WLS Series Non-Contact Switch with a 0 dBi antenna and a side sensing target, for use in US, Canada, and Mexico	528.16	453.88	414.98
785-WLS1A11BQRS1	L	Limitless™ WLS Series Non-Contact Switch with a 0 dBi antenna and a top sensing target, for use in all other approved countries	528.16	453.88	414.98
785-WLS1A11BQRS2	M	Limitless™ WLS Series Non-Contact Switch with a 0 dBi antenna and a side sensing target, for use in all other approved countries	528.16	453.88	414.98

### WPMM Series Monitors

MOUSER STOCK NO.	Fig.	Description	Price Each		
			1	10	50
785-WPMM1A03A	N	Limitless™ WPMM Series Monitor, 2.4GHz, 3.0dBi omni antenna with remote adhesive mounting with 9.8ft cable, for use in US/Canada	296.59	255.87	235.61
785-WPMM1A04A	N	Limitless™ WPMM Series Monitor, 2.4GHz, 5.5dBi omni antenna (tilt & swivel design) w/ remote magnetic mounting w/ 5ft cable, for use in US/Canada	330.74	285.33	262.73
785-WPMM1A05A	N	Limitless™ WPMM Series Monitor, 2.4GHz, 5.5dBi omni antenna (tilt & swivel design) w/ remote magnetic mounting w/ 10ft cable, for use in US/Canada	344.65	297.32	273.78
785-WPMM1A02A	N	Limitless™ WPMM Series Monitor, 2.4GHz, 2.1dBi omni antenna (tilt & swivel design), for use in US/Canada	265.07	243.28	226.12

### WCA Series Cables

MOUSER STOCK NO.	Fig.	Description	Price Each		
			1	10	50
785-WCA200RNPRSP-002	O	200 Series coax cable assembly, reverse polarity N plug, reverse polarity SMA plug, 2ft of cable	74.30	61.66	56.78
785-WCA200RNPRSP-010	O	200 Series coax cable assembly, reverse polarity N plug, reverse polarity SMA plug, 10ft of cable	84.16	69.83	64.31

## LIMITLESS™ WIRELESS OPERATOR INTERFACE - WOI SERIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Region	Antenna Code	Actuator Type	Actuator Color	Price Each		
						1	10	50
<b>22mm Actuator</b>								
785-WOI1A11BPAR	P	AU, NZ, Europe	0dBi Omnidirectional with Switch Mount	Flush Momentary	Red	525.00	497.54	479.00
<b>40mm Actuator</b>								
785-WOI1A11APCY	Q	US, CA, MX	0dBi Omnidirectional with Switch Mount	Mushroom Head Maintained	Yellow	574.55	504.63	476.88

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# HONEYWELL Limit Switches

**Honeywell**

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## MICRO SWITCH™ COMPACT LS AND PLUG-IN LIMIT SWITCHES

MICRO SWITCH™ compact LS and plug-in 200LS limit switches have a long record of successful performance in industrial applications. The MICRO SWITCH™ LS fits in many places too small for any other fully adjustable limit switch. The MICRO SWITCH™ 200LS switches are the original plug-in concept for reducing downtime by making changeover simple and fast.

### Features:

- Mode of operation is field adjustable
- NEMA 1, 3, 4, 6, and 13
- Wide choice of heads and actuators
- Variety of operating characteristics
- Captive screws
- UL and CSA approved parts available

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Honeywell Part No.	Fig.	Circuit or Switch Function	Actuator Type	Operating Force (max.)	Lever Style	Price Each		
							1	10	50
785-1LS2	1LS2	A	1 NC 1 NO	Side Rotary	0.51 N	Not Included	149.39	121.83	116.19
785-1LS3	1LS3	A	1 NC 1 NO	Side Rotary	0.51 N	Roller-adj.	171.58	148.00	136.30
785-1LS3-L	1LS3-L	A	1 NC 1 NO	Side Rotary	0.51 N	Roller-adj.	171.58	141.16	136.30
785-1LS53	1LS53	A	1 NC 1 NO	Side Rotary	0.11 N	Rod-adj.	163.69	159.00	153.98
785-1LS56	1LS56	A	1 NC 1 NO	Side Rotary	0.11 N	Not Included	145.36	126.22	124.36
785-1LS9	1LS9	A	1 NC 1 NO	Side Rotary	0.51 N	Not Included	160.85	136.48	125.11
785-201LS1	201LS1	A	1 NC 1 NO	Side Rotary	0.51 N	Roller-fixed	173.70	149.85	137.98
785-201LS3	201LS3	A	1 NC 1 NO	Side Rotary	0.51 N	Roller-adj.	204.79	193.12	187.45
785-3LS1	3LS1	A	1 NC 1 NO	Side Roller Plunger	40.03 N	None	186.86	180.80	158.57
785-4LS1	4LS1	A	1 NC 1 NO	Side Plunger	40.03 N	None	168.57	138.69	133.91
785-6LS1	6LS1	A	1 NC 1 NO	Side Rotary	0.34 N	Roller-yolk	195.10	160.52	154.98
785-202LS1	202LS1	B	1 NC 1 NO	Top Plunger	31.14 N	None	160.85	131.18	125.11
785-2LS1	2LS1	B	1 NC 1 NO	Top Plunger	31.14 N	None	145.60	138.94	132.87
785-2LS1-L	2LS1-L	B	1 NC 1 NO	Top Plunger	31.14 N	None	145.60	138.94	132.87
785-208LS1	208LS1	C	1 NC 1 NO	Wobble-Flex Cable	1.39 N	None	160.85	131.18	125.11
785-208LS12	208LS12	C	1 NC 1 NO	Wobble-Coil Spring	1.39 N	None	160.85	131.18	125.11
785-8LS1	8LS1	C	1 NC 1 NO	Wobble-Flex Cable	1.39 N	None	165.88	135.28	129.02
785-8LS12	8LS12	C	1 NC 1 NO	Wobble-Coil Spring	1.39 N	None	165.88	135.28	129.02
785-8LS1-L	8LS1-L	C	1 NC 1 NO	Wobble-Cable	1.39 N	None	165.88	135.28	129.02

## SL1 SERIES ENCLOSED AND COMPACT LIMIT SWITCHES

### Features:

- Ideal source of replacement parts for imported machine tools or transplant factories
- Wide product selection to suit many applications
- Snap-in terminal enclosure makes mounting and wiring easy
- Rugged Zinc diecast housing
- Temperature ranges:  
Standard -10 to +70°C (14 to 158°F);  
Low temp. with roller lever -40 to +70°C (-40 to 158°F);  
Low temp. with roller plunger -50 to 70°C (-60 to +158°F)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Honeywell Part No.	Fig.	Circuit or Switch Function	Actuator Type	Operating Force (max.)	Lever Style	Price Each		
							1	10	50
785-SL1-A	SL1-A	D	1 NC 1 NO	Top Roller Plunger	11.76 N	None	125.45	106.44	97.57
785-SL1-AK	SL1-AK	D	1 NC 1 NO	Top Roller Plunger	11.76 N	None	140.70	114.74	109.43
785-SL1-D	SL1-D	D	1 NC 1 NO	Cross Roll Plunger	11.76 N	None	97.76	96.49	93.53
785-SL1-E	SL1-E	D	1 NC 1 NO	Top Roll Plunger-Long	11.76 N	None	133.98	113.68	104.21
785-SL1-EK	SL1-EK	D	1 NC 1 NO	Top Roll Plunger-Long	11.76 N	None	149.20	126.59	116.04
785-SL1-H	SL1-H	D	1 NC 1 NO	Top Plunger-Short	11.76 N	None	100.07	81.61	77.83
785-SL1-KK	SL1-KK	D	1 NC 1 NO	Cross Roll Plunger-long	11.76 N	None	147.01	119.89	114.34
785-SL1-P	SL1-P	D	1 NC 1 NO	Top Roller Arm	3.92 N	None	125.46	102.32	97.58

## 914CE SERIES MINIATURE PREWIRED ENCLOSED SWITCHES

### Features:

- Miniature size
- Wide selection of actuators
- Precision characteristics
- Zinc die cast housing
- Optional mounting bracket
- Fluorocarbon seal available
- Pleated or connector versions
- Temperature range 35° to 160°F (2° to 71°C)
- UL Recognized, file #E41859
- CSA Certified, file #LR15775
- CE Certified
- Low temp. versions available (-40°C & °F)

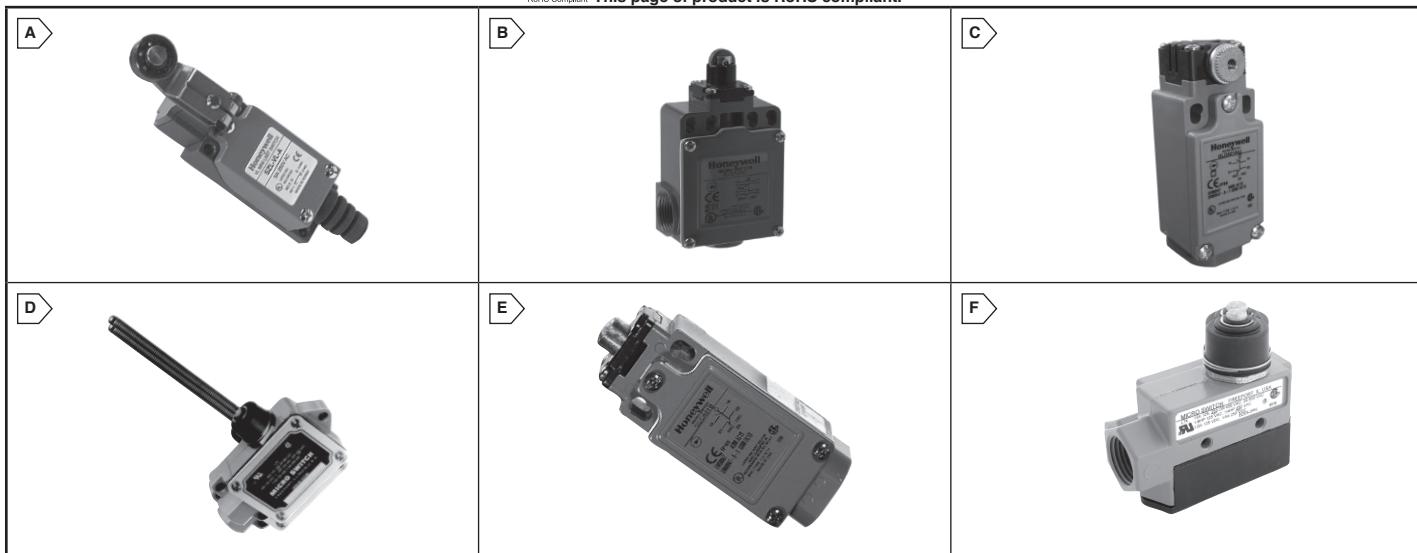
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Honeywell Part No.	Fig.	Circuit or Switch Function	Actuator Type	Operating Force (max.)	Lever Style	Price Each		
							1	10	50
785-914CE1-3	914CE1-3	E	1 NC 1 NO	Top Plunger	11.8 N	None	79.07	65.62	60.43
785-914CE1-3A	914CE1-3A	E	1 NC 1 NO	Top Plunger	11.8 N	None	83.32	66.25	63.68
785-914CE1-6	914CE1-6	E	1 NC 1 NO	Top Plunger	11.8 N	None	86.86	72.08	66.38
785-914CE1-6A	914CE1-6A	E	1 NC 1 NO	Top Plunger	11.8 N	None	89.17	70.89	68.14
785-914CE18-3	914CE18-3	E	1 NC 1 NO	Top Plunger	22.5 N	None	89.29	75.76	69.44
785-914CE18-3AL1	914CE18-3AL1	E	1 NC 1 NO	Top Plunger	22.5 N	None	104.46	85.19	81.24
785-914CE18-6	914CE18-6	E	1 NC 1 NO	Top Plunger	22.5 N	None	96.58	81.95	75.12
785-914CE18-9	914CE18-9	E	1 NC 1 NO	Top Plunger	22.5 N	None	102.94	83.95	80.07
785-914CE18-Q	914CE18-Q	E	1 NC 1 NO	Top Plunger	22.5 N	None	94.47	77.05	73.48
785-914CE1-9	914CE1-9	E	1 NC 1 NO	Top Plunger	11.8 N	None	88.11	74.76	68.53
785-914CE1-Q	914CE1-Q	E	1 NC 1 NO	Top Plunger	11.8 N	None	85.25	70.74	65.15
785-914CE2-3	914CE2-3	E	1 NC 1 NO	Top Roller Plunger	11.8 N	None	85.95	72.93	66.85
785-914CE2-3A	914CE2-3A	E	1 NC 1 NO	Top Roller Plunger	11.8 N	None	88.11	74.76	68.53
785-914CE2-6	914CE2-6	E	1 NC 1 NO	Top Roller Plunger	11.8 N	None	92.67	78.63	72.08
785-914CE2-6A	914CE2-6A	E	1 NC 1 NO	Top Roller Plunger	11.8 N	None	93.99	81.34	74.56
785-914CE28-3	914CE28-3	E	1 NC 1 NO	Top Roller Plunger	11.8 N	None	118.20	96.39	91.93
785-914CE2-9	914CE2-9	E	1 NC 1 NO	Top Roller Plunger	11.8 N	None	99.63	84.53	77.49
785-914CE2-AQ	914CE2-AQ	E	1 NC 1 NO	Top Roller Plunger	11.8 N	None	131.26	127.49	123.89
785-914CE2-Q	914CE2-Q	E	1 NC 1 NO	Top Roller Plunger	11.8 N	None	91.14	77.33	70.89
785-914CE31-6	914CE31-6	E	1 NC 1 NO	Top Roller Plunger	17.5 N	None	109.58	102.62	93.69
785-914CE3-3	914CE3-3	E	1 NC 1 NO	Cross Roll Plunger	11.8 N	None	85.95	72.93	66.85
785-914CE3-6	914CE3-6	E	1 NC 1 NO	Cross Roll Plunger	11.8 N	None	92.67	78.63	72.08
785-914CE3-9	914CE3-9	E	1 NC 1 NO	Cross Roll Plunger	11.8 N	None	87.56	82.00	74.87
785-914CE3-Q	914CE3-Q	E	1 NC 1 NO	Cross Roll Plunger	11.8 N	None	91.14	74.33	70.89
785-914CE66-3	914CE66-3	E	1 NC 1 NO	Ball Bearing Plunger	11.8 N	None	90.23	88.12	85.83

# HONEYWELL Limit Switches

**Honeywell**

RoHS Compliant This page of product is RoHS compliant.



## MICRO SWITCH™ GLOBAL LIMIT SWITCHES

Designed to IEC standard for world-wide acceptance. These metal or plastic switches are available with a wide variety of actuators, electrical specifications, terminations, circuitry and sealing ratings.

\* Part is UL only.



MOUSER STOCK NO.	Honeywell Part No.	Fig.	Contact Form	Circuitry	Actuator Type	Operating Force (max.)	Lever Style	For quantities greater than listed, call for quote.		
								1	10	50
* 785-SZL-VL-H	SZL-VL-H	A	SPDT	1 NC 1 NO	Roller Plunger	8.83 N	None	23.22	22.18	20.64
* 785-SZL-VL-G	SZL-VL-G	A	SPDT	1 NC 1 NO	Wobble-Coil Spring	0.88 N	None	28.09	22.44	20.14
* 785-SZL-VL-F	SZL-VL-F	A	SPDT	1 NC 1 NO	Wobble-Plastic Rod	0.88 N	None	30.50	24.37	21.88
* 785-SZL-VL-D	SZL-VL-D	A	SPDT	1 NC 1 NO	Top Plunger	8.83 N	None	23.22	22.18	20.64
* 785-SZL-VL-C	SZL-VL-C	A	SPDT	1 NC 1 NO	Side Rotary	2.0-7.84N	None	30.50	22.83	21.88
* 785-SZL-VL-B	SZL-VL-B	A	SPDT	1 NC 1 NO	Side Rotary	3.35-7.84 N	None	26.64	21.28	19.10
* 785-SZL-VL-A	SZL-VL-A	A	SPDT	1 NC 1 NO	Side Rotary	5.88 N	None	30.50	24.36	21.87
785-GLEA24C	GLEA24C	B	DPDT	2 NC 2 NO	Top Roller Plunger	13.0 N	None	85.58	72.61	66.56
785-GLEA24A1B	GLEA24A1B	B	DPDT	2 NC 2 NO	Side Rotary	0.165 N	Roller-Std	74.75	70.01	63.93
785-GLDA01A4J	GLDA01A4J	C	SPDT	1 NC 1 NO	Side Rotary	0.120 N	Rod-adj.	39.97	36.62	33.20
785-GLDA01A2A	GLDA01A2A	C	SPDT	1 NC 1 NO	Side Rotary	0.120 N	Roller-adj.	43.60	34.84	31.27
785-GLDA01A1B	GLDA01A1B	C	SPDT	1 NC 1 NO	Side Rotary	0.120 N	Roller-Std, Steel	37.40	29.89	26.83
785-GLDA01A1A	GLDA01A1A	C	SPDT	1 NC 1 NO	Side Rotary	0.120 N	Roller-Std, Plastic	31.15	24.89	22.34
785-GLCA01C	GLCA01C	D	SPDT	1 NC 1 NO	Top Roller Plunger	16.0 N	None	54.21	48.28	45.11
785-GLCA01B	GLCA01B	E	SPDT	1 NC 1 NO	Top Plunger	16.0 N	None	46.15	43.64	39.55
785-GLCA01A4J	GLCA01A4J	E	SPDT	1 NC 1 NO	Side Rotary	0.120 N	Rod-adj.	51.81	43.00	39.60
785-GLCA01A2B	GLCA01A2B	E	SPDT	1 NC 1 NO	Side Rotary	0.120 N	Roller-adj., Steel	51.81	43.00	39.60
785-GLCA01A2A	GLCA01A2A	E	SPDT	1 NC 1 NO	Side Rotary	0.120 N	Roller-adj., Plastic	51.81	41.20	39.60
785-GLCA01A1B	GLCA01A1B	E	SPDT	1 NC 1 NO	Side Rotary	0.120 N	Roller-Std, Steel	46.01	38.18	35.16
785-GLCA01A1A	GLCA01A1A	E	SPDT	1 NC 1 NO	Side Rotary	0.120 N	Roller-Std, Plastic	46.01	38.18	35.16
785-GLAA01B	GLAA01B	E	SPDT	1 NC 1 NO	Top Plunger	16.0 N	None	84.54	70.15	64.60

## MICRO SWITCH™ MEDIUM-DUTY LIMIT SWITCHES

Application-proven enclosed switches (precision snap-acting switches sealed in rugged metal housing). Honeywell Sensing and Control's (S&C) limit switches offer superior flexibility and performance.

\* Part is UL only.

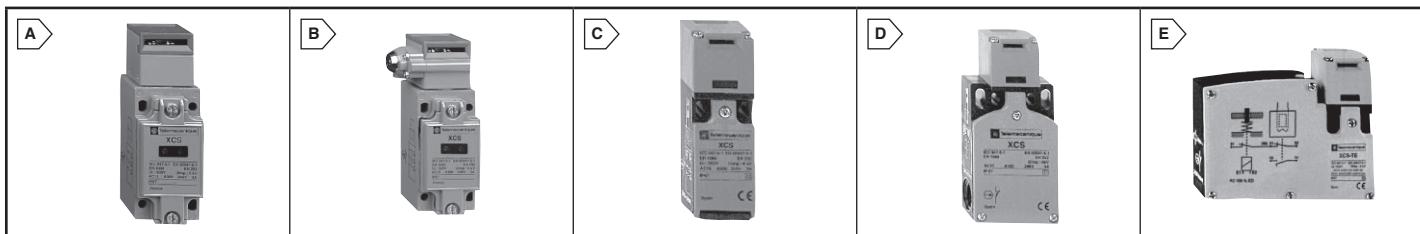


Part No.	Description	Fig.	Contact Form	Circuitry	Actuator Type	Operating Force (max.)	Lever Style	For quantities greater than listed, call for quote.		
								1	10	50
785-BAF1-2RN-RH	BAF1-2RN-RH	D	SPDT	1 NC 1 NO	Top Plunger	11.2 N	None	126.19	107.07	98.15
785-BAF1-2RN18-LH	BAF1-2RN18-LH	D	SPDT	1 NC 1 NO	Wobble-Coil Spring, LH	--	None	168.67	138.77	133.98
785-BAF1-2RN18-RH	BAF1-2RN18-RH	D	SPDT	1 NC 1 NO	Wobble-Coil Spring, RH	--	None	168.67	145.51	133.98
785-BAF1-2RN2-LH	BAF1-2RN2-LH	D	SPDT	1 NC 1 NO	Top Roller Arm	8.90 N	Roller-adj.	159.34	135.19	123.93
785-BAF1-2RQ9-RH	BAF1-2RQ9-RH	D	SPDT	1 NC 1 NO	Top Roller Plunger	11.1 N	None	167.43	136.55	130.22
785-BAF1-3RNX1	BAF1-3RNX1	D	SPDT	1 NC 1 NO	Top Plunger	7.79 N	None	173.65	149.81	137.94
785-BZE6-2RN	BZE6-2RN	F	SPDT	1 NC 1 NO	Top Plunger	2.50 N	None	54.06	44.86	41.31
* 785-BZE6-2RN-S	BZE6-2RN-S	F	SPDT	1 NC 1 NO	Top Plunger	2.50 N	None	63.90	53.03	48.83
785-BZE6-2RN18	BZE6-2RN18	F	SPDT	1 NC 1 NO	Wobble-Coil Spring	1.95 N	None	93.32	76.10	72.58
785-BZE6-2RN2	BZE6-2RN2	F	SPDT	1 NC 1 NO	Top Roller Arm	5.56 N	Roller-adj.	87.47	74.21	68.03
785-BZE6-2RN4	BZE6-2RN4	F	SPDT	1 NC 1 NO	Manual Palm Button	5.56 N	None	95.70	78.04	74.43
785-BZE6-2RN7	BZE6-2RN7	F	SPDT	1 NC 1 NO	Top Plunger	6.67 N	None	67.79	56.25	51.80
785-BZE6-2RN72	BZE6-2RN72	F	SPDT	1 NC 1 NO	Top Plunger	6.67 N	None	81.94	65.15	62.62
785-BZE6-2RN80	BZE6-2RN80	F	SPDT	1 NC 1 NO	Top Roller Plunger	6.67 N	None	86.09	73.04	66.96
785-BZE6-2RQ	BZE6-2RQ	F	SPDT	1 NC 1 NO	Top Plunger	3.61 N	None	53.66	44.52	41.01
785-BZE6-2RQ62	BZE6-2RQ62	F	SPDT	1 NC 1 NO	Low Force Rod	1.39 N	Rod-Low Force	78.90	75.48	74.25
785-BZE6-2RQ8	BZE6-2RQ8	F	SPDT	1 NC 1 NO	Top Roller Plunger	3.61 N	None	78.66	65.27	60.11
785-BZE6-2RQ81	BZE6-2RQ81	F	SPDT	1 NC 1 NO	Cross Roller Plunger	3.61 N	None	78.66	62.54	60.11
785-BZE6-RNX1	BZE6-RNX1	F	SPDT	1 NC 1 NO	Top Plunger	5.56 N	None	101.76	93.14	82.69
* 785-BZG1-2RN	BZG1-2RN	F	SPDT	1 NC 1 NO	Top Plunger	6.67 N	None	95.45	86.91	80.37
* 785-BZG1-2RN2	BZG1-2RN2	F	SPDT	1 NC 1 NO	Top Roller Arm	5.56 N	Roller-adj.	137.01	111.73	106.56
785-BZV6-2RN	BZV6-2RN	F	SPDT	1 NC 1 NO	Top Plunger	6.67 N	None	69.71	57.85	53.27
785-BZV6-2RN18	BZV6-2RN18	F	SPDT	1 NC 1 NO	Wobble - Coil Spring	1.95 N	None	107.61	105.45	102.73
785-BZV6-2RN2	BZV6-2RN2	F	SPDT	1 NC 1 NO	Top Roller Arm	5.56 N	Roller-adj.	94.47	80.16	73.48
785-BZV6-2RNQ2	BZV6-2RNQ2	F	SPDT	1 NC 1 NO	Top Roller Arm	5.00 N	Roller-adj.	87.64	78.55	70.40
785-BZV6-2RQ8	BZV6-2RQ8	F	SPDT	1 NC 1 NO	Top Roller Plunger	3.61 N	None	87.37	69.47	66.77
785-DTE6-2RN	DTE6-2RN	F	SPDT	2 NC 2 NO	Top Plunger	16.4 N	None	140.88	114.90	109.58
785-DTE6-2RN2	DTE6-2RN2	F	SPDT	2 NC 2 NO	Top Roller Arm	13.34 N	Roller-adj.	164.95	134.52	128.29
785-DTE6-2RN80	DTE6-2RN80	F	SPDT	2 NC 2 NO	Top Roller Plunger	13.34 N	None	251.04	234.32	220.05
785-DTE6-2RQ2	DTE6-2RQ2	F	SPDT	2 NC 2 NO	Top Roller Arm	5.57 N	Roller-adj.	162.52	132.54	126.40
785-DTE6-2RQ9	DTE6-2RQ9	F	SPDT	2 NC 2 NO	Top Roller Plunger	13.34 N	None	162.40	149.16	129.75
785-DTV6-2RN	DTV6-2RN	F	SPDT	2 NC 2 NO	Top Plunger	16.4 N	None	153.78	125.41	119.60

# SCHNEIDER ELECTRIC Safety Interlock and Limit Switches Schneider Electric

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## SAFETY INTERLOCK WITH KEY OPERATED SWITCHES



The Preventa XCS safety interlock switches are designed to protect personnel by verifying that doors, gates and guards are closed before a process can start up. It minimizes potential accidents by removing the actuating key from the switch and sending a stop signal to the safety circuit when the guard or gate is open. Simple to install and configure, XCS safety interlocks feature metal or plastic bodies and can be used with an assortment of actuating keys to make the switch suitable for a variety of safety applications that are compliant with both domestic and international standards.

### Features:

- Multiple actuator types to fit a wide variety of application requirements
- Metal enclosures for rugged and demanding applications
- Small enclosure styles for mounting in tight spaces
- Locking devices keep personnel out of machine when hazards are present

### Applications:

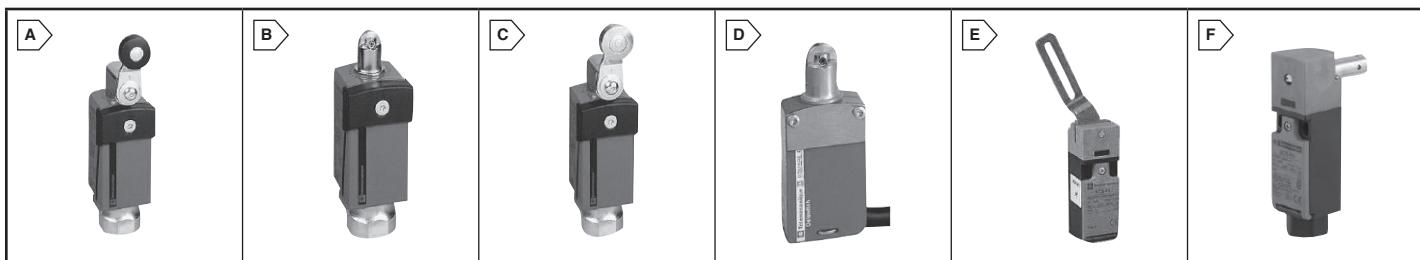
- Automotive and machine tool
- Complex and special machines
- Crane and hoist
- Food and beverage
- Packaging
- Industrial markets
- Infrastructure
- Manufacturing



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schneider Electric Part No.	Fig.	Contacts	Operation	Connection	Number of Poles	Price Each			
							1	5	10	25
<b>Metal Safety Switches</b>										
996-XCSA503	XCSA503	A	1 NC + 2 NO	Slow-break, break before make	1 entry tapped 1/2" NPT	3	175.64	165.87	148.62	142.77
996-XCSA701	XCSA701	A	2 NC + 1 NO	Slow-break, break before make	1 entry tapped Pg 13.5	3	155.85	154.57	138.51	133.09
996-XCSA703	XCSA703	A	2 NC + 1 NO	Slow-break, break before make	1 entry tapped 1/2" NPT	3	175.64	165.87	148.62	142.77
996-XCSB703	XCSB703	B	2 NC + 1 NO	Slow-break, break before make	1 entry tapped 1/2" NPT	3	236.81	235.47	216.64	206.48
<b>Plastic Safety Switches</b>										
996-XCSPA693	XCSPA693	C	1 NC + 1 NO	Slow-break, make before break	1 entry tapped 1/2" NPT	2	95.56	90.26	80.88	77.72
996-XCSPA791	XCSPA791	C	1 NC + 1 NO	Slow-break, simultaneous	1 entry tapped Pg 11	2	69.40	67.31	64.41	61.68
996-XCSTA593	XCSTA593	D	1 NC + 2 NO	Slow-break, break before make	2 entries tapped 1/2" NPT	3	93.18	88.00	78.86	75.77
996-XCSTA893	XCSTA893	D	3 NC	Slow-break, simultaneous	2 entries tapped 1/2" NPT	3	95.56	90.26	80.88	77.72
<b>Metal Safety Switches with Solenoid Locking</b>										
996-XCSTE5311	XCSTE5311	E	1 NC + 1 NO	Slow-break, break before make	1 entry tapped Pg 11	2	276.42	258.70	238.01	226.85
996-XCSTE5513	XCSTE5513	E	1 NC + 1 NO	Slow-break, break before make	1 entry tapped Pg 11	2	315.96	295.66	271.96	259.20
996-XCSTE7313	XCSTE7313	E	2 NC	Slow-break, simultaneous	1 entry tapped 1/2" NPT	2	276.42	258.70	238.01	226.85

## SAFETY LIMIT SWITCHES



Preventa XCS safety limit switches are designed to protect personnel in machine guarding applications where physical contact with the guard is required. Featuring positive opening contact operation and tamper resistant mounting, Preventa safety limit switches interrupt machine or control processes when the switch's plunger or lever is deflected by the sliding action of the guard or other moving object. These switches are available in two styles: miniature or compact with either plastic or metal bodies.

### Features:

- Tamper resistant covers included, to resist tampering with mounting, wiring, and repositioning of the operating head after installation.
- Red color makes them easily identifiable as a safety related component
- 2 NC contacts provide electrical redundancy
- Small size allows easy installation even in cramped spaces

### Applications:

- Automotive and machine tool
- Complex and special machines
- Food and beverage
- Industrial markets
- Packaging
- Manufacturing
- Material handling



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schneider Electric Part No.	Fig.	Contacts	Actuator Type	Connection	Material	Price Each			
							1	5	10	25
<b>XCS Series</b>										
996-XCSD3718N12	XCSD3718N12	A	1 NC / 2 NO	Plastic Roller Plunger	1/2" NPT Conduit	Metal	107.86	104.52	94.59	87.79
996-XCSD3902N12	XCSD3902N12	B	1 NC + 1 NC + 1 NO	Steel Roller Plunger	1 entry tapped 1/2" NPT	Metal	97.97	92.53	82.91	79.64
996-XCSD3918N12	XCSD3918N12	A	1 NC + 1 NC + 1 NO	Thermoplastic Roller Lever	1 entry tapped 1/2" NPT	Metal	97.01	90.80	80.24	76.84
996-XCSD3919N12	XCSD3919N12	C	1 NC + 1 NC + 1 NO	Steel Roller Lever	1 entry tapped 1/2" NPT	Metal	97.97	92.53	82.90	79.64
<b>XCSM Series</b>										
996-XCSM3902L2	XCSM3902L2	D	1 NC + 1 NC + 1 NO	Roller Plunger	Pre-Cabled	Metal	138.59	130.89	117.29	112.67
996-XCSM4110L2	XCSM4110L2	D	1 NC + 1 NC + 1 NO + 1 NO	Metal End Plunger	Pre-Cabled	Metal	136.18	128.62	115.25	110.75
<b>XCSPL Series</b>										
996-XCSPPL581	XCSPPL581	E	1 NC + 1 NO + 1 NO	Elbowed Flush Lever	1 entry tapped 1/2" NPT	Plastic	97.97	92.53	82.90	79.64
<b>XCSPR Series</b>										
996-XCSPR753	XCSPR753	F	1 NC + 1 NO + 1 NO	Elbowed Flush Lever	1 entry tapped 1/2" NPT	Plastic	108.71	102.67	92.00	88.40

## ACCESSORIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schneider Electric Part No.	Description	Product Series	Price Each			
				1	10	25	50
996-XCSZ01	XCSZ01	Straight actuator for metal switch	XCSA, XCSB,	18.90	17.76	17.51	17.25
996-XCSZ02	XCSZ02	Actuator with wide fixing for metal switch	XCSA, XCSB,	21.14	17.88	17.71	17.46
996-XCSZ03	XCSZ03	Pivoting actuator for metal switch	XCSA, XCSB,	49.36	39.71	37.98	36.89
996-XCSZ21	XCSZ21	Retaining device for switch	XCSPA, XCSTE	28.03	24.38	23.31	22.65

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# APM HEXSEAL Environmental Sealing Boots



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**APM HEXSEAL®**  
SEALING SPECIALISTS

## PUSHBUTTON SWITCH BOOTS

- Silicone rubber boot, with molded-in mounting nut
- Completely covers actuator
- Meets MIL-B-5423

- Resistant to sunlight, weather, salt spray, ozone, fungus and most acids and lubricating oils
- RFI suffix are EMI shielded



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	APM Hexseal Part No.	Fig.	Thread Size	Dimensions: in.			Plunger Height (in.)	Color	Price Each		
				A	B	C			1	25	50
608-N3030	N3030	A	15/32-32NS-2B	0.547	0.625	0.422	0.281	Gray	2.84	2.70	2.42
608-N3030-2605	N3030 2605	A	15/32-32NS-2B	0.547	0.625	0.422	0.281	Green	3.75	3.52	3.30
608-N3030-2604	N3030 2604	A	15/32-32NS-2B	0.547	0.625	0.422	0.281	Red	2.99	2.86	2.82
608-NC3030	NC3030	A	15/32-32NS-2B	0.719	0.625	0.422	0.438	Gray	2.84	2.70	2.42
608-NH3030	NH3030	A	1/2-32NS-2B	0.547	0.625	0.422	0.281	Gray	2.96	2.90	2.65
608-N5040	N5040	A	1/4-40NS-2B	0.313	0.375	0.188	0.141	Gray	3.35	3.28	3.01
608-N5040G	N5040G	A	1/4-32NS-2B	0.313	0.375	0.188	0.203	Gray	3.69	3.58	3.23
608-N5040R	N5040R	A	1/4-40NS-2B	0.313	0.375	0.188	0.203	Gray	3.27	3.13	2.85
608-1231/8/49	1231/8/49	A	3/8-27NS-2B	0.653	0.500	0.300	0.545	Clear	2.76	2.58	2.43
608-1221/12	1221/12	B	3/8-27NS-2B	0.609	0.641	0.320	0.330	Gray	2.07	1.95	1.83
608-1221/15	1221/15	B	15/32-32NS-2B	0.719	0.766	0.375	0.400	Gray	2.12	1.99	1.86
608-C1221/23	C1221/23	B	3/8-32NEF-2B	0.609	0.641	0.320	0.330	Clear	2.03	1.90	1.79
608-C1221/25	C1221/25	B	3/8-32NS-2B	0.609	0.500	0.320	0.545	Black	3.11	2.89	2.59
608-N3030-RFI	N3030 RFI	A	15/32-32NS-2B	0.547	0.625	0.422	0.281	Gray	12.48	11.49	11.08
608-NH3030-RFI	NH3030 RFI	A	1/2-32NS-2B	0.547	0.625	0.422	0.281	Gray	14.79	13.85	13.01

## TOGGLE SWITCH BOOTS

- Silicone rubber with molded-in hex mounting nut
- Seals both switch and panel cutout
- Meets MIL-B-5423

- Resistant to sunlight, weather, salt spray, ozone, fungus and most acids and lubricating oils
- RFI suffix are EMI shielded



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	APM Hexseal Part No.	Fig.	Thread Size	Dimensions: in.			Color	Price Each			
				A	B	C		1	25	50	
608-N1030	N1030	C	15/32-32NS-2B	0.219	0.844	0.625	0.660	Gray	3.01	2.82	2.66
608-N1030-2503	N1030 2503	C	15/32-32NS-2B	0.219	0.844	0.625	0.660	Yellow	3.82	3.58	3.36
608-N1030A	N1030A	D	15/32-32NS-2B	0.219	0.875	0.625	0.660	Stainless-Steel	6.83	6.26	5.78
608-N1030B	N1030B	E	15/32-32NS-2B	0.078	0.437	0.625	—	Gray	2.74	2.63	2.39
608-N5030	N5030	C	1/4-40NS-2B	0.104	0.422	0.375	0.310	Gray	3.58	3.35	3.15
608-N5030L	N5030L	C	1/4-40NS-2B	0.062	0.500	0.375	0.370	Gray	3.59	3.36	3.16
608-N5032B	N5032B	E	1/4-40NS-2B	0.047	0.250	0.375	—	Gray	3.51	3.28	3.08
608-C113/28	C113/28	C	15/32-32NS-2B	0.219	0.937	0.625	0.710	Black	2.73	2.54	2.27
608-1131/26	1131/26	C	15/32-32NS-2B	0.219	1.093	0.625	0.900	Gray	3.01	2.82	2.65
608-50154	50154	C	15/32-32NS-2B	0.280	1.094	0.625	1.094	Gray	3.01	2.82	2.65
608-N5030S	N5030S	C	1/4-40NS-2B	0.062	0.594	0.375	0.500	Gray	3.27	3.14	2.86
608-IN1030-RFI	IN1030 RFI	C	15/32-32NS-2B	0.219	0.844	0.625	0.660	Gray	12.39	11.41	11.00
608-IN1030RFI1/232	IN1030 RFI 1/2-32	C	1/2-32NS-2B	0.219	0.844	0.625	0.660	Gray	11.42	10.64	9.93
608-N5030S-RFI	N5030S RFI	C	1/4-40NS-2B	0.062	0.594	0.750	0.500	Gray	12.43	11.40	10.52

## ROCKER SWITCH BOOTS

- High tear strength, transparent silicone rubber
- Resistant to sunlight, weather, salt spray, ozone, fungus and most acids and lubricating oils

- Does not compromise switch operability, position status viewing, or legend visibility
- Meets MIL-B-5423

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	APM Hexseal Part No.	Fig.	Thread Size	Dimensions: in.			Color	Price Each			
				A	B	C		1	25	50	
608-C1113/66	C1113/66	F	0.228	0.348	0.531	0.750	0.531	Clear	2.14	2.01	1.88
608-C1113/80	C1113/80	F	0.560	0.750	1.375	1.750	0.900	Clear	2.55	2.39	2.25

## ROTARY SHAFT SEALS

- For standard rotary switch/potentiometer shafts
- Seals boot shaft and panel cutout
- RFI suffix are EMI shielded

- Resistant to sunlight, weather, salt spray, ozone, fungus and most acids and lubricating oils
- Meets MIL-B-5423

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	APM Hexseal Part No.	Fig.	Thread Size	Dimensions: in.			Color	Price Each		
				Shaft Dia.	A	B		1	25	50
608-N9030-X-1/4	N9030 X 1/4	G	3/8-32NS-2B	.250	0.219	0.500	Gray	2.71	2.55	2.28
608-N9040-X-1/8	N9040 X 1/8	G	1/4-32NEF-2B	.125	0.219	0.375	Gray	2.48	2.32	2.18
608-N9030-X-1/4-RFI	N9030 X 1/4 RFI	G	3/8-32NS-2B	.250	0.219	0.500	Gray	10.82	10.15	9.52
608-N9040-X-1/8-RFI	N9040 X 1/8 RFI	G	1/4-32NEF-2B	.125	0.219	0.375	Gray	13.79	12.92	12.12

## SEALED-SWITCH PANEL BUSHING SEAL

- Seals panel cutout through which the switch bushing passes
- Meets MIL-B-5423



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	APM Hexseal Part No.	Fig.	Shaft Brushing	Dimensions: in.		Washer Dia.	Thickness	Price Each		
				H	L1	W1	W2	1	25	50
608-60064	60064	H	15/32-32	.677		0.120		2.14	1.94	1.76

## SEALING BOOTS FOR LEVER-ACTUATED CIRCUIT BREAKERS

- High tear strength, transparent silicone rubber
- Does not compromise breaker operation or position status viewing
- Resistant to sunlight, weather, salt spray, ozone, fungus and most acids and lubricating oils
- Mounting hardware provided
- Meets MIL-B-5423



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	APM Hexseal Part No.	Fig.	Poles	Dimensions: in.			Carling	Tyco/P&B	Price Each				
				H	L1	L2	W1	W2	1	25	50		
<b>Front-Panel Mounted</b>													
608-CT1020	CT1020	I	2	0.875	1.875	2.656	2.219	1.594	CA2/DA2	W92	16.12	15.11	14.18
608-CT1050	CT1050	I	3	0.875	1.875	2.656	2.656	2.344	CA3/DA3	W93	18.14	17.01	15.97
<b>Back-of-Panel Mounted</b>													
608-C1113/40	C1113/40	J	1	0.813	1.813	2.00	0.75	0.656	BA1	W67/W68/W69	9.50	9.12	8.44
608-C1113/42	C1113/42	J	2	0.813	1.813	2.00	1.50	1.406	BA2	W68/W69	10.02	9.85	8.93

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1942

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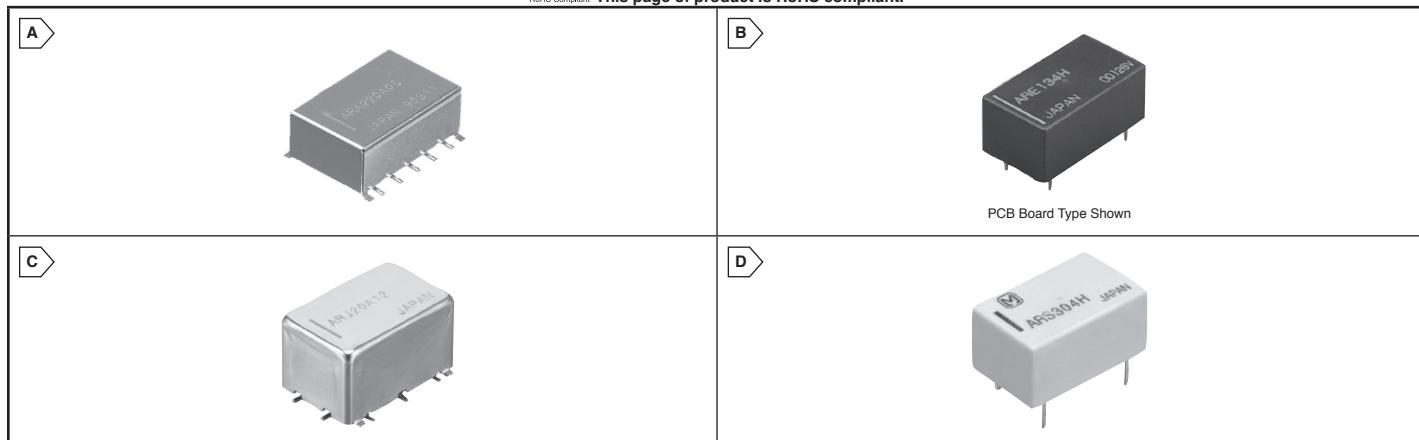
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# PANASONIC RF Relays

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**Panasonic**



Panasonic high frequency relays and coaxial switches are RoHS compliant and specifically designed for instrumentation, test & measurement, wireless communications, and cable TV/satellite equipment markets.

## ARA SERIES

- Impedance: 50Ω, 1.0GHz
- Surface mount terminal
- Low Profile
- Nominal operating power: 140mW
- High contact reliability

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig	Frequency (GHz)	Nominal Coil Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	5	10	25
769-ARA200A03	ARA200A03	A	1	3	2 Form C	SMD	25.24	24.74	24.21	23.02
769-ARA200A05	ARA200A05	A	1	5	2 Form C	SMD	25.99	25.11	24.94	23.02
769-ARA200A12	ARA200A12	A	1	12	2 Form C	SMD	25.99	25.11	24.94	23.02
769-ARA200A4H	ARA200A4H	A	1	4.5	2 Form C	SMD	24.55	24.39	23.55	23.02
769-ARA220A05	ARA220A05	A	1	5	2 Form C	SMD	29.69	29.09	28.49	26.37
769-ARA210A12	ARA210A12	A	1	12	2 Form C	SMD	27.00	26.66	25.90	23.02

## ARE SERIES

- Compact and slim size
- High Frequency Characteristics: to 2.6GHz

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig	Frequency (GHz)	Nominal Coil Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-ARE104H	ARE104H	B	2.6	4.5	1 Form C	PCB	6.10	4.98	4.24	3.74
769-ARE1312	ARE1312	B	2.6	12	1 Form C	PCB	5.88	4.80	4.08	3.60
769-ARE134H	ARE134H	B	2.6	4.5	1 Form C	PCB	5.88	4.80	4.08	3.60
769-ARE10A12	ARE10A12	B	2.6	12	1 Form C	SMD	6.30	6.04	4.37	3.86
769-ARE13A12	ARE13A12	B	2.6	12	1 Form C	SMD	6.39	6.14	4.44	3.92
769-ARE13A4H	ARE13A4H	B	2.6	4.5	1 Form C	SMD	6.39	6.14	4.44	3.92
769-ARE1303	ARE1303	B	2.6	3	1 Form C	PCB	5.88	4.80	4.08	3.60

## ARJ SERIES

- High Frequency Characteristics: 50Ω, at 5GHz

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig	Frequency (GHz)	Nominal Coil Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	2	5	10
769-ARJ20A4H	ARJ20A4H	C	8	4.5	2 Form C	SMD	151.36	148.55	145.75	145.19
769-ARJ22A12	ARJ22A12	C	8	12	2 Form C	SMD	151.36	148.55	145.75	145.19

## ARS SERIES

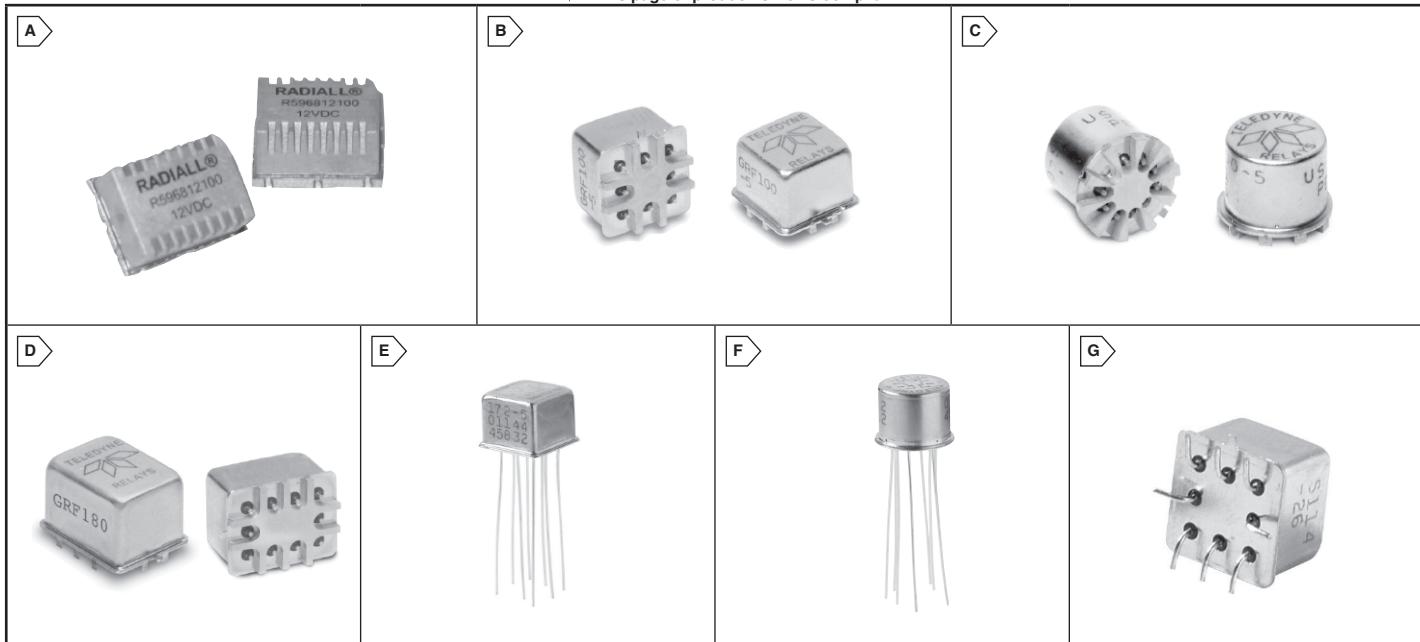
- Miniature design
- High Frequency Characteristics: to 3GHz
- Impedance: 75Ω

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig	Frequency (GHz)	Nominal Coil Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-ARS1012	ARS1012	D	3	12	1 Form C	PCB	8.36	6.83	5.69	5.02
769-ARS1024	ARS1024	D	3	24	1 Form C	PCB	9.17	7.49	6.23	5.50
769-ARS104H	ARS104H	D	3	4.5	1 Form C	PCB	8.36	6.83	5.69	5.02
769-ARS1112	ARS1112	D	3	12	1 Form C	PCB	8.36	6.83	5.69	5.02
769-ARS1124	ARS1124	D	3	24	1 Form C	PCB	9.17	7.49	6.23	5.50
769-ARS114H	ARS114H	D	3	4.5	1 Form C	PCB	8.36	6.83	5.69	5.02
769-ARS1212	ARS1212	D	3	12	1 Form C	PCB	9.53	8.76	6.62	5.84
769-ARS1224	ARS1224	D	3	24	1 Form C	PCB	10.22	8.34	6.95	6.13
769-ARS124H	ARS124H	D	3	4.5	1 Form C	PCB	9.72	7.94	6.61	5.83
769-ARS1312	ARS1312	D	3	12	1 Form C	PCB	9.53	8.76	6.62	5.84
769-ARS1324	ARS1324	D	3	24	1 Form C	PCB	10.22	8.34	6.95	6.13
769-ARS134H	ARS134H	D	3	4.5	1 Form C	PCB	9.72	7.94	6.61	5.83
769-ARS1412	ARS1412	D	3	12	1 Form C	PCB	7.99	7.34	5.55	4.89

# SMT Power, Microwave and General Purpose Relays

 This page of product is RoHS compliant.



## Radiall® R596 SERIES: SLIM-LINE SMT POWER MICRO-SPDT RELAYS

An innovative and original micro-mechanical design allows the R596 SMT micro-relay to bring together the excellent reliability, RF and repeatability characteristics of coaxial switches with the miniature size and low cost implementation of surface mount components. Very low return loss and insertion loss allow this relay to be used in power applications, as well as in typical SMT relay applications such as RF attenuators, RF matrices, spectrum analyzers, and telecommunications. Failsafe models are proposed in two RF configurations (direct and inverted). The association of these two products on the same PC board allows to perform the BYPASS function very easily.

MOUSER STOCK NO.	Radiall Part No.	Fig.	Freq.	Type	Voltage	Price Each	
						1	25
501-R596812100	R596812100	A	8GHz	Failsafe	12V	139.31	125.61
501-R596813100	R596813100	A	8GHz	Failsafe	24V	176.48	148.61
501-R596832100	R596832100	A	8GHz	Latching, 2 Coils	12V	172.63	145.37
501-R596833100	R596833100	A	8GHz	Latching, 2 Coils	24V	176.48	148.61



## GRF SERIES SURFACE MOUNT RF RELAYS

### GRF100/103 Series

#### Features:

- GRF100/103 Series surface mount RF relays are designed to provide excellent RF signal repeatability.
- Repeatability = ±0.1dB

\* High sensitivity

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Freq.	Coil Res. (Ω)	Price Each	
						1	25
881-GRF100-5	GRF100-5	B	5V	DC-6GHz	0.10W	48.92	43.61
* 881-GRF103-12	GRF103-12	B	12V	DC-6GHz	0.10W	55.80	48.27

### GRF172 Series

#### Features:

- GRF172 Series surface mount RF relays are designed to provide excellent RF signal repeatability.

† With internal diode

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Freq.	Coil Res. (Ω)	Price Each	
						1	25
881-GRF172-5	GRF172-5	B	5V	DC-2.5GHz	0.15W	33.27	32.49
881-GRF172-12	GRF172-12	B	12V	DC-2.5GHz	0.15W	34.94	33.53
† 881-GRF172D-5	GRF172D-5	B	5V	DC-2.5GHz	0.15W	36.10	35.16
† 881-GRF172D-12	GRF172D-12	B	12V	DC-2.5GHz	0.15W	38.02	37.26

### GRF300/303 Series

#### Features:

- The ultraminiature GRF312 relay is designed to improve upon the GRF300/GRF303 relay's high frequency performance.
- High Repeatability
- DPDT

\* High sensitivity

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Freq.	Coil Res. (Ω)	Price Each	
						1	25
881-GRF300-5	GRF300-5	C	5V	DC-6GHz	0.10W	55.19	47.59
881-GRF300-12	GRF300-12	C	12V	DC-6GHz	0.10W	55.19	47.59
* 881-GRF303-5	GRF303-5	C	5V	DC-6GHz	0.10W	63.83	55.04
881-GRF312-5	GRF312-5	C	5V	DC-8GHz	0.15W	74.53	64.92
881-GRF312-12	GRF312-12	C	12V	DC-8GHz	0.15W	77.53	68.46

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1944

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## GRF 180 SERIES HIGH ISOLATION LATCHING RELAYS



A Teledyne Technologies Company

#### Features:

- GRF180 Series DPDT magnetic latching relays are designed to optimize isolation across contacts @4GHz
- Isolation = 36dB, Insertion Loss = 0.38dB, VSWR = 1.20:1

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Freq.	Coil Res. (Ω)	Price Each	
						1	25
881-GRF180-5	GRF180-5	D	5V	DC-6GHz	0.15W	55.58	53.55

## DPDT GENERAL PURPOSE CENTIGRID & TO-5 RELAYS

#### Features:

- Surface mount (S172 Series)
- Dry circuit to 1A, 28VDC
- Superb RF performance, DC to 1GHz
- Hermetically sealed
- Gold-plated contacts
- \*With internal transistor driver
- † With internal diode

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Freq.	Coil Res. (Ω)	Price Each	
						1	25
881-172-12	172-12	E	12V	DC-1GHz	0.15W	29.11	27.63
881-172-26	172-26	E	26V	DC-1GHz	0.15W	27.99	26.75
881-172-5	172-5	E	5V	DC-1GHz	0.15W	30.00	28.56
† 881-172D-12	172D-12	E	12V	DC-1GHz	0.15W	32.22	30.91
† 881-172D-26	172D-26	E	26V	DC-1GHz	0.15W	31.71	30.56
881-172D-5	172D-5	E	5V	DC-1GHz	0.15W	32.22	30.91
† 881-172DM-12	172DM-12	E	12V	DC-1GHz	0.15W	33.62	31.28
881-172M-5	172M-5	E	5V	DC-1GHz	0.15W	29.11	27.73
881-712-12	712-12	F	12V	DC-1GHz	0.15W	27.59	26.58
881-712-26	712-26	F	26V	DC-1GHz	0.15W	47.52	46.54
881-712-5	712-5	F	5V	DC-1GHz	0.15W	28.59	27.82
† 881-712D-12	712D-12	F	12V	DC-1GHz	0.15W	33.82	32.21
† 881-712D-26	712D-26	F	26V	DC-1GHz	0.15W	38.69	36.97
881-712D-5	712D-5	F	5V	DC-1GHz	0.15W	34.04	32.66
† 881-712Y-12	712Y-12	F	12V	DC-1GHz	0.15W	36.30	35.02
† 881-712TN-5	712TN-5	F	5V	DC-1GHz	0.15W	48.84	48.00

#### Magnetic Latching

881-722-12	722-12	F	12V	DC-1GHz	0.15W	56.23	53.48
881-722-26	722-26	F	26V	DC-1GHz	0.15W	56.23	53.48
881-722-5	722-5	F	5V	DC-1GHz	0.15W	56.23	53.48

#### High Sensitivity

881-732-12	732-12	F	12V	DC-1GHz	0.15W	34.72	29.14
881-732-5	732-5	F	5V	DC-1GHz	0.15W	32.71	30.14
† 881-732D-12	732D-12	F	12V	DC-1GHz	0.15W	35.48	34.51
† 881-732D-5	732D-5	F	5V	DC-1GHz	0.15W	34.48	33.51
* 881-732TN-5	732TN-5	F	5V	DC-1GHz	0.15W	47.32	45.65
* 881-732TN-12	732TN-12	F	12V	DC-1GHz	0.15W	47.28	46.42

#### Surface Mount

881-S172-12	S172-12	G	12V	DC-1GHz	0.15W	30.80	28.92
881-S172-5	S172-5	G	5V	DC-1GHz	0.15W	31.02	29.06
† 881-S172D-12	S172D-12	G	12V	DC-1GHz	0.15W	35.47	33.39
† 881-S172D-26	S172D-26	G	26V	DC-1GHz	0.15W	35.47	33.39
881-S172D-5	S172D-5	G	5V	DC-1GHz	0.15W	34.69	32.24

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## RF180 SERIES HIGH ISOLATION LATCHING RELAYS

### Features:

- RF180 Series DPDT magnetic latching relays are designed to optimize isolation across contacts  
@4GHz Isolation = 30dB, Insertion Loss = 0.38dB, VSWR = 1.20:1

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Frequency	Contact Res.	Price Each	
						1	25
881-RF180-5	RF180-5	A	5V	DC-6GHz	0.15	48.89	46.41
881-RF180-12	RF180-12	A	12V	DC-6GHz	0.15	51.31	49.12

## RF100/103 SERIES HIGH REPEATABILITY CENTIGRID® RELAYS

### Features:

- RF100/103 Series DPDT high repeatability broadband relays are designed to provide improved RF signal repeatability over the frequency range.

\* High Sensitivity

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Frequency	Contact Res.	Price Each	
						1	25
881-RF100-5	RF100-5	B	5V	DC-4GHz	0.10	53.30	45.99
* 881-RF103-12	RF103-12	B	12V	DC-4GHz	0.10	51.49	45.27
* 881-RF103-5	RF103-5	B	5V	DC-4GHz	0.10	52.49	46.27

## RF300/303 SERIES HIGH REPEATABILITY TO-5 RELAYS

### Features:

- RF300/303 Series DPDT high repeatability broadband relays are designed to provide improved RF signal repeatability over the frequency range.

\* High Sensitivity

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Frequency	Contact Res.	Price Each	
						1	25
881-RF300-12	RF300-12	C	12V	DC-3GHz	0.15	45.61	39.73
881-RF300-5	RF300-5	C	5V	DC-3GHz	0.15	45.61	39.73
* 881-RF303-12	RF303-12	C	12V	DC-3GHz	0.15	54.85	48.68
* 881-RF303-5	RF303-5	C	5V	DC-3GHz	0.15	56.78	49.45

## RF311 SERIES HIGH REPEATABILITY, TO-5 RELAYS

### Features:

- The ultraminiature RF311 and RF331 relays are designed to provide improved RF signal repeatability over the frequency range

\* SPDT

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Frequency	Contact Res.	Price Each	
						1	25
881-RF311-5/G	RF311-5/G	B	5V	DC-8GHz	0.15	44.93	38.95
881-RF311-12/G	RF311-12/G	B	12V	DC-8GHz	0.15	54.22	47.00
881-RF311-26/G	RF311-26/G	B	26.5V	DC-8GHz	0.15	44.93	38.95

## RF312 SERIES HIGH REPEATABILITY 12GBPS SIGNAL INTEGRITY TO-5 RELAY

### Features:

- The RF312 offers monotonic insertion loss to 8GHz.
- DPDT

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Frequency	Contact Res.	Price Each	
						1	25
881-RF312-12/G	RF312-12/G	C	12V	DC-8GHz	0.15	72.36	62.78

## 412H/422H SERIES HI-TEMPERATURE, HI-PERFORMANCE TO-5 RELAYS

### Features:

- 412H/422H Series DPDT high-performance, high-temperature relays are designed for reliable operation in elevated ambient temperatures up to 200°C.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Frequency	Coil Res. (Ω)	Price Each	
						1	25
881-412H-12	412H-12	D	12V	DC-1GHz	390	61.57	58.73
881-412H-26	412H-26	D	26V	DC-1GHz	1560	61.57	58.73
881-412H-5	412H-5	D	5V	DC-1GHz	50	59.60	55.97
881-422H-12	422H-12	D	12V	DC-1GHz	500	92.47	88.42
881-422H-26	422H-26	D	26V	DC-1GHz	2000	92.47	88.42

## S114 SERIES DPDT CENTIGRID® SMT RF RELAYS

### Features:

- All welded construction
- High force/mass ratios

\* With internal diode

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Frequency	Coil Res. (Ω)	Price Each	
						1	25
881-S114-26	S114-26	E	26.5 V	1560	-	43.37	39.92
881-S114-5	S114-5	E	5 V	50	-	38.37	34.32
* 881-S114D-5	S114D-5	E	5 V	50	-	39.94	37.51

## S134 SERIES DPDT SENSITIVE CENTIGRID® SMT RF RELAY

### Features:

- All welded construction
- High force/mass ratios

\* High Sensitivity

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Frequency	Coil Res. (Ω)	Price Each	
						1	25
* 881-S134D-5	S134D-5	F	5 V	100	-	42.76	38.36

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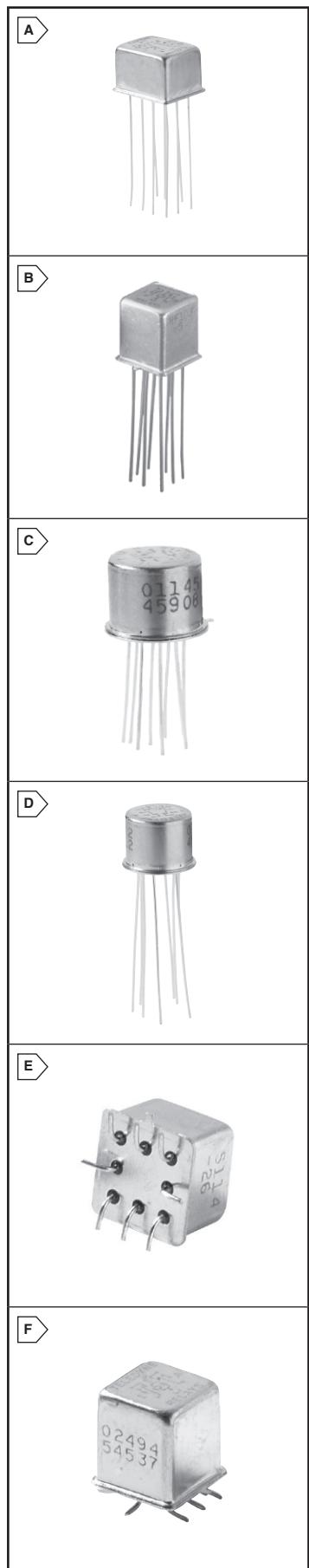
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1945



# TELEDYNE RF, General Purpose Centigrid & TO-5 Relays

**TELEDYNE  
RELAYS**  
A Teledyne Technologies Company

## 114 SERIES DPDT CENTIGRID® RF RELAYS

### Features:

- All welded construction
- High force/mass ratios
- ◆ With internal diode
- † With internal diode and polarity reversal protection

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Coil Res. (Ω)	Coil Current Range	Screening & Reliability Level	Price Each
							1 25
<b>T2R® Established Reliability</b>							
881-ER114-26A	ER114-26A	A	26.5V	1560	-	A	42.48
◆ 881-ER114D-5A	ER114D-5A	A	5V	50	-	A	37.25
Military Qualified							
◆ 881-J114D-26M	J114D-26M	A	26.5V	1560	-	M	56.98
							50.92

## 116C SERIES DPDT CENTIGRID® CMOS COMPATIBLE RF RELAYS

### Features:

- All welded construction
- High force/mass ratios
- Internal MOSFET driver, Zener diode gate protection, & diode coil suppression
- Military Qualified
- ※ M9 pad included

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Coil Res. (Ω)	Coil Current Range	Screening & Reliability Level	Price Each
							1 25
※ 881-J116CM9-5M	J116CM9-5M	B	5V	-	132.3-96.5 mAdc	M	75.37
							67.12

## 134 SERIES DPDT SENSITIVE RF RELAYS

### Features:

- All welded construction
- High force/mass ratios
- Internal diode
- Military Qualified
- ※ M4 pad included

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Coil Res. (Ω)	Coil Current Range	Screening & Reliability Level	Price Each
							1 25
881-J134D-12M	J134D-12M	C	12V	800	-	M	62.80
※ 881-J134DM4-26M	J134DM4-26M	C	26.5V	3200	-	M	43.91
							41.24

## 411 SERIES SPDT TO-5 RELAYS

### Features:

- All welded construction
- High force/mass ratios

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Coil Res. (Ω)	Coil Current Range	Screening & Reliability Level	Price Each
							1 25
881-J411-26WL	J411-26WL	D	26.5V	2000	-	L	69.03
							62.04

## 412 SERIES DPDT TO-5 RELAYS - T2R® ESTABLISHED RELIABILITY

### Features:

- All welded construction
- High force/mass ratios

\*\* With Y ground pin included

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Coil Res. (Ω)	Coil Current Range	Screening & Reliability Level	Price Each
							1 25
881-ER412-12A	ER412-12A	E	12V	390	-	A	43.60
881-ER412-26A	ER412-26A	E	26.5V	1560	-	A	43.60
881-ER412-5A	ER412-5A	E	5V	50	-	A	43.60
*** 881-ER412YM-26A/SQ	ER412YM-26A/SQ	E	26.5V	1560	-	A	48.60
							44.84

## 432 SERIES DPDT SENSITIVE TO-5 RELAYS

### Features:

- All welded construction
- High force/mass ratios

†† With internal transistor driver and coil transient suppression diode

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Coil Res. (Ω)	Coil Current Range	Screening & Reliability Level	Price Each
							1 25
<b>T2R® Established Reliability</b>							
881-ER432-12A	ER432-12A	F	12V	850	-	A	48.42
Military Qualified							
881-J432-12M	J432-12M	F	12V	850	-	M	68.18
†† 881-J432T-5L	J432T-5L	F	5V	100	43.5-59.3 mAdc	L	61.24
							54.89

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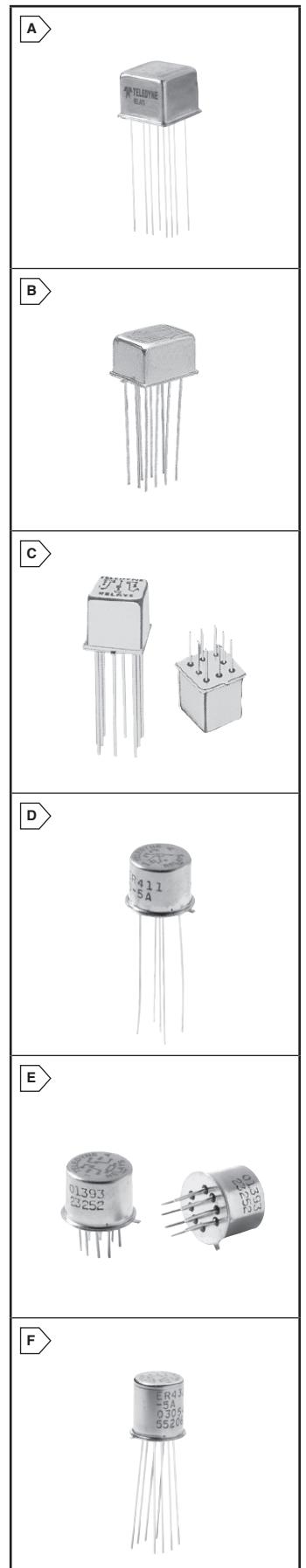
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# TELEDYNE RF and Microwave Coaxial Switches



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**TELEDYNE**  
RELAYS  
A Teledyne Technologies Company

## CCR SERIES - COMMERCIAL SWITCHES

- Models with indicator contacts, TTL drivers, and other options are available.

### CCR-33 SPDT Coaxial Switches

- Operate from DC-18GHz @ 18GHz Isolation = 60dB, Insertion Loss = 0.5dB, VSWR = 1.50:1.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Frequency	Type	Connector	Indicator Contacts	Features	Price Each
<b>Failsafe</b>									
881-CCR-33S1O	CCR-33S1O	A	28V Failsafe	DC-18GHz	SPDT	SMA	No	-----	137.48
881-CCR-33S1C	CCR-33S1C	A	28V Failsafe	DC-18GHz	SPDT	SMA	Yes	-----	171.02
881-CCR-33S2O	CCR-33S2O	A	15V Failsafe	DC-18GHz	SPDT	SMA	No	-----	133.33
881-CCR-33S3O	CCR-33S3O	A	12V Failsafe	DC-18GHz	SPDT	SMA	No	-----	161.37
881-CCR-33S3O-N	CCR-33S3O-N	A	12V Failsafe	DC-18GHz	SPDT	SMA	No	Narrow body	161.37
<b>Latching</b>									
881-CCR-33S6O	CCR-33S6O	A	28V Latching	DC-18GHz	SPDT	SMA	No	-----	133.58
881-CCR-33S6O-N	CCR-33S6O-N	A	28V Latching	DC-18GHz	SPDT	SMA	No	Narrow body	137.48
881-CCR-33S8O	CCR-33S8O	A	12V Latching	DC-18GHz	SPDT	SMA	No	-----	133.58
881-CCR-33S8C-T	CCR-33S8C-T	A	12V Latching	DC-18GHz	SPDT	SMA	Yes	TTL driver	218.88

### CCR-33M Series SPDT Coaxial Switches

- Operate from DC-3GHz @ 3GHz Isolation = 70dB, Insertion Loss = 0.3dB, VSWR = 1.30:1

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Frequency	Type	Connector	Indicator Contacts	Features	Price Each
881-CCR-33M1O	CCR-33M1O	A	28V Failsafe	DC-3GHz	SPDT	SMB	No	-----	148.62
881-CCR-33M8O	CCR-33M8O	A	12V Latching	DC-3GHz	SPDT	SMB	No	-----	178.27

### CCR-38 Series Multi-Throw Coaxial Switches

- Operate from DC-18GHz. @ 18GHz Isolation = 60dB, Insertion Loss = 0.5dB, VSWR = 1.50:1.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Frequency	Type	Connector	Indicator Contacts	Features	Price Each
881-CCR-38S14O	CCR-38S14O	B	28V N.O.	DC-18GHz	SP4T	SMA	No	-----	484.89
881-CCR-38S16O	CCR-38S16O	B	28V N.O.	DC-18GHz	SP6T	SMA	No	-----	572.61

### CCRT-33 Series SPDT Coaxial Switches with Internal Terminations

- Operate from DC-18GHz @ 18GHz Isolation = 60dB, Insertion Loss = 0.5dB, VSWR = 1.50:1.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Frequency	Type	Connector	Indicator Contacts	Features	Price Each
881-CCR-33S10	CCRT-33S10	C	28V Failsafe	DC-18GHz	SPDT	SMA	No	-----	455.17
881-CCR-33S6O	CCRT-33S6O	C	28V Latching	DC-18GHz	SPDT	SMA	No	-----	466.17

### CCS-37 Series Miniature Transfer Coaxial Switch

- Operate from DC-18GHz @ 18GHz Isolation = 60dB, Insertion Loss = 0.5dB, VSWR = 1.50:1.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Frequency	Type	Connector	Indicator Contacts	Features	Price Each
881-CCS-37S2C	CCS-37S2C	D	15V Failsafe	DC-18GHz	SPDT	SMA	Yes	-----	326.19

## CR SERIES - ELITE SWITCHES

- Models with indicator contacts, TTL drivers, and other options are available.

### CR-33 Series SPDT Failsafe/Latching Coaxial Switch

- Operate from DC-22GHz and offer an expanded temperature range @ 22GHz Isolation = 50dB, Insertion Loss = 0.6dB, VSWR = 1.60:1.

For quantities greater than listed, call for quote.

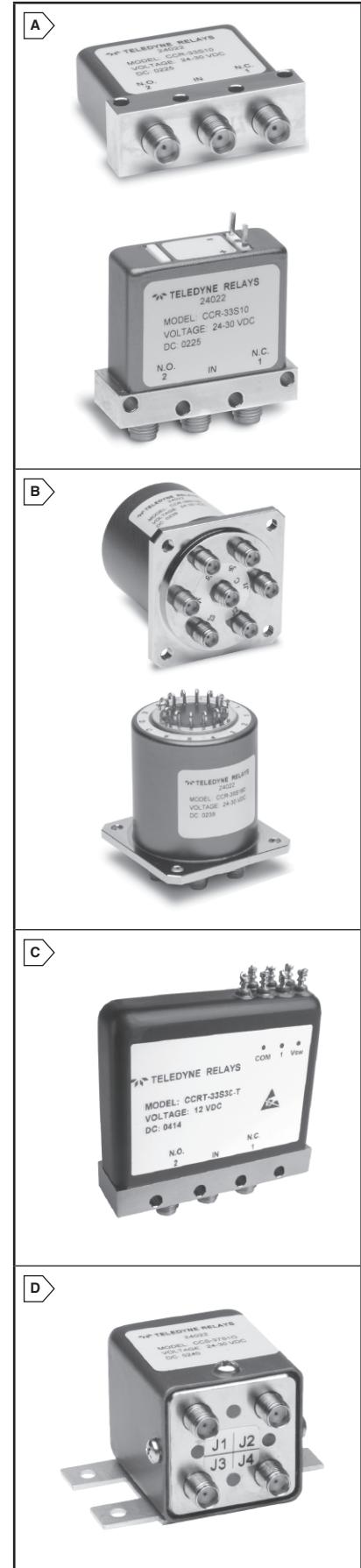
MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Frequency	Type	Connector	Indicator Contacts	Features	Price Each
881-CCR-33S10	CR-33S10	A	28V Failsafe	DC-22GHz	SPDT	SMA	No	-----	141.00

### CS-37 Series Miniature Transfer Coaxial Switch

- Operate from DC-18GHz @ 18GHz Isolation = 60dB, Insertion Loss = 0.5dB, VSWR = 1.50:1.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Coil Voltage	Frequency	Type	Connector	Indicator Contacts	Features	Price Each
881-CS-37S10	CS-37S10	D	28V Failsafe	DC-18GHz	SPDT	SMA	No	-----	291.18



# FUJITSU Signal Relays

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## A SERIES MINIATURE RELAYS

- Features:**
- 2 Poles - 1 to 2A (for signal switching)
  - Extremely low profile and light weight
  - UL, CSA recognized
  - High Reliability - bifurcated contacts
  - Plastic Sealed type
  - Contact Form: DPDT

- Height: 5mm
- Weight: approx. 1.2g
- Wide Operating range
- DIL through-hole terminals
- Contact Rating: .5A

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fujitsu Part No.	Fig.	Nominal Voltage (VDC)	Coil Resistance ( $\pm 10\%$ )	Nominal Power	Price Each			
						1	100	500	1000
817-A-3W-K	A-3W-K	A	3	64.3Ω	140mW	2.98	2.53	2.16	1.98
817-A-5W-K	A-5W-K	A	5	178Ω	140mW	2.98	2.53	2.16	1.98
817-A-12W-K	A-12W-K	A	12	1,028Ω	140mW	2.22	1.89	1.61	1.48
817-A-24W-K	A-24W-K	A	24	2,880Ω	200mW	3.13	2.66	2.27	2.08
817-A-48W-K	A-48W-K	A	48	7,680Ω	300mW	3.35	2.85	2.44	2.23

## FTR-B3 SERIES MINIATURE HORIZONTAL RELAYS

- Features:**

- 2-Contact 1A (for switching signals)
- Flat Type ultra miniature (SMT)
- Ultra slim and light weight
- High efficiency polar electromagnet structure
- Contact Form: DPDT
- Gold-plated silver alloy bifurcated contacts
- UL, CSA recognized
- Contact Rating: .3A

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fujitsu Part No.	Fig.	Terminal Type	Nominal Voltage (VDC)	Coil Resistance ( $\pm 10\%$ )	Nominal Power	Price Each			
							1	100	500	1000
817-FTR-B3GA003Z	FTR-B3GA003Z	B	Surface Mount	3	64.3Ω	140mW	3.75	3.19	2.73	2.50
817-FTR-B3GA4.5Z	FTR-B3GA4.5Z	B	Surface Mount	4.5	145Ω	140mW	3.75	3.19	2.73	2.50
817-FTR-B3GA012Z	FTR-B3GA012Z	B	Surface Mount	12	1,028Ω	140mW	3.75	3.19	2.73	2.50

## FTR-B4 SERIES ULTRA MINIATURE SLIM SIGNAL RELAYS

- Features:**

- High reliability bifurcated contacts
- Lower power consumption
- 10mm Max. height SMT
- Contact Form: DPDT
- Reduced mounting area
- Weight: Approx. 1.0g
- Conforms Bellcore and FCC part 68
- Contact Rating: 1A

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fujitsu Part No.	Fig.	Through-Hole	Nominal Voltage (VDC)	Coil Resistance ( $\pm 10\%$ )	Nominal Power	Price Each			
							1	100	500	1000
817-FTR-B4CA003Z	FTR-B4CA003Z	C	Through-Hole	3	64.3Ω	140mW	3.75	3.19	2.73	2.50
817-FTR-B4GA003Z	FTR-B4GA003Z	D	Surface Mount	3	64.3Ω	140mW	3.75	3.19	2.73	2.50
817-FTR-B4GA012Z	FTR-B4GA012Z	D	Surface Mount	12	1,028Ω	140mW	3.75	3.19	2.73	2.50
* 817-FTR-B4SA003Z	FTR-B4SA003Z	D	Surface Mount	3	64.3Ω	140mW	4.53	3.85	3.29	3.02
* 817-FTR-B4SA012Z	FTR-B4SA012Z	D	Surface Mount	12	1,028Ω	140mW	4.53	3.85	3.29	3.02
* 817-FTR-B4SA4.5Z	FTR-B4SA4.5Z	D	Surface Mount	4.5	145Ω	140mW	4.53	3.85	3.29	3.02

## FTR-C1 SERIES ULTRA MINIATURE RELAYS

- Features:**

- High reliability bifurcated contacts
- Lower power consumption
- Contact Form: DPDT
- Weight: Approx. 1.0g
- Surge Strength: 5000V
- Conforms to IEC 60950 / EN60950 / UL1950 / C22.2
- Contact Rating: 1A

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fujitsu Part No.	Fig.	Surface Mount	Nominal Voltage (VDC)	Coil Resistance ( $\pm 10\%$ )	Nominal Power	Price Each			
							1	100	500	1000
817-FTR-C1GA003G	FTR-C1GA003G	E	Surface Mount	3	32.1	280mW	3.80	3.23	2.75	2.52
817-FTR-C1GA4.5G	FTR-C1GA4.5G	E	Surface Mount	4.5	72.3	280mW	3.80	3.23	2.75	2.52
817-FTR-C1GA012G	FTR-C1GA012G	E	Surface Mount	12	514	280mW	3.80	3.23	2.75	2.52

## MZ SERIES MINIATURE RELAYS

- Features:**

- 1 Pole - 1 to 2A (for signal switching)
- Subminiature size
- Standard and high sensitivity types available
- DIL through-hole terminals
- Contact Form: SPDT
- Plastic sealed type
- High reliability - bifurcated contacts
- High reliability bifurcated contacts
- UL, CSA recognized
- Contact Rating: .5A

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fujitsu Part No.	Fig.	Nominal Voltage (VDC)	Coil Resistance ( $\pm 10\%$ )	Nominal Power	Price Each			
						1	100	500	1000
817-MZ-5HS-K	MZ-5HS-K	F	5	120Ω	200mW	2.35	2.00	1.71	1.57
817-MZ-12HS-K	MZ-12HS-K	F	12	700Ω	200mW	2.35	2.00	1.71	1.57
817-MZ-24HS-K	MZ-24HS-K	F	24	2,800Ω	200mW	2.65	2.26	1.93	1.77

## NA SERIES MINIATURE RELAYS

- Features:**

- 2 Poles - 1 to 2A (for signal switching)
- Slim type relay for high density mounting
- High sensitivity and low consumption power
- Maximum switching capacity - 4.2A 700VAC
- Contact Form: DPDT
- Plastic sealed type
- High reliability - bifurcated contacts
- DIL through-hole terminals
- Contact Rating: 5A

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fujitsu Part No.	Fig.	Nominal Voltage (VDC)	Coil Resistance ( $\pm 10\%$ )	Nominal Power	Price Each			
						1	100	500	1000
817-NA-3W-K	NA-3W-K	G	3	64.3Ω	140mW	3.33	2.83	2.42	2.22
817-NA-5W-K	NA-5W-K	G	5	178Ω	140mW	3.33	2.83	2.42	2.22
817-NA-12W-K	NA-12W-K	G	12	1,028Ω	140mW	3.43	2.91	2.49	2.28

## RY SERIES MINIATURE RELAYS

- Features:**

- 2 Poles - 1 to 2A (for signal switching)
- Ultra high sensitivity
- Wide operating temperature range
- Contact Form: DPDT
- Plastic sealed type
- UL, CSA recognized

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fujitsu Part No.	Fig.	Nominal Voltage (VDC)	Contact Rating	Coil Resistance ( $\pm 10\%$ )	Nominal Power	Price Each			
							1	100	500	1000
817-RY-12W-K	RY-12W-K	H	12	.5A	960Ω	150mW	2.80	2.38	2.04	1.87
817-RY-24W-K	RY-24W-K	H	24	.5A	2,880Ω	200mW	2.88	2.45	2.09	1.92
817-RY-12D-K	RY-12D-K	H	12	.3A	320Ω	450mW	3.40	2.89	2.47	2.27
817-RY-12WFZ-K	RY-12WFZ-K	H	12	.5A	280Ω	510mW	2.73	2.32	1.98	1.82

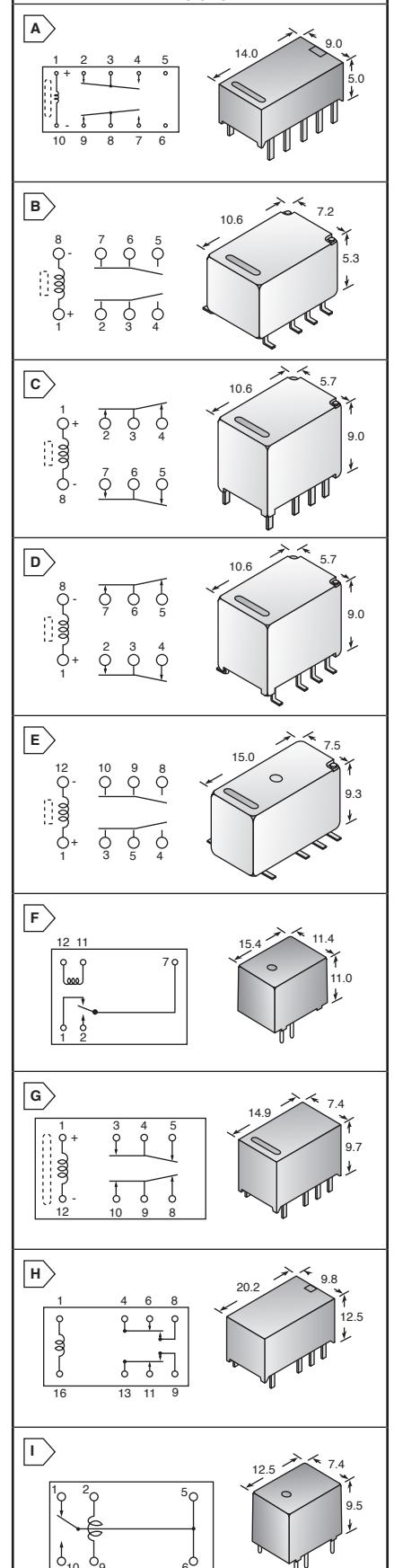
## SY SERIES MINIATURE RELAYS

- Features:**

- 1 Pole - 1A (for signal switching)
- Very small size and weight
- High sensitivity
- Contact Form: SPDT
- Wide operating temperature range
- DIL through-hole terminals
- Plastic sealed type
- Contact Rating: .5A

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fujitsu Part No.	Fig.	Nominal Voltage (VDC)	Coil Resistance ( $\pm 10\%$ )	Nominal Power	Price Each			
						1	100	500	1000
817-SY-5W-K	SY-5W-K	I	5	167Ω	150mW	2.58	2.19	1.87	1.72
817-SY-12W-K	SY-12W-K	I	12	960Ω	150mW	2.70	2.30	1.96	1.80
817-SY-6-K	SY-6-K	I	6	240Ω	150mW	2.00	1.70	1.45	1.33
817-SY-9W-K	SY-9W-K	I	9	540Ω	150mW	2.13	1.81	1.55	1.42

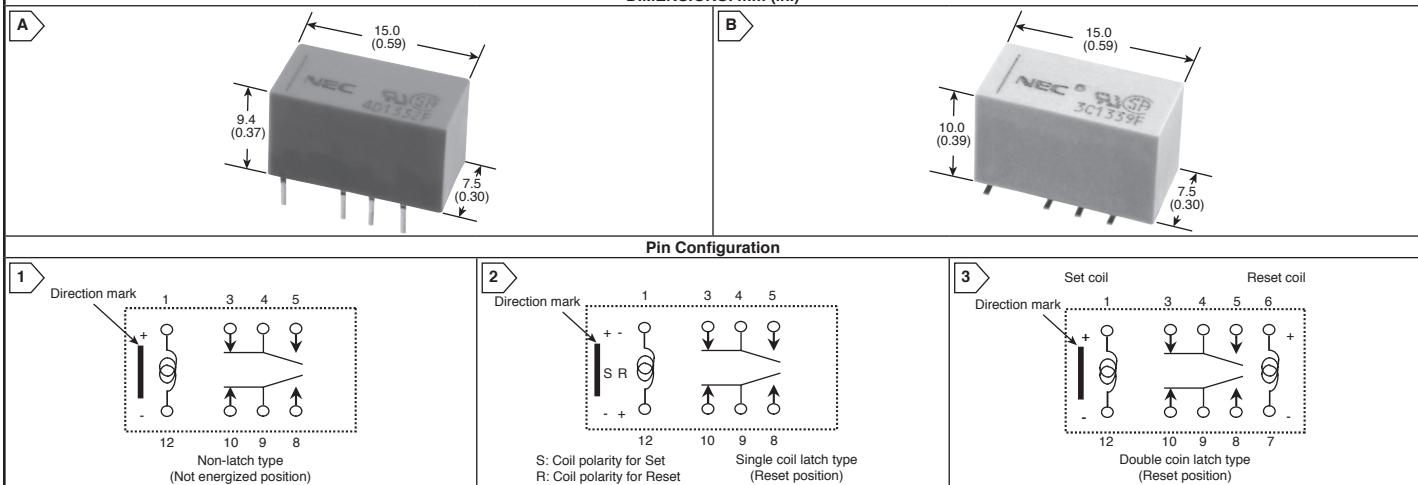


# KEMET Signal Relays

Electronic Components  
**KEMET**  
CHARGED:

RoHS Compliant This page of product is RoHS compliant.

DIMENSIONS: mm (in.)



## EC2/EE2 SERIES MINIATURE SIGNAL RELAYS

### Benefits:

- Low power consumption (< 200 mW)
- Compact and lightweight
- Low magnetic interference
- Tube or embossed tape and reel packaging
- Surface mount and through-hole options
- High Insulation (ND) type conforms to TUV EN60950 supplementary insulation class standards
- High Breakdown Voltage (NKK) type can withstand 1.5 kVAC at open contacts

### Applications:

- Electronic switching systems
- PBX
- Terminal equipment
- Telephone systems



MOUSER STOCK NO.	Kemet NEC-Tokin Part No.	Fig.	Latch Type	Coil Voltage	Power Consumption	Termination Style	For quantities greater than listed, call for quote.		
							1	10	50
<b>EC2 Series</b>									
80-EC2-12NU	EC2-12NU	A1	Non-Latching	12 V	140 mW	SMD/SMT	1.97	1.85	1.56
80-EC2-12SNU	EC2-12SNU	A2	Single Latching	12 V	100 mW	SMD/SMT	2.02	1.93	1.78
80-EC2-12TNU	EC2-12TNU	A3	Dual Latching	12 V	140 mW	SMD/SMT	2.18	2.09	1.92
80-EC2-24NU	EC2-24NU	A1	Non-Latching	24 V	200 mW	SMD/SMT	2.06	1.97	1.82
80-EC2-24SNU	EC2-24SNU	A2	Single Latching	24 V	140 mW	SMD/SMT	3.79	3.56	3.01
80-EC2-3NU	EC2-3NU	A1	Non-Latching	3 V	140 mW	SMD/SMT	1.73	1.62	1.37
80-EC2-3SNU	EC2-3SNU	A2	Single Latching	3 V	100 mW	SMD/SMT	2.52	2.41	2.22
80-EC2-3TNU	EC2-3TNU	A3	Dual Latching	3 V	140 mW	SMD/SMT	2.69	2.58	2.13
80-EC2-4.5NU	EC2-4.5NU	A1	Non-Latching	4.5 V	140 mW	SMD/SMT	1.82	1.71	1.45
80-EC2-4.5TNU	EC2-4.5TNU	A3	Dual Latching	4.5 V	140 mW	SMD/SMT	2.64	2.53	2.33
80-EC2-5NU	EC2-5NU	A1	Non-Latching	5 V	140 mW	Through Hole	1.63	1.53	1.30
80-EC2-5SNU	EC2-5SNU	A2	Single Latching	5 V	100 mW	SMD/SMT	2.64	2.48	2.09
80-EC2-5TNU	EC2-5TNU	A3	Dual Latching	5 V	140 mW	SMD/SMT	2.76	2.64	2.44
<b>EE2 Series</b>									
80-EE2-12NU	EE2-12NU	B1	Non-Latching	12 V	140 mW	SMD/SMT	1.90	1.78	1.51
80-EE2-12NU-L	EE2-12NU-L	B1	Non-Latching	12 V	140 mW	SMD/SMT	2.04	1.71	1.62
80-EE2-12NUH-L	EE2-12NUH-L	B1	Non-Latching	12 V	140 mW	SMD/SMT	2.04	1.71	1.62
80-EE2-12SNU	EE2-12SNU	B2	Single Latching	12 V	100 mW	SMD/SMT	1.94	1.83	1.54
80-EE2-12SNU-L	EE2-12SNU-L	B2	Single Latching	12 V	100 mW	SMD/SMT	2.24	1.87	1.78
80-EE2-12SNUH-L	EE2-12SNUH-L	B2	Single Latching	12 V	100 mW	SMD/SMT	2.24	1.87	1.78
80-EE2-12TNU	EE2-12TNU	B3	Dual Latching	12 V	140 mW	SMD/SMT	2.90	2.78	2.56
80-EE2-12TNU-L	EE2-12TNU-L	B3	Dual Latching	12 V	140 mW	SMD/SMT	2.77	2.31	2.19
80-EE2-12TNUH-L	EE2-12TNUH-L	B3	Dual Latching	12 V	140 mW	SMD/SMT	2.77	2.31	2.19
80-EE2-24NU	EE2-24NU	B1	Non-Latching	24 V	200 mW	SMD/SMT	1.97	1.85	1.56
80-EE2-24NU-L	EE2-24NU-L	B1	Non-Latching	24 V	200 mW	SMD/SMT	2.49	2.08	1.98
80-EE2-24NUH-L	EE2-24NUH-L	B1	Non-Latching	24 V	200 mW	SMD/SMT	2.49	2.08	1.98
80-EE2-24SNU	EE2-24SNU	B2	Single Latching	24 V	100 mW	SMD/SMT	3.82	3.58	3.03
80-EE2-24SNU-L	EE2-24SNU-L	B2	Single Latching	24 V	100 mW	SMD/SMT	4.01	3.34	3.17
80-EE2-24SNUH-L	EE2-24SNUH-L	B2	Single Latching	24 V	100 mW	SMD/SMT	4.01	3.34	3.17
80-EE2-3NU-L	EE2-3NU-L	B1	Non-Latching	3 V	140 mW	SMD/SMT	2.37	1.98	1.89
80-EE2-3NUH-L	EE2-3NUH-L	B1	Non-Latching	3 V	140 mW	SMD/SMT	2.37	1.98	1.89
80-EE2-3SNU-L	EE2-3SNU-L	B2	Single Latching	3 V	100 mW	SMD/SMT	2.90	2.42	2.29
80-EE2-3SNUH-L	EE2-3SNUH-L	B2	Single Latching	3 V	100 mW	SMD/SMT	2.90	2.42	2.29
80-EE2-3TNU-L	EE2-3TNU-L	B3	Dual Latching	3 V	140 mW	SMD/SMT	2.67	2.23	2.11
80-EE2-3TNUH-L	EE2-3TNUH-L	B3	Dual Latching	3 V	140 mW	SMD/SMT	2.67	2.23	2.11
80-EE2-4.5NU	EE2-4.5NU	B1	Non-Latching	4.5 V	140 mW	SMD/SMT	2.59	2.43	2.06
80-EE2-4.5NU-L	EE2-4.5NU-L	B1	Non-Latching	4.5 V	140 mW	SMD/SMT	2.65	2.21	2.09
80-EE2-4.5NUH-L	EE2-4.5NUH-L	B1	Non-Latching	4.5 V	140 mW	SMD/SMT	2.65	2.21	2.09
80-EE2-4.5TNU	EE2-4.5TNU	B2	Dual Latching	4.5 V	140 mW	SMD/SMT	2.64	2.48	2.09
80-EE2-4.5TNU-L	EE2-4.5TNU-L	B2	Dual Latching	4.5 V	140 mW	SMD/SMT	2.90	2.42	2.29
80-EE2-4.5TNUH-L	EE2-4.5TNUH-L	B2	Dual Latching	4.5 V	140 mW	SMD/SMT	2.90	2.42	2.29
80-EE2-5NU	EE2-5NU	B1	Non-Latching	5 V	140 mW	SMD/SMT	1.70	1.60	1.35
80-EE2-5NU-L	EE2-5NU-L	B1	Non-Latching	5 V	140 mW	SMD/SMT	1.81	1.52	1.44
80-EE2-5NUH-L	EE2-5NUH-L	B1	Non-Latching	5 V	140 mW	SMD/SMT	1.81	1.52	1.44
80-EE2-5SNU	EE2-5SNU	B2	Single Latching	5 V	100 mW	SMD/SMT	2.42	2.28	1.92
80-EE2-5SNU-L	EE2-5SNU-L	B2	Single Latching	5 V	100 mW	SMD/SMT	2.60	2.17	2.05
80-EE2-5SNUH-L	EE2-5SNUH-L	B2	Single Latching	5 V	100 mW	SMD/SMT	2.60	2.17	2.05
80-EE2-5TNU	EE2-5TNU	B3	Dual Latching	5 V	140 mW	SMD/SMT	2.66	2.55	2.35
80-EE2-5TNU-L	EE2-5TNU-L	B3	Dual Latching	5 V	140 mW	SMD/SMT	2.62	2.19	2.07
80-EE2-5TNUH-L	EE2-5TNUH-L	B3	Dual Latching	5 V	140 mW	SMD/SMT	2.62	2.19	2.07

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# OMRON Low Signal Relays

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OMRON

## G5V-1 & G5V-13 SERIES: 1A SPDT SMALL LOW SIGNAL RELAYS

### Specifications:

- Contact resistance: 100mΩ max.
- Contact material: Ag (Au clad)
- Power consumption: 150mW
- \* 2% pickup voltage

### Features:

- Ultra-miniature, highly sensitive relay for signal circuits
- High-sensitivity: 150mW nominal power consumption
- Wide switching power of 1mA to 1A
- Conforms to FCC part 68 requirements for coil to contacts

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Rated Current (mA)	Coil Resist. (Ω)	Coil Voltage (VDC)	Price Each			
						1	25	50	100
<b>Single Contact - Minimum Permissible Load DC5V, 1mA</b>									
653-G5V-1-DC3	G5V-1-DC3	A1	50.0	60.0	3	2.05	1.71	1.63	1.54
653-G5V-1-DC5	G5V-1-DC5	A1	30.0	166.7	5	2.05	1.71	1.63	1.54
653-G5V-1-DC6	G5V-1-DC6	A1	25.0	240.0	6	2.05	1.71	1.63	1.54
653-G5V-1-DC9	G5V-1-DC9	A1	16.7	540.0	9	2.05	1.71	1.63	1.54
653-G5V-1-DC12	G5V-1-DC12	A1	12.5	960.0	12	2.05	1.71	1.63	1.54
653-G5V-1-DC24	G5V-1-DC24	A1	6.3	3840.0	24	2.40	2.00	1.90	1.80
* 653-G5V-1-2DC5	G5V-1-2 DC5	A1	30.0	166.7	5	2.26	1.88	1.79	1.69
* 653-G5V-1-2DC9	G5V-1-2 DC9	A1	16.7	540.0	9	2.46	2.05	1.95	1.84
* 653-G5V-1-2DC12	G5V-1-2 DC12	A1	12.5	960.0	12	2.63	2.19	2.08	1.97
<b>Double Contact - Minimum Permissible Load DC100mV, 100µA</b>									
653-G5V-13DC3	G5V-13DC3	A1	50.0	60.0	3	2.41	2.01	1.91	1.81
653-G5V-13DC5	G5V-13DC5	A1	30.0	167.0	5	2.41	2.01	1.91	1.80
653-G5V-13-DC12	G5V-13-DC12	A1	12.5	960.0	12	2.41	2.01	1.91	1.80
653-G5V-13-DC24	G5V-13-DC24	A1	3.25	3840.0	24	2.41	2.01	1.91	1.80

## G5V-2 SERIES: 2A DPDT GENERAL USAGE LOW SIGNAL RELAYS

### Specifications:

- Contact resistance: 50mΩ max.
- Power consumption: Standard type 500mW High-sensitivity type 360mW Ultra-sensitive type 150mW

### Features:

- Miniature relay for signal circuits
- Suitable for handling low signals in computer peripherals, telecommunications and security equipment
- Capable of switching loads 10µA to 2A

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Rated Current (mA)	Coil Resist. (Ω)	Coil Voltage (VDC)	Price Each			
						1	25	50	100
<b>Standard Type</b>									
653-G5V-2-DC3	G5V-2-DC3	B2	166.70	18.0	3	2.97	2.48	2.35	2.23
653-G5V-2-DC5	G5V-2-DC5	B2	100.00	50.0	5	2.97	2.48	2.35	2.23
653-G5V-2-DC6	G5V-2-DC6	B2	83.30	72.0	6	2.97	2.48	2.35	2.23
653-G5V-2-DC9	G5V-2-DC9	B2	55.60	162.0	9	2.97	2.48	2.35	2.23
653-G5V-2-DC12	G5V-2-DC12	B2	41.70	288.0	12	2.97	2.48	2.35	2.23
653-G5V-2-DC24	G5V-2-DC24	B2	20.80	1152.0	24	2.97	2.48	2.35	2.23
653-G5V-2-DC48	G5V-2-DC48	B2	12.00	4000.0	48	3.51	2.93	2.78	2.63
<b>High-Sensitivity Type</b>									
653-G5V-2-H-DC5	G5V-2-H-DC5	B2	72.00	70.0	5	3.23	2.70	2.56	2.42
653-G5V-2-H-DC9	G5V-2-H-DC9	B2	40.00	225.0	9	3.19	2.66	2.52	2.39
653-G5V-2-H-DC12	G5V-2-H-DC12	B2	30.00	400.0	12	3.19	2.66	2.52	2.39
653-G5V-2-H-DC24	G5V-2-H-DC24	B2	15.00	1600.0	24	3.19	2.66	2.52	2.39
<b>Ultra-Sensitive Type</b>									
653-G5V-2-H1-DC5	G5V-2-H1-DC5	B2	30.00	166.7	5	3.28	2.73	2.59	2.46
653-G5V-2-H1-DC9	G5V-2-H1-DC9	B2	16.70	540.0	9	3.28	2.73	2.59	2.46
653-G5V-2-H1-DC12	G5V-2-H1-DC12	B2	12.50	960.0	12	3.28	2.73	2.59	2.46
653-G5V-2-H1-DC24	G5V-2-H1-DC24	B2	8.30	2880.0	24	3.28	2.73	2.59	2.46
653-G5V-2-H1-DC48	G5V-2-H1-DC48	B2	6.25	7680.0	48	3.92	3.27	3.11	2.94

## G6A SERIES: 3A DPDT LOW SIGNAL RELAYS

### Specifications:

- Contact material: G6A-234P AgPd (Au clad) G6A-274P Ag (Au clad)
- Max. resistive switching capacity: 125VAC / 60W
- Minimum permissible load: 10µA @ 10mVDC

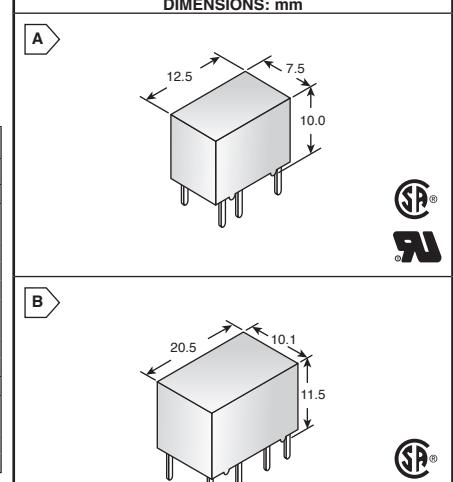
### Features:

- Unique moving magnet armature (Moving Loop System) reduces relay size, magnetic interference, and contact bounce time
- Due to low magnetic leakage, units can be mounted side by side
- Fully sealed construction

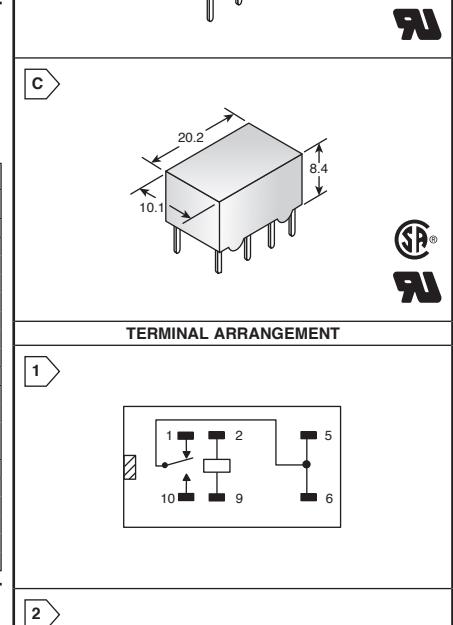
\* BABT approved

For quantities greater than listed, call for quote.

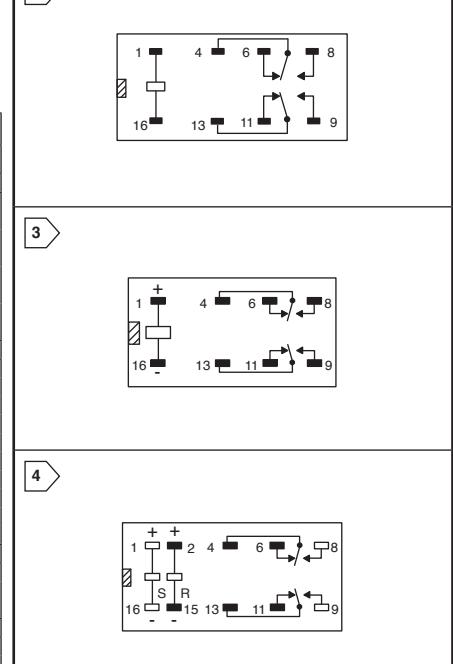
MOUSER STOCK NO.	Omron Part No.	Fig.	Type	Rated Current (mA)	Coil Resist. (Ω)	Coil Voltage (VDC)	Price Each			
							1	25	50	100
<b>Non-Latching Coil, Rated Load 0.3A @ 125VAC/1A @ 30VDC</b>										
653-G6A-234P-DC3	G6A-234P-ST-US-DC3	C3	Standard	66.7	45.0	3	4.77	4.05	3.64	3.21
* 653-G6A-234PBS-DC5	G6A-234P-BS-DC5	C3	Standard	40.0	125.0	5	8.79	7.32	6.95	6.58
653-G6A-234P-DC5	G6A-234P-ST-US-DC5	C3	Standard	40.0	125.0	5	6.08	5.06	4.81	4.55
653-G6A-234P-DC12	G6A-234P-ST-US-DC12	C3	Standard	16.7	720.0	12	6.08	5.06	4.81	4.55
653-G6A-234P-DC24	G6A-234P-ST-US-DC24	C3	Standard	8.3	2880.0	24	6.08	5.06	4.81	4.55
653-G6A-234P-DC48	G6A-234P-ST-US-DC48	C3	Standard	4.9	9750.0	48	6.61	5.51	5.23	4.95
653-G6A-234P-ST-DC5	G6A-234P-ST-US-DC5	C3	High-Sensitivity	30.0	167.0	5	6.15	5.13	4.87	4.60
653-G6A-234P-ST40	G6A-234P-ST40-US-DC12	C3	Low-Sensitivity	133.3	22.5	12	5.50	4.58	4.35	4.12
<b>Non-Latching Coil, Rated Load 0.5A @ 125VAC/2A @ 30VDC</b>										
653-G6A-274P-DC5	G6A-274P-ST-US-DC5	C3	Standard	40.0	125.0	5	5.79	4.83	4.58	4.34
653-G6A-274P-DC6	G6A-274P-ST-US-DC6	C3	Standard	33.3	180.0	6	5.79	4.83	4.58	4.34
653-G6A-274P-DC12	G6A-274P-ST-US-DC12	C3	Standard	16.7	720.0	12	5.43	4.52	4.29	4.06
653-G6A-274P-DC24	G6A-274P-ST-US-DC24	C3	Standard	8.3	2880.0	24	5.43	4.52	4.29	4.06
653-G6A-274P-DC48	G6A-274P-ST-US-DC48	C3	Standard	4.9	9750.0	48	6.61	5.51	5.23	4.95
653-G6A-274P40-DC5	G6A-274P-ST40-US-DC5	C3	Low-Sensitivity	80.0	62.5	5	5.09	4.24	4.02	3.81
653-G6A-274P40-DC9	G6A-274P-ST40-US-DC9	C3	Low-Sensitivity	44.3	203.0	9	5.50	4.58	4.35	4.12
653-G6A-274P40-DC12	G6A-274P-ST40-US-DC12	C3	Low-Sensitivity	33.3	360.0	12	5.09	4.24	4.02	3.81
653-G6A-274P40-DC24	G6A-274P-ST40-US-DC24	C3	Low-Sensitivity	16.7	1440.0	24	5.52	4.60	4.37	4.14
653-G6A-274P40-DC48	G6A-274P-ST40-US-DC48	C3	Low-Sensitivity	8.3	5760.0	48	6.31	5.26	4.99	4.73
<b>Latching Coil, Rated Load 0.3A @ 125VAC/1A @ 30VDC</b>										
653-G6AK-234P-DC5	G6AK-234P-ST-US-DC5	C4	Standard	36.0	139.0	5	8.05	6.71	6.37	6.03
653-G6AK-234P-DC12	G6AK-234P-ST-US-DC12	C4	Standard	15.0	800.0	12	8.05	6.71	6.37	6.03
653-G6AK-234P-DC24	G6AK-234P-ST-US-DC24	C4	Standard	7.5	3200.0	24	8.05	6.71	6.37	6.03
<b>Latching Coil, Rated Load 0.5A @ 125VAC/2A @ 30VDC</b>										
653-G6AK-274P-DC5	G6AK-274P-ST-US-DC5	C4	Standard	36.0	139.0	5	8.05	6.71	6.37	6.03
653-G6AK-274P-DC12	G6AK-274P-ST-US-DC12	C4	Standard	15.0	800.0	12	8.05	6.71	6.37	6.03
653-G6AK-274P-DC24	G6AK-274P-ST-US-DC24	C4	Standard	7.5	3200.0	24	8.05	6.71	6.37	6.03



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# OMRON Low Signal Relays

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OMRON

## G6E SERIES: 3A SPDT LOW SIGNAL RELAYS

### Specifications:

- Rated load: 0.40A @ 125VAC / 2A @ 30VDC
- Contact material: Ag (Au clad)
- Contact resistance: 50mΩ Max.
- Power consumption: Standard 200mW  
Low-sensitivity 400mW
- Terminals: PCB straight
- Standoffs: 0.64mm

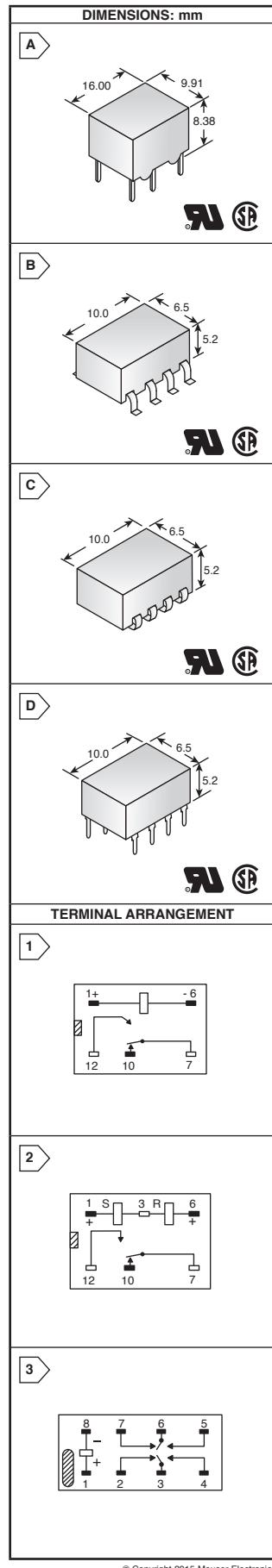
\* Standoffs: 0.3mm

### Features:

- Subminiature, sensitive signal relays
- High sensitivity with pick-up coil power of 98mW
- Surge withstand voltage meets FCC Part 68 requirements.
- Unique moving loop armature reduces relay size, magnetic interference, and contact bounce time.
- Bifurcated crossbar contact assures high reliability.
- Fully sealed construction

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Rated Current (mA)	Coil Resistance (Ω)	Coil Voltage (VDC)	Price Each			
						1	25	50	100
<b>Standard</b>									
653-G6E-134P-USDC5	G6E-134P-US DC5	A1	40.0	125	5	3.04	2.95	2.90	2.85
<b>Standard, Non-Latching Coil</b>									
653-G6E-134P-STUSDC3	G6E-134P-ST-US-DC3	A1	66.7	45	3	5.06	4.62	4.41	4.21
653-G6E-134P-DC5	G6E-134P-ST-US-DC5	A1	40.0	125	5	5.40	4.86	4.44	4.00
653-G6E-134PSTUSDC6	G6E-134P-ST-US-DC6	A1	33.3	180	6	10.21	9.20	8.36	7.65
653-G6E-134P-DC9	G6E-134P-ST-US-DC9	A1	22.2	405	9	4.79	4.72	4.44	3.78
653-G6E-134P-DC12	G6E-134P-ST-US-DC12	A1	16.7	720	12	4.17	3.90	3.74	3.57
653-G6E-134P-DC24	G6E-134P-ST-US-DC24	A1	8.3	2880	24	4.91	4.59	4.38	4.00
<b>Low-Sensitivity, Non-Latching Coil</b>									
653-G6E-134PL-DC5	G6E-134P-L-ST-US-DC5	A1	79.4	63	5	8.65	7.78	6.90	6.22
653-G6E-134PL-DC12	G6E-134P-L-ST-US-DC12	A1	33.3	360	12	5.34	4.80	4.26	3.84
653-G6E-134PL-DC24	G6E-134P-L-ST-US-DC24	A1	16.7	1140	24	8.01	7.20	6.39	5.76
<b>Standard, Latching Single Coil</b>									
653-G6EU134PSTUSDC12	G6EU-134P-ST-US-DC12	A2	16.7	720	12	9.89	8.91	8.09	7.42
<b>Standard, Latching Dual Coil</b>									
653-G6EK-134P-DC5	G6EK-134P-ST-US-DC5	A2	40.0	125	5	7.23	6.50	5.78	5.20
653-G6EK-134P-DC12	G6EK-134P-ST-US-DC12	A2	16.7	720	12	7.23	6.50	5.78	5.20
653-G6EK-134P-DC24	G6EK-134P-ST-US-DC24	A2	8.3	2880	24	7.48	6.74	5.99	5.09



## G6K SERIES: 1A DPDT ULTRA-SMALL LOW SIGNAL RELAYS

### Specifications:

- Rated load: 0.3A @ 125VA / 1A @ 30VDC
- Contact material: Ag (Au clad)
- Max. resistive switching capacity: 37.5VA / 30W
- Minimum permissible load: 10µA @ 10mVDC

\* Tape and reel packaging; Full reel size is 1800

### Features:

- Compact fourth generation design offers excellent board space savings
- "-V" models meet 2.5kV Bellcore surge requirements
- Conforms to FCC Part 68

For quantities greater than listed, call for quote.

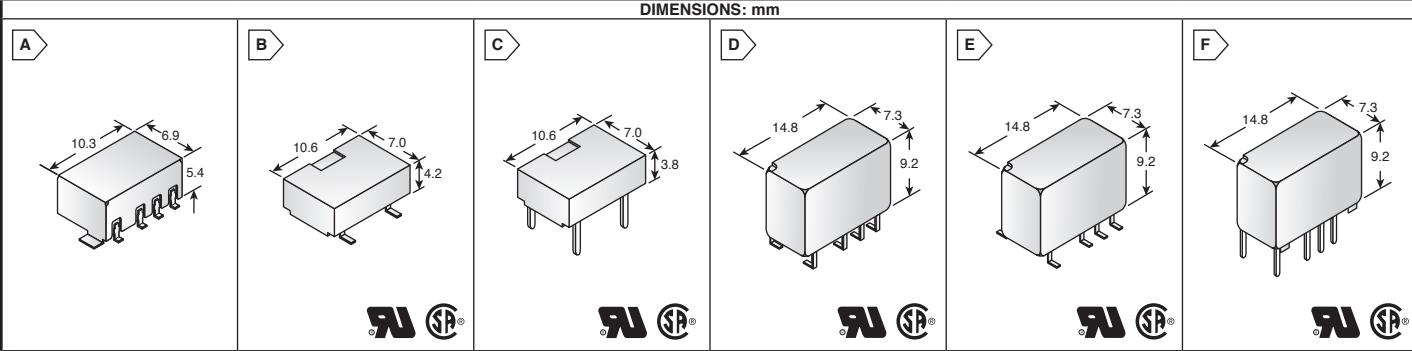
MOUSER STOCK NO.	Omron Part No.	Fig.	Rated Current (mA)	Coil Resistance (Ω)	Coil Voltage (VDC)	Price Each			
						1	25	50	100
<b>SMT Gull-Wing, Non-Latching, 2.5mm Coil-Contact Terminal Spacing</b>									
653-G6K-2F-DC3	G6K-2F-DC3	B3	33.0	91	3	4.23	3.81	3.54	3.39
653-G6K-2F-DC4.5	G6K-2F-DC4.5	B3	23.2	194	4.5	4.42	3.68	3.50	3.31
653-G6K-2F-DC5	G6K-2F-DC5	B3	21.1	237	5	4.42	3.68	3.50	3.31
653-G6K-2F-DC12	G6K-2F-DC12	B3	9.1	1315	12	4.42	3.68	3.50	3.31
* 653-G6K-2F-TRDC12	G6K-2F-TRDC12	B3	9.1	1315	12	4.42	3.68	3.50	3.31
653-G6K-2F-DC24	G6K-2F-DC24	B3	4.6	5220	24	4.42	3.68	3.50	3.31
<b>SMT Gull-Wing, Non-Latching, 3.2mm Coil-Contact Terminal Spacing</b>									
653-G6K-2F-Y-DC3	G6K-2F-Y-DC3	B3	33.0	91	3	4.23	3.81	3.54	3.39
653-G6K-2F-Y-DC4.5	G6K-2F-Y-DC4.5	B3	23.2	194	4.5	4.23	3.81	3.54	3.39
653-G6K-2F-Y-DC5	G6K-2F-Y-DC5	B3	21.1	237	5	4.23	3.81	3.54	3.39
* 653-G6K-2F-Y-TRDC5	G6K-2F-Y-TRDC5	B3	21.1	237	5	4.23	3.81	3.54	3.39
653-G6K-2F-Y-DC12	G6K-2F-Y-DC12	B3	9.1	1315	12	4.23	3.81	3.54	3.39
* 653-G6K-2F-Y-TRDC12	G6K-2F-Y-TRDC12	B3	9.1	1315	12	4.23	3.81	3.54	3.39
653-G6K-2F-Y-DC24	G6K-2F-Y-DC24	B3	4.6	5220	24	4.23	3.81	3.54	3.39
<b>SMT Inside "L", Non-Latching, 2.54mm Coil-Contact Terminal Spacing</b>									
653-G6K-2G-DC5	G6K-2G-DC5	C3	21.1	237	5	4.23	3.81	3.54	3.39
* 653-G6K-2G-TRDC5	G6K-2G-TRDC5	C3	21.1	237	5	4.23	3.81	3.54	3.39
653-G6K-2G-DC12	G6K-2G-DC12	C3	9.1	1315	12	4.23	3.81	3.54	3.39
* 653-G6K-2G-TRDC12	G6K-2G-TRDC12	C3	9.1	1315	12	4.23	3.81	3.54	3.39
<b>SMT Inside "L", Non-Latching, 3.2mm Coil-Contact Terminal Spacing</b>									
653-G6K-2G-Y-DC3	G6K-2G-Y-DC3	C3	33.0	91	3	4.23	3.81	3.54	3.39
653-G6K-2G-Y-DC4.5	G6K-2G-Y-DC4.5	C3	23.2	194	4.5	4.23	3.80	3.54	3.39
653-G6K-2G-Y-DC5	G6K-2G-Y-DC5	C3	21.1	237	5	4.23	3.81	3.54	3.39
653-G6K-2G-Y-DC12	G6K-2G-Y-DC12	C3	9.1	1315	12	4.23	3.81	3.54	3.39
653-G6K-2G-Y-DC24	G6K-2G-Y-DC24	C3	4.6	5220	24	4.23	3.81	3.54	3.39
<b>PCB Thru-Hole, Non-Latching, 2.5mm Coil-Contact Terminal Spacing</b>									
653-G6K-2P-DC4.5	G6K-2P-DC4.5	D3	23.2	194	4.5	4.23	3.81	3.54	3.39
653-G6K-2P-DC5	G6K-2P-DC5	D3	21.1	237	5	4.23	3.81	3.54	3.39
653-G6K-2P-DC12	G6K-2P-DC12	D3	9.1	1315	12	4.23	3.81	3.54	3.39
653-G6K-2P-DC24	G6K-2P-DC24	D3	4.6	5220	24	4.23	3.81	3.54	3.39
<b>PCB Thru-Hole, Non-Latching, 3.2mm Coil-Contact Terminal Spacing</b>									
653-G6K-2P-Y-DC3	G6K-2P-Y-DC3	D3	33.0	91	3	4.23	3.81	3.54	3.39
653-G6K-2P-Y-DC4.5	G6K-2P-Y-DC4.5	D3	23.2	194	4.5	4.23	3.81	3.54	3.39
653-G6K-2P-Y-DC5	G6K-2P-Y-DC5	D3	21.1	237	5	4.23	3.81	3.54	3.39
653-G6K-2P-Y-DC12	G6K-2P-Y-DC12	D3	9.1	1315	12	4.73	4.25	3.95	3.79
653-G6K-2P-Y-DC24	G6K-2P-Y-DC24	D3	4.6	5220	24	4.23	3.81	3.54	3.39
<b>SMT Gull-Wing, Single Coil Latching, 3.2mm Coil-Contact Terminal Spacing</b>									
653-G6KU-2F-YDC3	G6KU-2F-YDC3	B3	33.0	91	3	4.45	4.00	3.72	3.57
653-G6KU-2F-Y-DC4.5	G6KU-2F-Y-DC4.5	B3	23.2	194	4.5	4.45	4.00	3.72	3.57
653-G6KU-2F-YDC5	G6KU-2F-YDC5	B3	21.1	237	5	5.56	5.00	4.65	4.45
<b>SMT Inside "L", Single Coil Latching, 3.2mm Coil-Contact Terminal Spacing</b>									
653-G6KU-2G-Y-DC5	G6KU-2G-Y-DC5	C3	21.1	237	5	4.45	4.00	3.72	3.57
<b>PCB Thru-Hole, Single Coil Latching, 3.2mm Coil-Contact Terminal Spacing</b>									
653-G6KU-2P-YDC5	G6KU-2P-YDC5	D3	21.1	237	5	4.24	3.81	3.55	3.40

# OMRON Low Signal Relays

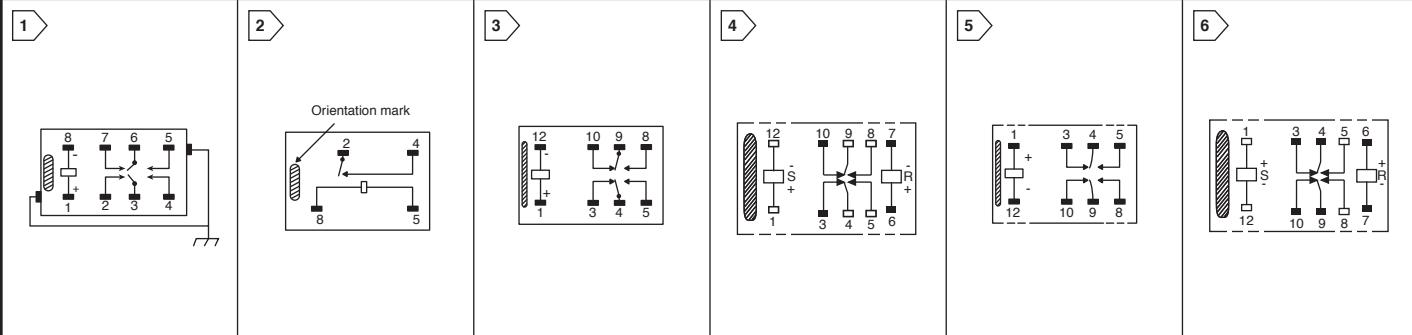
RoHS Compliant This page of product is RoHS compliant.

OMRON

DIMENSIONS: mm



## TERMINAL ARRANGEMENT



## G6K-RF SERIES: 1A DPDT COMPACT HIGH-FREQUENCY RELAYS

### Specifications:

- Insertion loss: 0.2dB max. @ 1GHz
- 0.6dB max. @ 3GHz
- Max. transmission capacity: 3W
- Rated power consumption: 100mW

### Features:

- Low power consumption
- Good isolation characteristics

### Applications:

- Wireless infrastructure equipment
- Filter and duplex switching
- Antenna switching
- Amplifiers

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Rated Current (mA)	Coil Resist. (Ω)	Coil Voltage (VDC)	Price Each			
					1	10	25	50

### Non-Latching with Standard Ground Terminals, 1GHz

653-G6K-2F-RF-DC3	A1	33.0	91	3	22.04	19.58	18.60	17.62
653-G6K-2F-RF-DC4.5	A1	23.2	194	4.5	22.04	19.58	18.60	17.62
653-G6K-2F-RF-DC5	A1	21.1	237	5	17.48	17.00	16.72	15.07
653-G6K-2F-RF-DC12	A1	9.1	1315	12	22.04	19.58	18.60	17.62

### Non-Latching with Space-Saving Ground Terminals, 1GHz

653-G6K2FRFSDC3	A1	33.0	91	3	17.19	15.28	14.51	13.75
653-G6K2FRFSDC4.5	A1	23.2	194	4.5	17.19	15.28	14.51	13.75
653-G6K2FRFSDC5	A1	21.1	237	5	17.19	15.28	14.51	13.75
653-G6K2FRFSDC12	A1	9.1	1315	12	17.19	15.28	14.51	13.75
653-G6K2FRFSDC24	A1	4.6	5220	24	18.37	16.33	15.51	14.69

### Non-Latching with Space-Saving Ground Terminals, 3GHz

653-G6K-2F-RF-TDC3	A1	33.0	91	3	24.28	21.60	20.47	19.44
653-G6K-2F-RF-TDC4.5	A1	23.2	194	4.5	24.28	21.60	20.47	19.44
653-G6K-2F-RF-TDC5	A1	21.1	237	5	24.28	21.60	20.47	19.44
653-G6K-2F-RF-TDC12	A1	9.1	1315	12	22.04	20.88	19.83	18.68

## G6L SERIES: 1A SPST-NO LOW PROFILE LOW SIGNAL RELAYS

### Specifications:

- Contact resistance: 100mΩ max.
- Max. switching current: 1A
- Power consumption: 180mW

### Features:

- Extremely thin and flat relay, one of the thinnest relays in the world
- Uses 20% less mounting area and 67% less volume in comparison with the G5V-1 relay
- High dielectric strength: 1000VAC between coil and contacts and 750VAC between contacts of the same polarity
- Conforms to FCC part 68

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Rated Current (mA)	Coil Resist. (Ω)	Coil Voltage (VDC)	Price Each			
					1	25	50	100

### Standard Type

653-G6L-1F-DC3	B2	60.0	50.0	3	2.76	2.48	2.20	1.98
653-G6L-1F-DC4.5	B2	40.0	112.5	4.5	2.76	2.48	2.30	1.98
653-G6L-1F-DC5	B2	36.0	139.0	5	2.76	2.48	2.20	1.98
653-G6L-1F-DC12	B2	15.0	800.0	12	2.76	2.48	2.20	1.98
653-G6L-1F-DC24	B2	9.6	2504.0	24	3.03	2.72	2.42	2.18

### High-Sensitivity Type

653-G6L-1P-DC3	C2	60.0	50.0	3	2.74	2.46	2.19	1.97
653-G6L-1P-DC4.5	C2	40.0	112.5	4.5	2.76	2.48	2.30	1.98
653-G6L-1P-DC5	C2	36.0	139.0	5	2.76	2.48	2.20	1.98
653-G6L-1P-DC12	C2	15.0	800.0	12	2.66	2.41	2.15	1.93
653-G6L-1P-DC24	C2	9.6	2504.0	24	2.46	2.37	2.11	1.98

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1952

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## G6S SERIES: 2A DPDT LOW SIGNAL RELAYS

### Specifications:

- Rated load: 0.5A @ 125VAC / 2A @ 30VDC
- Contact material: Ag (Au clad)
- Contact resistance: 75mΩ max.
- Max. carry current: 2A
- Power consumption:

  - G6S (3-12VDC) 140mW / G6S (24VDC) 200mW
  - G6SU (3-12VDC) 100mW / G6SU (24VDC) 150mW
  - G6SK (3-12VDC) 200mW / G6SK (24VDC) 300mW
  - G6S Euro (5-12VDC) 200mW / G6SK (24VDC) 230mW

### Features:

- Design based on worldwide communications, office automation, and computer peripheral relay requirements
- High dielectric withstand voltage of 2000VAC between coil and contacts (standard type); 1500VAC between contacts of different polarity
- Meets FCC Part 68 and Telcordia 2.5kV surge withstand
- European version certified for EN60950/EN41003
- Supplementary insulation at 250V at Pollution Degree 2.
- Low power consumption of 140mW (non-latching)

\* Tape and reel packaging; Full reel size is 800

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Rated Current (mA)	Coil Resist. (Ω)	Coil Voltage (VDC)	Price Each			
					1	25	50	100

### SMT Inside "L", Non-Latching

653-G6S-2G-DC5	D3	28.1	178.0	5	3.65	3.28	3.06	2.93
653-G6S-2G-DC12	D3	11.7	1028.0	12	3.65	3.28	3.06	2.93
653-G6S-2G-DC24	D3	8.3	2880.0	24	4.14	3.72	3.46	3.32

### SMT Outside "L", Non-Latching

653-G6S-2F-DC3	E3	46.7	64.3	3	3.65	3.28	3.06	2.93
653-G6S-2F-DC5	E3	28.1	178.0	5	3.60	3.23	3.01	2.88
653-G6S-2F-TRDC51	E3	28.1	178.0	5	3.60	3.24	3.02	2.89
653-G6S-2F-TRDC122	E3	11.7	1028.0	12	3.40	3.06	2.84	2.72
653-G6S-2F-DC24	E3	8.3	2880.0	24	4.08	3.67	3.42	3.27

### SMT Outside "L", Non-Latching, EN60950/EN41003 Approved

653-G6S-2Y-DC5	C3	22.2	203.0	4.5	3.80	3.42	3.18	3.04
653-G6S-2Y-DC12	C3	28.1	178.0	5	3.80	3.42	3.18	3.04
653-G6S-2Y-DC24	C3	9.6	2504.0	24	4.13	3.71	3.45	3.31

### PCB Thru-Hole, Non-Latching

653-G6S-2D-DC3	F5	33.3	90.0	3	4.04	3.63	3.38	3.24
653-G6S-2D-DC4.5	F5	22.2	203.0	4.5	3.80	3.42	3.18	3.04
653-G6S-2D-DC5	F5	11.7	1028.0	12	3.69	3.31	3.08	2.95
653-G6S-2D-DC24	F5	8.3	2880.0	24	4.13	3.72	3.46	3.31

### PCB Thru-Hole, Single Coil Latching

653-G6S-2D-DC3	F5	33.3	90.0	3	4.04	3.63	3.38	3.24
653-G6S-2D-DC4.5	F5	22.2	203.0	4.5	3.80	3.42	3.18	3.04
653-G6S-2D-DC5	F5	11.7	1028.0	12	3.69	3.31	3.08	2.95
653-G6S-2D-DC24	F5	8.3	2880.0	24	4.13	3.72	3.46	3.31

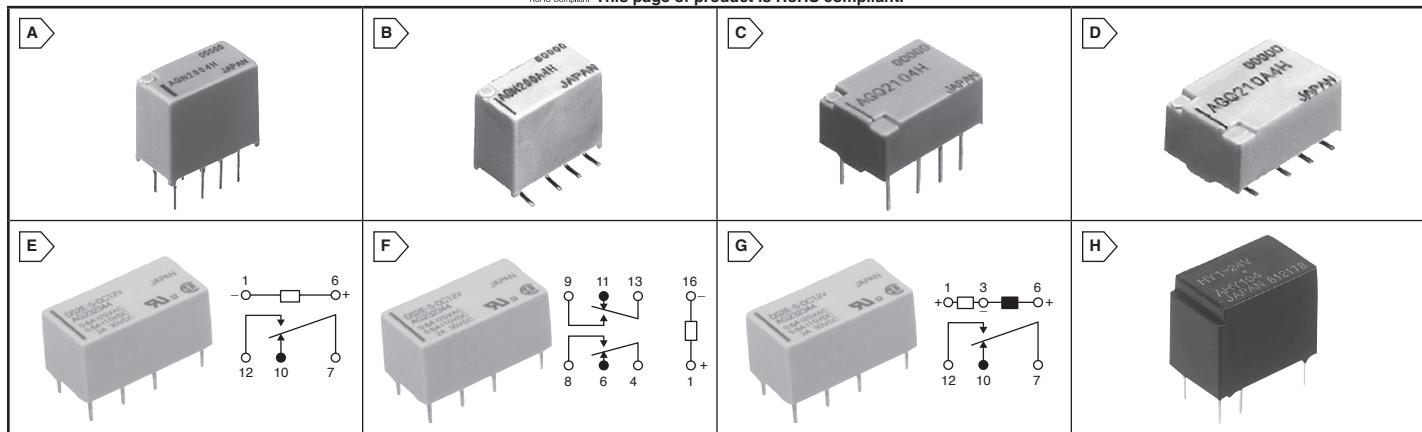
### PCB Thru-Hole, Dual Coil Latching

653-G6S-2F-DC5	F6	40.0	125.0	5	3.90	3.51	3.27	3.13
653-G6S-2F-DC12	F6	11.7	1028.0	12	4.14	3.72	3.47	3.32
653-G6S-2F-DC24	F6	8.3	2880.0	24	4.55	4.09	3.81	3.65
653-G6S-2H-DC5	F6	28.1	78.0	5	4.			

# PANASONIC Low Signal Relays

RoHS Compliant This page of product is RoHS compliant.

**Panasonic**



Panasonic signal relays are RoHS compliant and offer high-reliability and space-saving solutions for today's applications in telecom, WiFi, handheld devices, instrumentation, and ATE. Panasonic is the leading provider of signal relays in North America (VDC 2004).

## AGN SERIES

### Features:

- Compact slim body
- Surge Resistance
- Nominal operating power: 140mW
- Vibration and Shock resistance
- High Contact reliability
- Available in PCB and SMD

### PC Board Type

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Current Rating (A)	Volt. (VDC)	Contact Arrangement	Mounting Type	Price Each			
						1	10	100	500
769-AGN20003	A	1	3	2 Form C	PCB	4.24	3.46	2.95	2.60
769-AGN20012	A	1	12	2 Form C	PCB	4.24	3.46	2.95	2.60
769-AGN20024	A	1	24	2 Form C	PCB	5.00	4.08	3.47	3.06
769-AGN2004H	A	1	4.5	2 Form C	PCB	4.24	3.46	2.95	2.60
769-AGN21003	A	1	3	2 Form C	PCB	4.43	3.62	3.08	2.72
769-AGN21012	A	1	12	2 Form C	PCB	4.43	3.62	3.08	2.72
769-AGN2104H	A	1	4.5	2 Form C	PCB	4.43	3.62	3.08	2.72

### SMD Type

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Current Rating (A)	Volt. (VDC)	Contact Arrangement	Mounting Type	Price Each			
						1	10	100	500
769-AGN200A03	B	1	3	2 Form C	SMD	4.41	3.60	3.06	2.70
769-AGN200A12	B	1	12	2 Form C	SMD	4.41	3.60	3.06	2.70
769-AGN200A24	B	1	24	2 Form C	SMD	5.15	4.20	3.57	3.15
769-AGN200A4H	B	1	4.5	2 Form C	SMD	4.41	3.60	3.06	2.70
769-AGN200S03	B	1	3	2 Form C	SMD	4.41	3.60	3.06	2.70
769-AGN200S12	B	1	12	2 Form C	SMD	4.41	3.60	3.06	2.70
769-AGN200S4H	B	1	4.5	2 Form C	SMD	4.41	3.60	3.06	2.70
769-AGN210A03	B	1	3	2 Form C	SMD	4.53	3.70	3.15	2.78
769-AGN210A4H	B	1	4.5	2 Form C	SMD	4.53	3.70	3.15	2.78

## AGQ SERIES

### Features:

- Compact flat body
- Surge Resistance
- Nominal operating power: 140mW
- Vibration and Shock resistance
- Available in PCB and SMD
- High Contact reliability

### PC Board Type

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Current Rating (A)	Volt. (VDC)	Contact Arrangement	Mounting Type	Price Each			
						1	10	100	500
769-AGQ20003	C	1	3	2 Form C	PCB	3.90	3.46	2.95	2.60
769-AGQ20012	C	1	12	2 Form C	PCB	3.05	3.46	2.95	2.60
769-AGQ20024	C	1	24	2 Form C	PCB	4.35	4.08	3.47	3.06
769-AGQ2004H	C	1	4.5	2 Form C	PCB	3.68	3.46	2.95	2.60

### SMD Type

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Current Rating (A)	Volt. (VDC)	Contact Arrangement	Mounting Type	Price Each			
						1	10	100	500
769-AGQ200A03	D	1	3	2 Form C	SMD	4.02	3.60	3.06	2.70
769-AGQ200A12	D	1	12	2 Form C	SMD	4.05	3.60	3.06	2.70
769-AGQ200A24	D	1	24	2 Form C	SMD	4.73	4.20	3.57	3.15
769-AGQ200A4H	D	1	4.5	2 Form C	SMD	3.17	3.60	3.06	2.70
769-AGQ200S03	D	1	3	2 Form C	SMD	4.52	3.70	3.15	2.78
769-AGQ200S12	D	1	12	2 Form C	SMD	4.53	3.70	3.15	2.78
769-AGQ200S24	D	1	24	2 Form C	SMD	5.02	4.28	3.64	3.21
769-AGQ200S4H	D	1	4.5	2 Form C	SMD	4.18	3.70	3.15	2.78
769-AGQ210A03	D	1	3	2 Form C	SMD	4.53	3.70	3.15	2.78
769-AGQ210A4H	D	1	4.5	2 Form C	SMD	4.34	3.70	3.15	2.78
769-AGQ210S4H	D	1	4.5	2 Form C	SMD	4.53	3.70	3.15	2.78

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## DS SERIES

### Features:

- Bifurcated contacts are standard
- High sensitivity 1500V FCC surge withstand
- High switching capacity: 60W, 125VA

### Applications:

- Office equipment
- Security equipment
- Telecommunication equipment

### Non-Latching

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Current Rating (A)	Volt. (VDC)	Contact Arrangement	Mounting Type	Price Each			
						1	10	100	500
769-DS1E-S-DC3V	E	2	3	1 Form C	PCB	7.96	7.32	5.53	4.88
769-DS1E-SL-DC12V	F	2	12	1 Form C	PCB	8.87	8.15	6.16	5.43
769-DS1E-SL-DC24V	F	2	3	1 Form C	PCB	8.84	8.13	6.14	5.42
769-DS1E-SL-DC3V	F	2	5	1 Form C	PCB	8.84	8.13	6.14	5.42
769-DS1E-SL-DC5V	F	2	12	1 Form C	PCB	5.64	4.60	3.91	3.45
769-DS1E-M-DC12V	E	2	24	1 Form C	PCB	5.64	4.60	3.91	3.45
769-DS1E-M-DC24V	E	2	3	1 Form C	PCB	5.64	4.60	3.91	3.45
769-DS1E-M-DC3V	E	2	48	1 Form C	PCB	7.18	6.60	4.99	4.40
769-DS1E-M-DC48V	E	2	5	1 Form C	PCB	5.64	4.60	3.91	3.45
769-DS1E-M-DC5V	E	2	9	1 Form C	PCB	5.64	4.60	3.91	3.45
769-DS1E-S-DC12V	E	2	12	1 Form C	PCB	7.96	7.32	5.53	4.88
769-DS1E-S-DC24V	E	2	24	1 Form C	PCB	7.96	7.32	5.53	4.88
769-DS1E-S-DC3V	E	2	48	1 Form C	PCB	10.49	9.63	7.28	6.42
769-DS1E-S-DC5V	E	2	5	1 Form C	PCB	7.96	7.32	5.53	4.88
769-DS1E-S-DC6V	E	2	6	1 Form C	PCB	7.96	7.32	5.53	4.88
769-DS1E-S-DC9V	E	2	9	1 Form C	PCB	7.96	7.32	5.53	4.88
769-DS2E-S-DC12V	F	2	12	2 Form C	PCB	5.37	4.38	3.73	3.29
769-DS2E-S-DC24V	F	2	24	2 Form C	PCB	5.37	4.38	3.73	3.29
769-DS2E-S-DC3V	F	2	3	2 Form C	PCB	7.28	6.69	5.05	4.46
769-DS2E-S-DC48V	F	2	48	2 Form C	PCB	7.28	6.69	5.05	4.46
769-DS2E-S-DC5V	F	2	5	2 Form C	PCB	5.37	4.38	3.73	3.29
769-DS2E-S-DC6V	F	2	6	2 Form C	PCB	5.37	4.38	3.73	3.29
769-DS2E-S-DC9V	F	2	9	2 Form C	PCB	5.37	4.38	3.73	3.29
769-DS2Y-S-DC12V	F	2	12	2 Form C	PCB	3.21	2.62	2.23	1.97
769-DS2Y-S-DC24V	F	2	24	2 Form C	PCB	3.33	2.72	2.32	2.04
769-DS2Y-S-DC48V	F	2	48	2 Form C	PCB	4.46	3.64	3.10	2.73
769-DS2Y-S-DC5V	F	2	5	2 Form C	PCB	3.21	2.62	2.23	1.97
769-DS2Y-S-DC6V	F	2	6	2 Form C	PCB	3.21	2.62	2.23	1.97
769-DS2Y-S-DC9V	F	2	9	2 Form C	PCB	3.21	2.62	2.23	1.97

### Dual Coil Latching

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Current Rating (A)	Volt. (VDC)	Contact Arrangement	Mounting Type	Price Each			
						1	10	100	500
769-DS1E-ML-DC12V	G	2	12	1 Form C	PCB	6.57	6.03	4.56	4.02
769-DS1E-ML-DC5V	G	2	5	1 Form C	PCB	6.57	6.03	4.56	4.02
769-DS1E-ML2-DC12V	G	2	12	1 Form C	PCB	6.30	5.79	4.37	3.86
769-DS1E-ML2-DC24V	G	2	24	1 Form C	PCB	6.30	5.79	4.37	3.86
769-DS1E-ML2-DC6V	G	2	6	1 Form C	PCB	6.42	5.24	4.36	3.85
769-DS1E-SL2-DC3V	G	2	3	1 Form C	PCB	8.58	7.88	5.95	5.25

### HY SERIES

#### Features:

- Non-Polarized
- Sealed Construction
- High sensitivity: 150mW/200mW

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Current Rating (A)	Volt. (VDC)	Contact Arrangement	Mounting Type	Price Each			
1	10	100	500						


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# AXICOM Low Signal Relays

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## IM SERIES: LOW PROFILE 2A POLARIZED LOW SIGNAL RELAYS

### Specifications:

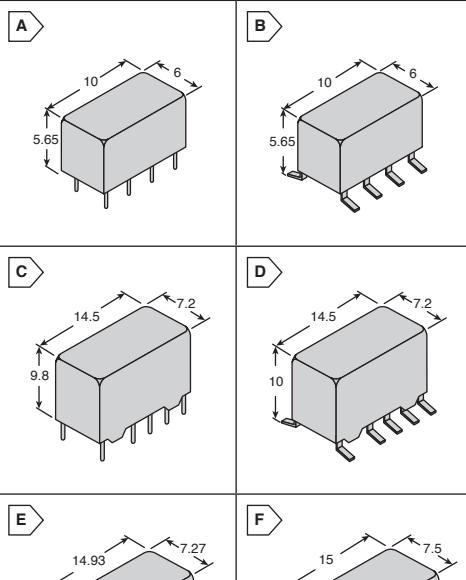
- High surge capability meets FCC Part 68
- Contact form: DPDT
- Maximum switching current: 2A
- Surface mount product; tape and reel packaging
- Contact material: Palladium-ruthenium, gold-covered
- Contact assembly: Bifurcated contacts
- Immersion cleanable, IP67 degree of protection



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Axicom Part No.	Fig.	Coil VDC	Power Consumption	Coil Resistance ( $\Omega$ )	Price Each			
							1	10	25	50
<b>Non-latching; Through-hole</b>										
655-IM03TS	1-146237-8	IM03TS	A1	5	140mW	178	3.64	3.30	3.19	2.88
655-IM06TS	2-1462037-7	IM06TS	A1	12	140mW	1028	4.00	3.72	3.49	3.15
655-IM07TS	3-1462037-0	IM07TS	A1	24	200mW	2440	4.52	4.20	3.93	3.57
<b>Non-latching; SMD</b>										
655-IM03GR	1-1462037-4	IM03GR	B1	5	140mW	178	3.93	3.86	3.45	3.12
655-IM06GR	2-1462037-3	IM06GR	B1	12	140mW	1028	5.32	5.24	5.01	4.53
655-IM07GR	4-1462037-7	IM07GR	B1	24	200mW	2440	4.10	3.56	3.37	3.25
<b>Single-coil Latching; Through-hole</b>										
655-IM46TS	6-1462037-6	IM46TS	A2	12	100mW	1028	5.18	4.83	4.52	4.10
<b>Single-coil Latching; SMD</b>										
655-IM43GR	5-1462037-9	IM43GR	B2	5	100mW	250	4.64	4.07	2.91	2.62
655-IM46GR	6-1462037-7	IM46GR	B2	12	100mW	1028	4.26	3.74	3.39	3.38

DIMENSIONS: mm



## P2 (V23079): SLIM CASE 5A POLARIZED LOW SIGNAL RELAYS

### Specifications:

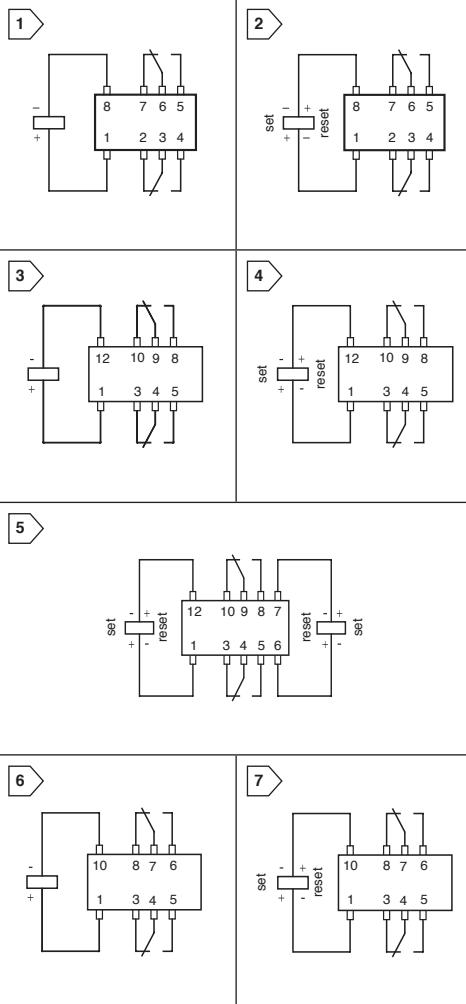
- High surge capability meets FCC Part 68
- Contact form: DPDT
- Maximum switching current: 5A
- Surface mount product tape and reel packaging
- Contact material: Silver nickel, gold-covered
- Contact assembly: Bifurcated contacts
- Immersion cleanable, IP67 degree of protection



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Axicom Part No.	Fig.	Coil VDC	Power Consumption	Coil Resistance ( $\Omega$ )	Price Each			
							1	10	25	50
<b>Non-latching; Through-hole</b>										
655-V23079A1001B301	1393788-3	V23079A1001B301	C3	5	140mW	178	2.50	2.33	2.19	1.98
655-V23079A1003B301	1-1393788-1	V23079A1003B301	C3	12	140mW	1029	3.65	3.26	3.19	2.88
655-V23079A1005B301	1-1393788-6	V23079A1005B301	C3	24	140mW	4114	4.47	4.22	3.91	3.53
655-V23079D1003B301	5-1393788-7	V23079D1003B301	D3	12	140mW	1029	3.86	3.59	3.36	3.05
655-V23079D1005B301	5-1393788-8	V23079D1005B301	D3	24	140mW	4114	5.21	4.89	4.56	4.12
<b>Single-coil Latching; Through-hole</b>										
655-V23079C1103B301	4-1393788-8	V23079C1103B301	C4	12	70mW	2057	4.02	3.74	3.50	3.16
<b>Dual-coil Latching; Through-hole</b>										
655-V23079B1203B301	3-1393788-6	V23079B1203B301	C5	12	140mW	1029	4.67	4.34	4.09	3.68

### PIN CONFIGURATIONS



## FX2 SERIES: SLIM CASE 3A NON-POLARIZED LOW SIGNAL RELAYS

### Specifications:

- High surge capability meets FCC Part 68
- Contact form: DPDT
- Maximum switching current: 3A
- Contact material: Palladium-ruthenium, gold covered
- Contact assembly: Bifurcated contacts
- Immersion cleanable, IP67 degree of protection



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Axicom Part No.	Fig.	Coil VDC	Power Consumption	Coil Resistance ( $\Omega$ )	Price Each			
							1	10	25	50
<b>Non-latching; Through-hole</b>										
655-D3209	0-1462034-9	D3209	E6	5	140mW	178	2.86	2.80	2.77	2.67
655-D3212	1-1462034-4	D3212	E6	24	200mW	2880	4.18	3.87	3.63	3.29
<b>Non-latching, High Sensitivity; Through-hole</b>										
655-D3223	2-1462034-1	D3223	E6	5	80mW	313	2.70	2.66	2.62	2.55
655-D3226	2-1462034-4	D3226	E6	12	80mW	1800	3.81	3.55	3.32	3.01
655-D3227	2-1462034-5	D3227	E6	24	140mW	4114	2.88	2.84	2.80	2.73
<b>Single-coil Latching; Through-hole</b>										
655-D3243	3-1462034-0	D3243	E7	5	100mW	250	4.15	3.86	3.62	3.27

## FT2 SERIES: SLIM CASE 2A NON-POLARIZED LOW SIGNAL RELAYS

### Specifications:

- High surge capability meets FCC Part 68
- Contact form: DPDT
- Maximum switching current: 2A
- Contact assembly: Bifurcated contacts
- Contact material (Standard version): Silver nickel, gold-covered
- Contact material (High dielectric version): Palladium-ruthenium, gold covered
- Immersion cleanable, IP67 degree of protection



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Axicom Part No.	Fig.	Coil VDC	Power Consumption	Coil Resistance ( $\Omega$ )	Price Each			
							1	10	25	50
<b>Non-latching; Through-hole</b>										
655-D3407	0-1462035-7	D3407	F6	24	300mW	1920	3.74	3.51	3.10	2.81
<b>Non-latching, High Sensitivity; Through-hole</b>										
655-D3423	1-1462035-1	D3423	F6	5	200mW	125	2.00	1.99	1.98	1.94
655-D3426	1-1462035-4	D3426	F6	12	200mW	720	2.73	2.54	2.38	2.16
655-D3427	1-1462035-7	D3427	F6	24	240mW	2400	3.49	3.24	3.04	2.75
<b>Non-latching, High Dielectric; Through-hole</b>										
655-D3493	1-1462035-5	D3493	F6	5	200mW	125	2.54	2.36	2.22	2.01

# Axicom Low Signal Relays



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## FU2 SERIES: SLIM CASE 2A NON-POLARIZED LOW SIGNAL RELAYS

- High surge capability meets FCC Part 68
- Contact form: DPDT
- Maximum switching current: 2A
- Termination: Through Hole
- Immersion cleanable, IP67 degree of protection
- Contact assembly: Bifurcated contacts



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Axicom Part No.	Fig.	Coil VDC	Power Consumption	Coil Resistance ( $\Omega$ )	Price Each			
							1	10	25	50
<b>Non-latching</b>										
<b>655-D3507W</b>	1-1462036-4	D3507W	A1	24	300mW	1920	3.15	2.98	2.78	2.68
<b>Non-latching, High Sensitivity</b>										
<b>655-D3523W</b>	2-1462036-2	D3523W	A1	5	200mW	125	2.46	2.42	2.39	2.35
<b>655-D3526W</b>	2-1462036-8	D3526W	A1	12	200mW	720	2.75	2.70	2.64	2.59
<b>655-D3527W</b>	9-1462036-1	D3527W	A1	24	240mW	2400	5.75	5.35	5.01	4.53

## FP2 SERIES: LOW PROFILE 2A POLARIZED LOW SIGNAL RELAYS

- High surge capability meets FCC Part 68
- Contact form: DPDT
- Maximum switching current: 2A
- Termination: Through Hole
- Immersion cleanable, IP67 degree of protection
- Contact assembly: Bifurcated contacts



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Axicom Part No.	Fig.	Coil VDC	Power Consumption	Coil Resistance ( $\Omega$ )	Price Each			
							1	10	25	50
<b>Non-Latching</b>										
<b>655-D3009</b>	1-1462033-4	D3009	B2	5	140mW	178	2.71	2.52	2.36	2.03
<b>655-D3002</b>	1462033-5	D3002	B2	12	140mW	1028	2.54	2.41	2.33	2.15
<b>655-D3012</b>	2-1462033-2	D3012	B2	24	200mW	2880	2.94	2.73	2.56	2.32
<b>Non-Latching, High Sensitivity</b>										
<b>655-D3023</b>	3-1462033-4	D3023	B2	5	80mW	313	3.89	3.62	3.39	3.08
<b>655-D3026</b>	3-1462033-7	D3026	B2	12	80mW	1800	3.77	3.51	3.29	2.98
<b>655-D3027</b>	3-1462033-8	D3027	B2	24	140mW	4114	4.09	3.80	3.56	3.23
<b>Single-Coil Latching</b>										
<b>655-D3043</b>	4-1462033-2	D3043	B3	5	100mW	250	3.58	3.30	3.12	2.83
<b>Dual-Coil Latching</b>										
<b>655-D3066</b>	5-1462033-4	D3066	B4	12	200mW	720	3.10	2.91	2.64	2.45

## D2N (V23105) SERIES: 3A NON-POLARIZED LOW SIGNAL RELAYS

- Non-latching coil
- High surge capability meets FCC Part 68
- Contact form: DPDT
- Maximum switching current: 3A
- Contact material: Silver-nickel, gold covered
- Immersion cleanable, IP67 degree of protection
- Contact assembly: Single contacts

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Axicom Part No.	Fig.	Coil VDC	Power Consumption	Coil Resistance ( $\Omega$ )	Price Each			
							1	10	25	50
<b>655-V23105A5001A201</b>										
8-1393792-5	V23105A5001A201	C5	5	150mW	167	1.55	1.51	1.46	1.42	
655-V23105A5003A201	8-1393792-8	V23105A5003A201	C5	12	150mW	960	3.07	2.87	2.69	2.43
655-V23105A5005A201	9-1393792-0	V23105A5005A201	C5	24	150mW	3480	2.63	2.43	2.28	2.08
655-V23105A5301A201	9-1393792-0	V23105A5301A201	C5	5	200mW	125	2.99	2.71	2.61	2.36
655-V23105A5303A201	9-1393792-7	V23105A5303A201	C5	12	200mW	720	2.81	2.36	2.22	2.00
655-V23105A5305A201	9-1393792-9	V23105A5305A201	C5	24	200mW	2880	2.96	2.77	2.59	2.35
655-V23105A5401A201	1393793-6	V23105A5401A201	C5	5	400mW	62	2.73	2.60	2.42	2.36
655-V23105A5403A201	1393793-8	V23105A5403A201	C5	12	400mW	360	2.50	2.47	2.43	2.36
655-V23105A5405A201	1393793-9	V23105A5405A201	C5	24	400mW	1440	2.43	2.19	2.03	1.88

## P1 (V23026) SERIES: 1A LOW SIGNAL RELAYS

- Non-latching coil
- High surge capability meets FCC Part 68
- Contact form: DPDT
- Maximum switching current: 1A
- Termination: V23026A Through Hole
- Immersion cleanable, IP67 degree of protection
- Contact assembly: Single contacts



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Axicom Part No.	Fig.	Coil VDC	Power Consumption	Coil Resistance ( $\Omega$ )	Price Each			
							1	10	25	50
<b>655-V23026A1001B201</b>										
1393774-1	V23026A1001B201	D6	5	68mW	370	5.82	5.55	5.15	4.63	
655-V23026A1002B201	1393774-8	V23026A1002B201	D6	12	64mW	2250	5.90	5.50	5.16	4.67
655-V23026A1004B201	1-1393774-2	V23026A1004B201	D6	24	128mW	4500	6.00	5.65	5.25	4.75
655-V23026D1021XB	1393776-3	V23026D1021XB	E6	5	80mW	313	5.05	4.75	4.54	4.33
655-V23026D1022XB	1393776-4	V23026D1022XB	E6	12	80mW	1800	7.15	6.00	-	-
655-V23026D1024XB	1393776-7	V23026D1024XB	E6	24	128mW	4500	4.80	4.63	4.33	3.92

## T81N/T81H SERIES: ULTRAMINIATURE PCB RELAYS

- High dielectric strength - 1000Vrms, 50/60Hz, for 1 minute contact to coil
- Contact material: Gold overlay silver-palladium alloy
- Contact rating: 1A @ 24VDC; 0.5A @ 120VAC
- Enclosure: Immersion cleanable, plastic sealed case
- Expected Mechanical life: 10 million operations min.
- Operate/Release Time (Excluding bounce): 5ms/2ms
- Nominal power: T81N - 450mW; T81H - 200mW
- T81N - standard coil; T81H - sensitive coil
- Contact form: SPDT

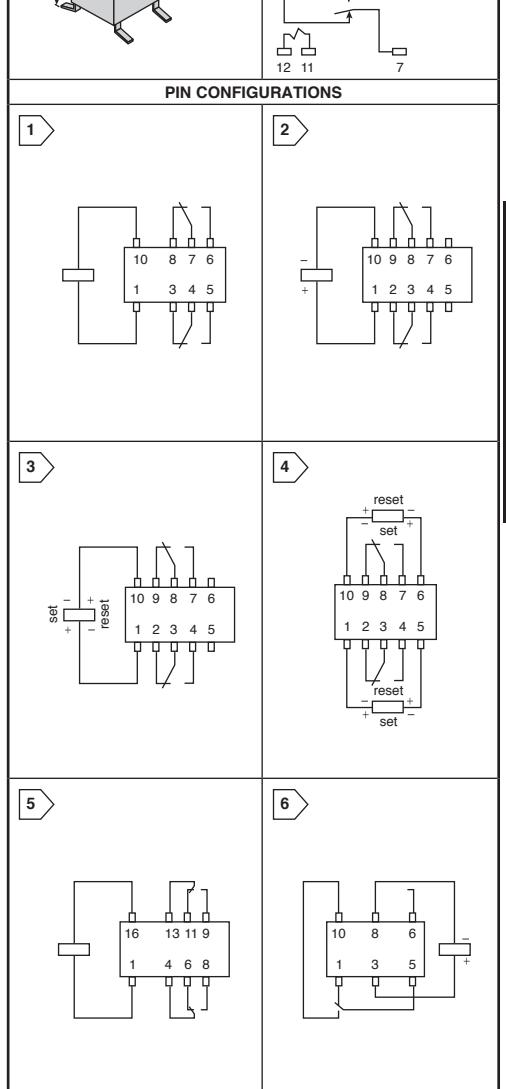
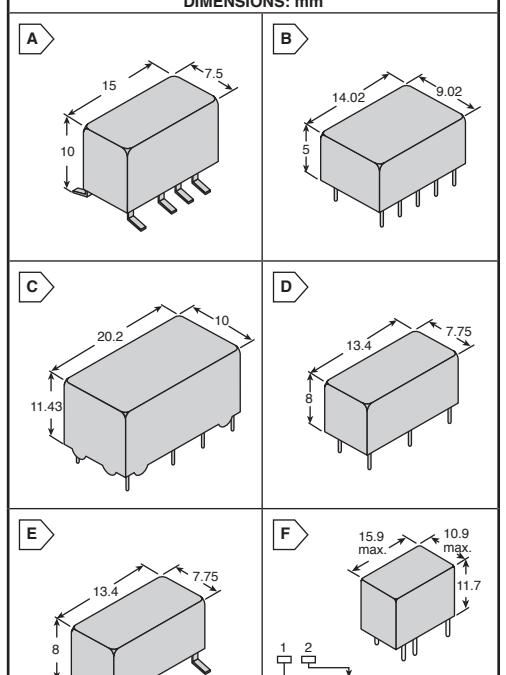


For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Axicom Part No.	Fig.	Coil VDC	Coil Resistance ( $\Omega$ )	Price Each				
						1	10	25	50	
<b>655-T81N5D312-12</b>										
7-1393779-1	T81N5D312-12	F	12	320	5.63	5.26	4.92	4.45		
655-T81N5D312-24	7-1393779-2	T81N5D312-24	F	24	1280	3.63	3.15	3.00	2.90	
655-T81H5D312-05	5-1393779-5	T81H5D312-05	F	5	125	4.59	4.31	4.02	3.63	
655-T81H5D312-12	5-1393779-8	T81H5D312-12	F	12	700	5.29	5.03	4.63	4.19	
655-T81H5D312-24	5-1393779-9	T81H5D312-24	F	24	2800	3.80	3.54	3.32	3.00	

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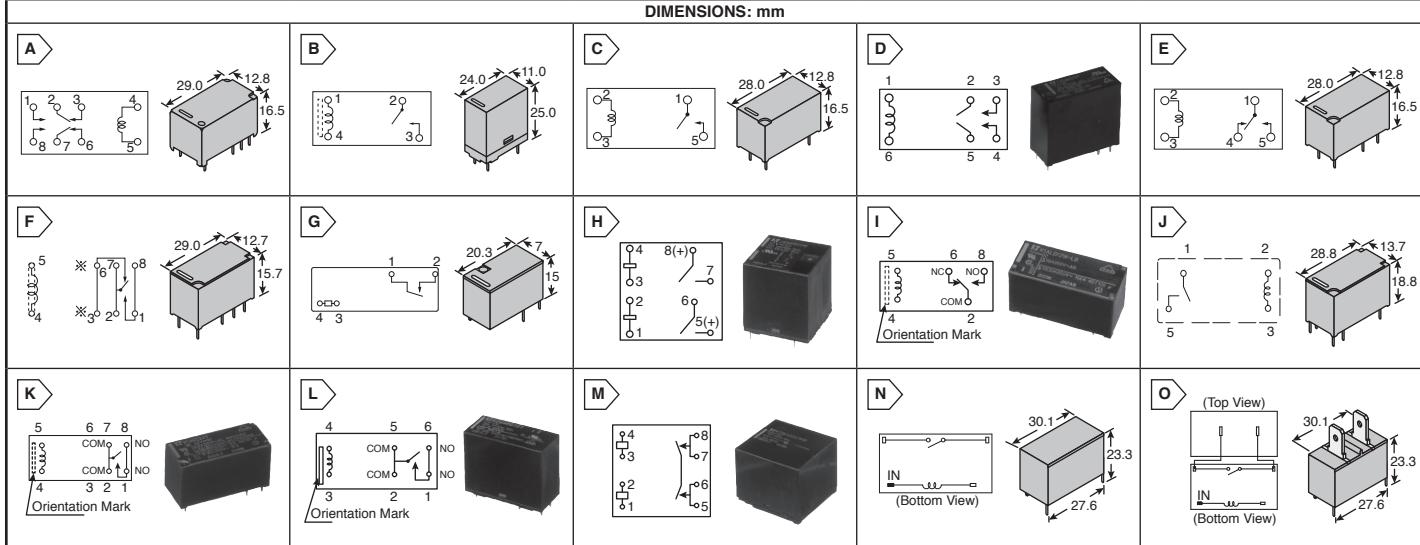


# FUJITSU Power Relays

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DIMENSIONS: mm



## FTR-F1 SERIES: 2 POLES - 5A LOW PROFILE TYPE

- Contact Form: DPST/DPDT 5A, TV-3 rating available
- Nominal Power: 53mW



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	100	500
817-FTR-F1CA005V	A	5	47Ω	2.28	1.94	1.65
817-FTR-F1CA006V	A	6	68Ω	2.28	1.94	1.65
817-FTR-F1CA012V	A	12	27Ω	2.28	1.94	1.65
817-FTR-F1CD012V	A	12	36Ω	2.50	2.13	1.82

## FTR-F2 SERIES: 1 POLE, 5, 10A CADMIUM FREE CONTACTS TYPE

- High Isolation
- Contact Form: SPST-NO
- 53 mW



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	100	500
817-FTR-F2AK048T	B	48	44Ω	1.78	1.51	1.29

## FTR-F3 SERIES: 1 POLES - 6A SLIM TYPE RELAY

- Dielectric Strength: 4kV
- Insulation Distance: Minimum 6mm between coil and contact (conforms to IEC 65)
- Nominal: 2W
- Flammability 94V-0
- Contact Form: 1 Form A



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	100	500
817-FTR-F3AA005E-HA	C	5	125Ω	1.23	1.04	.89
817-FTR-F3AA012E-HA	C	12	72Ω	1.25	1.06	.91
817-FTR-F3AA024E	C	24	2880Ω	1.38	1.17	1.00

## FTR-F4G SERIES: 2 POLE - 5A, 1.5MM CONTACT GAP

- Flammability UL94V-0 (plastics)
- Power: 0.8W
- Surge strength: 10,000V
- Dielectric strength: 5,000VAC
- Contact Form: 2 Pole, 5A



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	25	50
817-FTR-F4GAK005T-KW	D	5	31Ω	5.15	4.42	4.19
817-FTR-F4GAK012T-KW	D	12	180Ω	5.15	4.42	4.19
817-FTR-F4GAK024T-KW	D	24	720Ω	5.73	4.92	4.66

## FTR-H1 SERIES: 1 POLE - 10A LOW PROFILE TYPE

- Type of service: Continuous duty
- UL class B (130°C) insulation



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	100	500
<b>Contact Form: SPST-NO</b>						
817-FTR-H1AA012V	E	12	68Ω	1.73	1.47	1.25
<b>Contact Form: SPDT</b>						
817-FTR-H1CA005V	F	5	47Ω	1.88	1.60	1.36
817-FTR-H1CA012V	F	12	270Ω	1.88	1.60	1.36
817-FTR-H1CA024V	F	24	1100Ω	2.03	1.72	1.47

## FTR-H3 SERIES: SILENT POWER RELAY 1 POLE 10A LOW PROFILE TYPE

- Low profile (height 16.5mm)
- Dielectric: 3,000VAC
- Surge: 10,000V
- Noise level is about 50dB at 5cm
- Contact Form: 1 Form A
- Contact Rating: 10A
- Nominal Power: 530mW



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	100	500
817-FTR-H3AA005V	G	5	47Ω	2.39	2.04	1.74
817-FTR-H3AA009V	G	9	155Ω	2.57	2.18	1.86
817-FTR-H3AA012V	G	12	270Ω	2.57	2.18	1.86
817-FTR-H3AA024V	G	24	1100Ω	2.72	2.31	1.98

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1956



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## FTR-J2 SERIES: ULTRA SMALL HIGH VOLTAGE DC RELAY

- High insulation between contacts and coil
- Insulation distance: Clearance/creepage >6mm
- Dielectric strength: 4,000VAC
- Surge strength: 10,000V (1.2 x 50μsec)

- Power: 0.53W
- Contact Form: 1 Form A (SPST-NO)



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	100	500
817-FTR-J2AK006W	H	6	68Ω	16.78	12.59	10.49
817-FTR-J2AK012W	H	12	270Ω	16.78	12.59	10.49
817-FTR-J2AK024W	H	24	1100Ω	17.48	13.12	10.93
817-FTR-J2AK048W	H	48	4400Ω	19.98	14.99	12.49

## FTR-K1 SERIES: 1 POLE - LOW PROFILE TYPE

- Heat Resistance, Flammability 94V-0
- TV-5 rating approved, TV-8 available
- Contact Form: SPDT Form C -FTR-K1C  
SPST-NO Form A-FTR-K1A



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	100	500
<b>10 A High Sensitivity</b>						
10 A High Sensitivity	I	12	575Ω	2.75	2.34	2.00
10 A High Sensitivity	I	24	575Ω	3.93	2.96	2.46
10 A High Sensitivity	I	24	11Ω	3.13	2.65	2.26
10 A High Sensitivity	I	12	360Ω	3.93	2.96	2.46
10 A High Sensitivity	I	24	11Ω	3.93	2.96	2.46
10 A High Sensitivity	I	24	1440Ω	3.20	2.41	2.00
<b>16A 800mW Inrush Type</b>						
16A 800mW Inrush Type	J	24	144Ω	3.00	2.55	2.18
<b>16A 105°C - Power: 400mW</b>						
16A 105°C - Power: 400mW	K	12	360Ω	3.21	2.42	2.01
16A 105°C - Power: 400mW	K	24	1440Ω	3.21	2.42	2.01

## FTR-K2G SERIES: 1 POLE - 20A, 3.0MM CONTACT GAP

- Contact Form: SPST-NO
- High insulation
- Reinforced insulation
- Insulation distance between coil and contact:
- Clearance min. 8.0mm, creepage min. 9.5mm
- Dielectric strength: 5kV
- Surge strength: 10kV



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	100	500
<b>Power: 1000mW</b>						
Power: 1000mW	L	12	145Ω	17.18	12.89	10.74
Power: 1000mW	L	24	580Ω	17.88	13.42	11.18
<b>Power: 2000mW</b>						
Power: 2000mW	M	12	72Ω	34.36	25.78	21.48
Power: 2000mW	M	24	290Ω	37.81	28.37	23.64

## FTR-K3 SERIES: 20A HEAVY LOAD

- Power 780mW
- Contact Rating: 20A
- Dielectric: 5,000VAC
- Creepage distance: 9.5mm



For quantities greater than listed, call for quote.

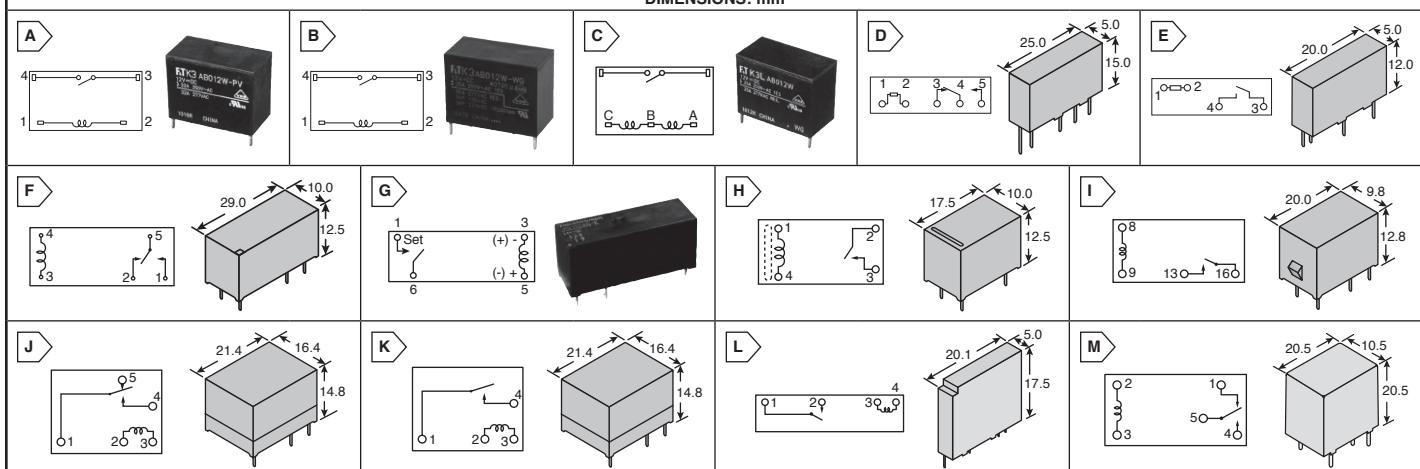
MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	100	500
<b>Contact Form: 1 Form A, TAB+PCB</b>						
817-FTR-K3AB005W	O	5	32Ω	2.18	1.85	1.58
817-FTR-K3AB006W	O	6	922Ω	2.18	1.85	1.59
817-FTR-K3AB009W	O	9	105Ω	2.18	1.85	1.59
817-FTR-K3JB012W	O	12	185Ω	2.18	1.85	1.58
817-FTR-K3AB018W	N	18	415Ω	2.05	1.75	1.49
817-FTR-K3AB024W	N	24	740Ω	2.01	1.71	1.46
<b>Contact Form: 1 Form A, TAB+PCB</b>						
817-FTR-K3JB005W	O	5	32Ω	2.18	1.85	1.58
817-FTR-K3JB006W	O	6	922Ω	2.18	1.85	1.59
817-FTR-K3JB009W	O	9	105Ω	2.18	1.85	1.59
817-FTR-K3JB012W	O	12	185Ω	2.18	1.85	1.58
817-FTR-K3JB018W	O	18	275Ω	2.28	1.94	1.66
817-FTR-K3JB024W	O	24	740Ω	2.21	1.88	1.61

# FUJITSU Power Relays

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DIMENSIONS: mm



## FTR-K3G-WG SERIES: 1 POLE - 32A HIGH CAPACITY TYPE

- High insulation in small package (between coil and contact)
- Insulation distance: Clearance > 6.4mm  
Creepage > 9.5mm
- Power : 95-1200mW
- Contact Form: 1 Form A SPST-NO



MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	100	500
817-FTR-K3AB012W-PV	A	12	120Ω	5.90	4.43	3.69

## FTR-K3-WG SERIES: 1 POLE - 25A, 1.5MM CONTACT GAP

- Power : 780mW
- Contact Form: 1 Form A SPST-NO



MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	100	500
817-FTR-K3AB012W-WG	B	12	120Ω	3.26	2.45	2.04
817-FTR-K3AB024W-WG	B	24	480Ω	3.26	2.45	2.04

## FTR-K3L SERIES: 1 POLE - 25A LATCHING RELAY

- High insulation (between coil and contacts)
- Insulation distance: Clearance min. 6.4mm  
Creepage min. 9.5mm
- Dielectric strength: 5,000VAC
- Surge strength: 8,500V
- Power : 900mW



MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	100	500
817-FTR-K3LAB012W	C	12	160Ω	4.12	3.09	2.58
817-FTR-K3LAB012W-PV	C	12	160Ω	7.87	7.20	3.76
817-FTR-K3LAB012W-WG	C	12	160Ω	10.30	7.73	6.44
817-FTR-K3LAB024W	C	24	640Ω	4.83	4.32	2.49
817-FTR-K3LAB024W-WG	C	24	640Ω	11.00	8.25	6.88
817-FTR-K3LJB012W	C	12	160Ω	5.73	4.30	3.58
817-FTR-K3LJB024W	C	24	640Ω	5.73	4.30	3.58

## FTR-LY SERIES: 1 POLE - 6A (MEDIUM LOAD CONTROL)

- Slim design
- High insulation in small package
- Power : 74-170W

- Insulation distance: 8mm min.
- Dielectric strength: 4000VAC
- Contact Material: Silver Alloy



For quantities greater than listed, call for quote.						
Contact Form: 1 Form A						
817-FTR-LYAA005Y	D	5	147Ω	2.83	2.40	2.05
817-FTR-LYAA012Y	D	12	847Ω	2.18	1.83	1.57
817-FTR-LYAA024Y	D	24	3388Ω	2.98	2.53	2.16
Contact Form: 1 Form C						
817-FTR-LYCA005Y	D	5	147Ω	3.08	2.62	2.24
817-FTR-LYCA012Y	D	12	847Ω	3.08	2.62	2.24
817-FTR-LYCA024Y	D	24	64Ω	3.20	2.72	2.33

## FTR-MY SERIES: 1 POLE - 5A SLIM POWER RELAY

- Contact Form: SPST-NO
- Power: 110mW
- Dielectric Strength: 3000VAC

- Power: 110mW



For quantities greater than listed, call for quote.						
817-FTR-MYAA005D	E	5	185Ω	3.58	3.04	2.75
817-FTR-MYAA012D	E	12	1310Ω	3.58	3.04	2.75

## JS SERIES: 1 POLE - 8A (MEDIUM LOAD CONTROL)

- Low profile and space saving
- Power: 245mW
- UL Class B (130°C) insulation
- Contact Form: SPDT



For quantities greater than listed, call for quote.						
817-JS-24-K	F	24	235Ω	3.10	2.64	2.25
817-JS-5-E	F	5	112Ω	2.88	2.45	2.09
817-JS-12-E	F	12	66Ω	2.88	2.45	2.09
817-JS-24E-K	F	24	235Ω	2.95	2.51	2.15

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1957

## JSL SERIES: 1 POLE - 8A POLARIZED LATCHING TYPE

- High insulation
- Insulation distance: 8 mm
- Power: 220mW
- Contact Form: 1 Form A SPST-NO
- Dielectric strength: 5,000VAC
- Surge strength: 10,000V



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	25	50
817-JSL-12N-K	G	12	655Ω	4.12	3.54	3.36
817-JSL-24N-K	G	24	2304Ω	4.80	4.12	3.91
817-JSL-5N-K	G	5	114Ω	4.12	3.54	3.36
817-JSL-D12N-K	G	12	655Ω	5.15	4.42	4.19
817-JSL-D24N-K	G	24	2304Ω	5.85	5.02	4.75
817-JSL-D5N-K	G	5	114Ω	5.15	4.42	4.19

## JV SERIES: 1 POLE - 5A (MEDIUM LOAD CONTROL)

- High Insulation with reinforced
- Cadmium free contacts
- Plastic sealed type
- Contact Form: SPST-NO
- Power: 0.2-0.3W
- High sensitivity in small package



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	100	500
817-JV-12S-KT	H	12	720Ω	2.00	1.70	1.45
817-JV-24S-KT	H	24	2880Ω	2.20	1.87	1.60
817-JV-24-KT	H	24	192Ω	2.08	1.77	1.51

## JY SERIES: 1 POLE - 5A (MEDIUM LOAD CONTROL)

- High sensitivity and low power consumption
- Wide operating temperature range
- Contact Form: SPST-NO
- Plastic sealed type
- Standard and high sensitivity types available



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	100	500
817-JY-12H-K	I	12	72Ω	2.90	2.47	2.11
817-JY-24H-K	I	24	2880Ω	2.98	2.53	2.16

## LZ SERIES: 1 POLE - 5A, 10A (MEDIUM LOAD CONTROL)

- 4 kinds of contact ratings
- Printed circuit terminals - fits grid with 0.1 inch
- Power: 450-600mW
- High surge strength version available
- UL class B (130°C) insulation type
- Standard and high sensitivity types available

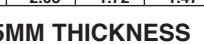


For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	100	500
817-LZ-12H-K	J	12	320Ω	2.03	1.72	1.47
817-LZ-24H-K	J	24	178Ω	2.03	1.72	1.48

## NY SERIES: 1 POLE - 5A ULTRA SLIM 5MM THICKNESS

- Contact Form: SPST-NO
- Ultra slim type with 5mm thickness
- Power: 120-200mW
- SIP through-hole terminals



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	100	500
817-NY-12W-K	L	12	1200Ω	3.40	2.89	2.47
817-NY-24W-K	L	24	4800Ω	3.50	2.98	2.55

## VE SERIES: 1 POLE - 5A (MEDIUM LOAD CONTROL)

- Low cost, miniature relay with big performance in small package
- Contact Form: 1 form A (SPST-NO) or 1 form C (SPDT) contact
- Slim type- for high density DIP through-hole mounting
- Power: 360mW



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Voltage (VDC)	Coil Resistance	Price Each		
				1	100	500
817-VE-12H-K	M	12	400Ω	2.15	1.83	1.56
817-VE-24H-S-K	M	24	1600Ω	2.25	1.91	1.64
817-VE-5HSE-K	M	5	69Ω	2.15	1.83	1.56
817-VE-6HSE-K	M	6	100Ω	2.15	1.83	1.56
817-VE-24H5-K	M	24	360Ω	2.15	1.83	1.56

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# MAGNECRAFT PCB and Solid State Relays

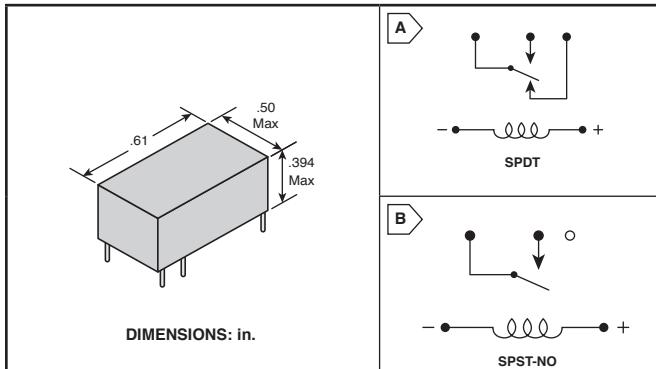
Schneider Electric

## CLASS 276 SEALED LOW PROFILE POWER PCB RELAYS

- Contact resistance: 100mΩ initial @ 6VDC, 1A
- Coil power: 200mW approx
- Coil resistance: ±10%
- Contact material: silver alloy
- Dielectric strength: 2000Vrms
- Insulation resistance: 500VDC exceeds 1000MΩ min
- Operating temperature: -40°C to +70°C

- Electrical life: 100,000 operations at rated resistive load
- DTL compatible single-side stable design
- 5KV surge resistance coil to contact

 UL Recognized File No. E190964

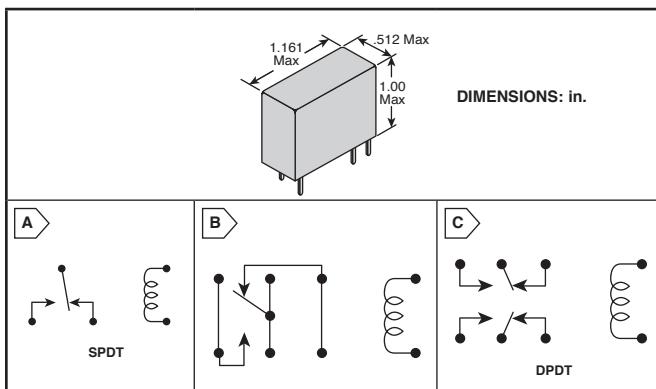


## CLASS 976 SEALED SLIM-LINE PCB RELAYS

- Contact resistance: 100mΩ min
- Coil power: AC 1.2VA, DC 0.54 watts
- Coil resistance: ±10% measured @ 25°C
- Contact material: silver cadmium oxide
- Dielectric strength: 5000V rms

- Insulation resistance: 100MΩ 500VDC
- Operating temperature: -20°C to +55°C
- Electrical life: 100,000 operations @ rated resistive load
- Class B insulation

 UL Recognized File No. E191122



## CLASS 6 SOLID STATE RELAYS WITH LED LAMP INDICATOR

- Screw (AXX) or Blade (BXX) Terminals Available
- Control Voltage Range: AC90 = 90-280VAC (50/60 Hz), DC3 = 3-32VDC
- Load Voltage Range: 62 = 40-280VAC, 64 = 48-480VAC, 66 = 48-600VAC
- 10 to 125 Amp Switching Capacity

- Optically Coupled
- AC or DC Controlled
- Panel Mountable

 UL Recognized File No. E258297

DIMENSIONS: in.

MOUSER STOCK NO.	Magnecraft® Part No.	Supercedes	Load Voltage	Current Rating (RMS)	Price Each			
					1	10	25	50
<b>AC Controlled Input, 90-280 VAC (SPST-NO)</b>								
528-6210AXXSZS-AC90	6210AXXSZS-AC90	W6210ASX-1	24-280VAC	10A	31.65	29.02	27.85	26.79
528-6225AXXSZS-AC90	6225AXXSZS-AC90	W6225ASX-1	24-280VAC	25A	47.09	45.32	43.06	39.87
528-6240AXXSZS-AC90	6240AXXSZS-AC90	W6240ASX-1	24-280VAC	40A	46.57	41.98	40.69	40.19
528-6275AXXSZS-AC90	6275AXXSZS-AC90	W6275ASX-1	24-280VAC	75A	112.44	108.44	106.59	102.20
528-6410AXXSZS-AC90	6410AXXSZS-AC90	W6410ASX-1	48-480VAC	10A	50.69	45.20	43.40	42.22
528-6425AXXSZS-AC90	6425AXXSZS-AC90	W6425ASX-1	48-480VAC	25A	43.24	30.17	28.23	27.03
<b>DC Controlled Input, 3-32 VDC (SPST-NO)</b>								
528-6312AXXMDS-DC3	6312AXXMDS-DC3	6212DDX-1	3-200VDC	12A	32.79	30.50	28.79	26.86
528-6325AXXMDS-DC3	6325AXXMDS-DC3	6225DDX-1	3-200VDC	25A	70.57	68.95	64.46	60.91
528-6340AXXMDS-DC3	6340AXXMDS-DC3	6240DDX-1	3-200VDC	40A	88.46	85.96	80.93	78.31
528-6210AXXSZS-DC3	6210AXXSZS-DC3	W6210DSX-1	24-280VAC	10A	26.56	25.57	24.29	22.50
528-6240AXXSZS-DC3	6240AXXSZS-DC3	W6240DSX-1	24-280VAC	40A	50.65	46.43	44.60	42.85
528-6250AXXSZS-DC3	6250DSX-1	W6250DSX-1	24-280VAC	50A	58.75	57.12	56.16	55.42
528-6450AXXSZS-DC3	6450AXXSZS-DC3	W6450DSX-1	48-480VAC	50A	82.79	75.89	72.78	70.05

## HEATSINK

MOUSER STOCK NO.	Magnecraft® Part No.	Description	Price Each			
			1	5	10	25
528-SSR-HS-1	SSR-HS-1	Aluminum Heat Sink for 6000 Series SSR	39.95	38.27	33.82	31.62

## 7052 SERIES - PCB & PANEL MOUNT SOLID STATE RELAYS

MOUSER STOCK NO.	Magnecraft® Part No.	Contact Form	Input Voltage	Output Voltage Range	Price Each			
					1	5	10	25
528-70S2-01-A-05-N	70S2-01-A-05-N	SPST-NO	3-15VDC	3-60VDC	30.75	30.12	29.37	28.11
528-70S2-04-B-12-N	70S2-04-B-12-N	SPST-NO	3-30VDC	24-140VAC	36.17	34.58	33.38	31.69
528-70S2-04-C-06-S	70S2-04-C-06-S	SPST-NO	6-30VDC	24-140VAC	33.16	31.59	28.10	27.88
528-70S2-04-C-10-M	70S2-04-C-10-M	SPST-NO	3-30VDC	24-280VAC	30.32	29.26	28.10	26.57
528-70S2-04-C-12-N	70S2-04-C-12-N	SPST-NO	3-30VDC	24-280VAC	30.94	29.58	28.98	28.37

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1958

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# OMRON Power PCB Relays

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## G4A SERIES: 20A SPST-NO MINIATURE POWER PCB RELAYS

### Specifications:

- Rated load: 20A @ 250VAC
- Contact resistance: 100 mΩ Max.
- Electrical endurance: With motor load (250VAC) 200,000 ops. With overload (250VAC) 1,500 ops. With Inverter load (100VAC) 30,000 ops.

### Features:

- Miniature single-pole relay with 80A surge
- 20A switching current
- Ideal for motor switching
- Miniature relay with high switching power and long endurance
- Highly noise-resistant insulation materials



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Rated Current (mA)	Coil Resist. (Ω)	Coil Voltage (VDC)	Coil Terminals	Price Each			
							1	25	50	100
653-G4A-1AE-DC5	G4A-1A-E-DC5	A1	180.0	27.8	5	QC #250/PCB	9.43	8.47	7.54	6.78
653-G4A-1AE-DC12	G4A-1A-E-DC12	A1	75.0	160.0	12	QC #250/PCB	6.89	6.20	5.51	4.96
653-G4A-1AE-DC24	G4A-1A-E-DC24	A1	37.5	640.0	24	QC #250/PCB	6.89	6.20	5.51	4.96
653-G4A-1A-PEDC51	G4A-1A-PE DC5	B2	180.0	27.8	5	PCB straight/PCB	9.45	8.59	7.87	7.26
653-G4A-1APE-DC12	G4A-1A-P-E-DC12	B2	75.0	160.0	12	PCB straight/PCB	7.74	6.96	6.19	5.57
653-G4A-1APE-DC24	G4A-1A-P-E-DC24	B2	37.5	640.0	24	PCB straight/PCB	6.71	6.53	6.19	5.57

## G4W SERIES: 15A POWER PCB RELAYS

### Specifications:

- Rated load: 15A @ 250VAC/24VDC
- Terminals: PCB straight
- Coil power consumption: 800mW

### Features:

- Impulse withstand voltage as high as 10kV with 4kV dielectric
- Ideal for power supply switching
- International 2.54mm terminal pitch



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Rated Current (mA)	Coil Resist. (Ω)	Coil Voltage (VDC)	Price Each			
							1	25	50	100
<b>Unsealed, TV-8 Rated</b>										
653-G4W1112PUSTV8	G4W-1112P-US-TV8-HP-DC12	C3	SPST-NO	66.7	180	12	6.78	6.18	5.62	5.07
* 653-G4W1112PVTV8HPD24	G4W-1112P-VD-TV8-HP-DC24	C3	SPST-NO	33.3	720	24	8.55	7.79	7.14	6.59
<b>Fully Sealed, TV-8 Rated</b>										
653-G4W1114P-DC12	G4W-1114P-US-TV8HP-DC12	C3	SPST-NO	66.7	180	12	6.16	5.96	5.77	5.51
653-G4W2214P-DC24	G4W-1114P-US-TV8HP-DC24	C3	SPST-NO	33.3	720	24	8.26	7.62	6.93	6.26
<b>Unsealed, TV-5 Rated</b>										
653-G4W2212PUSTV5	G4W-2212P-US-TV5HP-DC24	C3	DPST-NO	33.3	720	24	8.46	7.61	6.77	6.09
<b>Fully Sealed</b>										
653-G4W-2214P-DC12	G4W-2214P-US-HP-DC12	C3	DPST-NO	66.7	180	12	8.24	7.52	6.83	6.42
653-G4W-2214P-DC24	G4W-2214P-US-HP-DC24	C3	DPST-NO	33.3	720	24	8.26	7.62	6.93	6.26

## G5CA SERIES: SPST-NO POWER PCB RELAYS

### Specifications:

- Contact material: Silver alloy
- Rated carry current: 10A
- Contact resistance: 30mΩ Max. (QC terminals 100mΩ Max.)

### Features:

- Flat relays that switch 10A/15A loads
- Ideal for switching power in household appliances or outputs from industrial devices



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Rated Current (mA)	Coil Resist. (Ω)	Coil Voltage (VDC)	Terminals	Price Each			
							1	25	50	100
<b>Standard Type, Flux Protected, Rated Load 10A @ 250VAC/30VDC</b>										
653-G5CA-1A-DC5	G5CA-1A-DC5	D4	40.0	125	5	PCB straight	5.43	4.88	4.34	3.91
653-G5CA-1A-DC12	G5CA-1A-DC12	D4	16.7	720	12	PCB straight	5.33	4.80	4.26	3.84
653-G5CA-1ADC24	G5CA-1ADC24	D4	8.3	2880	24	PCB straight	4.22	3.80	3.37	3.15
<b>Standard Type, Fully Sealed, Rated Load 10A @ 250VAC/30VDC</b>										
653-G5CA-1A4-DC5	G5CA-1A4-DC5	D4	40.0	125	5	PCB straight	4.54	4.31	3.83	3.44
<b>High-Capacity Type, Flux Protected, Rated Load 15A @ 110VAC / 10A @ 30VDC</b>										
653-G5CA-1A-E-DC5	G5CA-1A-E-DC5	D4	40.0	125	5	PCB straight	4.46	4.08	3.62	3.26
653-G5CA-1A-E-DC12	G5CA-1A-E-DC12	D4	16.7	720	12	PCB straight	4.32	3.86	3.49	3.19
653-G5CA-1A-E-DC24	G5CA-1A-E-DC24	D4	8.3	2880	24	PCB straight	4.46	4.08	3.62	3.26
653-G5CA-1A-TP-EDC5	G5CA-1A-TP-E DC5	E5	40.0	125	5	QC#187	6.54	5.99	5.79	5.14
653-G5CA1ATPEDC12	G5CA-1A-TP-E DC12	E5	8.3	2880	24	QC#187	6.33	5.69	5.06	4.55

## G5Q SERIES: COMPACT, HIGH-ISOLATION POWER PCB RELAYS

### Specifications:

- Contact material: Ag Alloy
- Contact rating: (NO) 10A @ 125VAC / 5A @ 30VDC (NC) 3A @ 125VAC / 3A @ 30VDC
- Power consumption: SPST-NO 400mW; SPDT 200mW

### Features:

- Ensures a withstand impulse voltage of 8,000V between the coil and contacts
- Low coil power consumption
- UL class F coil insulation
- Ideal for appliance and HVAC controls



For quantities greater than listed, call for quote.

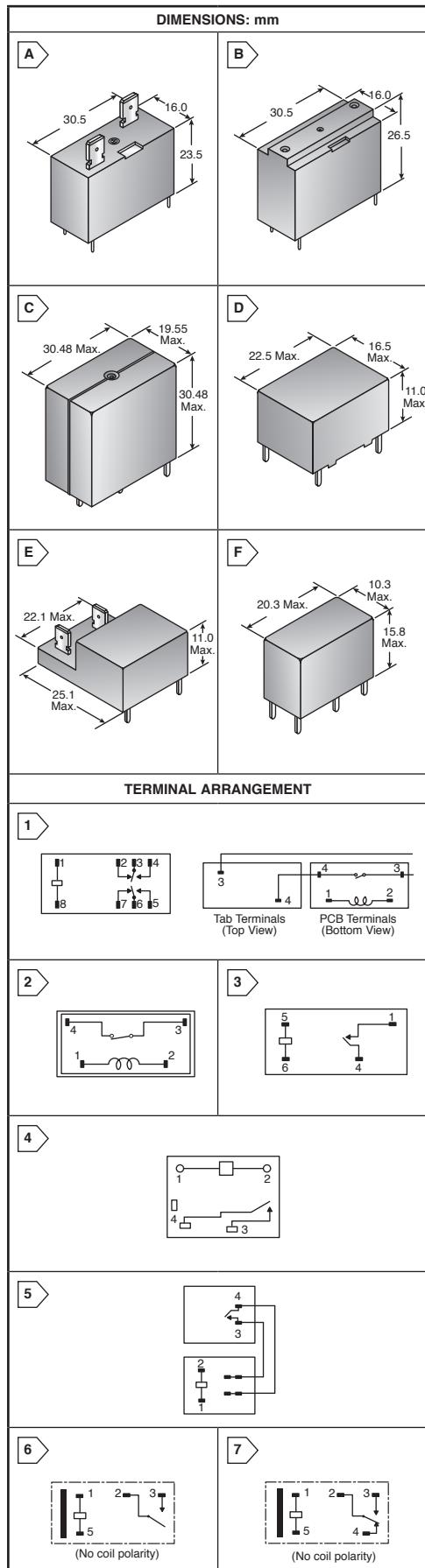
MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Rated Current (mA)	Coil Resist. (Ω)	Coil Voltage (VDC)	Price Each			
							1	25	50	100
<b>Vented Construction</b>										
653-G5Q-1A-DC5	G5Q-1A-DC5	F6	SPST-NO	40.0	200	5	2.97	2.67	2.37	2.14
653-G5Q-1A-DC12	G5Q-1A-DC12	F6	SPST-NO	16.7	720	12	2.89	2.60	2.31	2.08
653-G5Q-1-DC5	G5Q-1-DC5	F7	SPDT	80.0	63	5	3.67	3.35	3.08	2.81
653-G5Q-1-DC24	G5Q-1-DC24	F7	SPDT	16.7	1440	24	2.78	2.50	2.22	2.00
<b>Sealed Construction</b>										
653-G5Q-1A4-DC12	G5Q-1A4-DC12	F6	SPST-NO	16.7	720	12	3.08	2.77	2.46	2.22
653-G5Q-1A4-DC24	G5Q-1A4-DC24	F6	SPST-NO	8.3	2880	24	2.67	2.43	2.23	2.09
653-G5Q-14-DC5	G5Q-14-DC5	F7	SPDT	80.0	63	5	3.29	2.95	2.62	2.36
653-G5Q-14-DC12	G5Q-14-DC12	F7	SPDT	33.3	360	12	2.65	2.55	2.37	2.21
653-G5Q-14-DC24	G5Q-14-DC24	F7	SPDT	16.7	1440	24	3.32	2.98	2.65	2.39

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OMRON



# OMRON Power PCB Relays

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## G5LE SERIES: 10A "SUGAR CUBE" POWER PCB RELAYS

### Specifications:

- Contact rating: 10A @ 120VAC for Standard (5VDC)
- 10A @ 240VAC for Standard (12VDC)
- 10A @ 35VDC for 0.8mm Contact Gap
- 16A @ 250VAC for High-Capacity

\*VDE Approved \*Contacts are Au plated

### Features:

- Withstands impulse of up to 4500V
- Ideal for applications in security equipment, household electrical appliances, garage door openers, and audio equipment



### Standard, AgSnO<sub>2</sub> Contact Material, Flux Protection Enclosure Rating

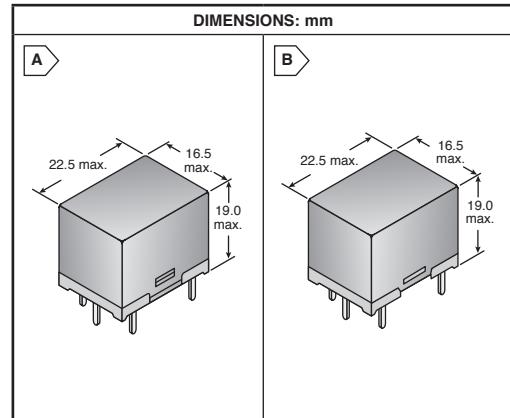
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Rated Current (mA)	Coil Resist. (Ω)	Coil Voltage (VDC)	Power Consumption (mW)	Price Each			
								1	25	50	100
653-G5LE-1-DC5	G5LE-1-DC5	A1	SPDT	79.4	63.0	5	400	1.50	1.25	1.18	1.12
653-G5LE-1-DC12	G5LE-1-DC12	A1	SPDT	33.3	360.0	12	400	1.37	1.14	1.09	1.03
653-G5LE-1-VDDC12	G5LE-1-VD DC12	A1	SPDT	58.3	205.7	12	400	1.27	1.06	1.00	.945
653-G5LE-1-DC24	G5LE-1-DC24	A1	SPDT	16.7	1440.0	24	400	1.37	1.14	1.09	1.03
653-G5LE-1-VDDC24	G5LE-1-VD DC24	A1	SPDT	16.7	1440.0	24	400	1.37	1.14	1.09	1.03
653-G5LE-1-ADCS	G5LE-1A DC5	A2	SPST-NO	79.4	63.0	5	400	1.46	1.22	1.15	1.09
653-G5LE-1A-DC24	G5LE-1A-DC24	A2	SPST-NO	16.7	1440.0	24	400	1.34	1.11	1.06	1.00

### Standard, AgSnO<sub>2</sub> Contact Material, Fully Sealed Enclosure Rating

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Rated Current (mA)	Coil Resist. (Ω)	Coil Voltage (VDC)	Power Consumption (mW)	Price Each			
								1	25	50	100
653-G5LE-14-DC3	G5LE-14 DC3	A1	SPDT	136.4	22.5	3	400	1.49	1.24	1.18	1.11
653-G5LE-14-DC5	G5LE-14-DC5	A1	SPDT	79.4	63.0	5	400	1.49	1.24	1.18	1.11
653-G5LE-14-DC6	G5LE-14-DC6	A1	SPDT	66.7	90.0	6	400	1.49	1.24	1.18	1.11
653-G5LE-14-DC9	G5LE-14-DC9	A1	SPDT	45.0	200.0	9	400	1.49	1.24	1.18	1.11
653-G5LE-14-DC12	G5LE-14-DC12	A1	SPDT	33.3	360.0	12	400	1.37	1.14	1.09	1.03
653-G5LE-14-AP3-DC12	G5LE-14-AP3-DC12	A1	SPDT	33.3	360.0	12	400	1.95	1.63	1.54	1.46
653-G5LE-14-DC24	G5LE-14-DC24	A1	SPDT	16.7	1440.0	24	400	1.37	1.14	1.09	1.03
653-G5LE-14-AP3-DC24	G5LE-14-AP3-DC24	A1	SPDT	16.7	1440.0	24	400	2.02	1.68	1.60	1.51
653-G5LE-1A4-DC5	G5LE-1A4-DC5	A2	SPST-NO	79.4	63.0	5	400	1.46	1.21	1.15	1.09
653-G5LE-1A4-DC9	G5LE-1A4-DC9	A2	SPST-NO	45.0	200.0	9	400	1.46	1.21	1.15	1.09
653-G5LE-1A4-DC12	G5LE-1A4-DC12	A2	SPST-NO	33.3	360.0	12	400	1.34	1.12	1.06	1.01
653-G5LE-1A4-DC24	G5LE-1A4-DC24	A2	SPST-NO	16.7	1440.0	24	400	1.34	1.12	1.06	1.01



### High-Capacity, AgSnIn Contact Material, Flux Protection Enclosure Rating

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Rated Current (mA)	Coil Resist. (Ω)	Coil Voltage (VDC)	Power Consumption (mW)	Price Each			
								1	25	50	100
653-G5LE-1-E-36-DC5	G5LE-1-E-36-DC5	B1	SPDT	72.0	70.0	5	360	2.50	2.08	1.98	1.87
653-G5LE-1-E-36-DC12	G5LE-1-E-36-DC12	B1	SPDT	30.0	400.0	12	360	2.40	2.00	1.90	1.80
653-G5LE-1-E-36-DC24	G5LE-1-E-36-DC24	B1	SPDT	15.0	1600.0	24	360	2.40	2.00	1.90	1.80
653-G5LE-1-E-DC5	G5LE-1-E-DC5	B1	SPDT	79.4	63.0	5	400	2.35	1.96	1.86	1.76
653-G5LE-1-E-DC12	G5LE-1-E-DC12	B1	SPDT	33.3	360.0	12	400	2.24	1.87	1.77	1.68
653-G5LE-1-E-DC24	G5LE-1-E-DC24	B1	SPDT	16.7	1440.0	24	400	2.24	1.87	1.77	1.68
653-G5LE-1A-E-DC5	G5LE-1A-E-DC5	B2	SPST-NO	79.4	63.0	5	400	2.37	1.98	1.88	1.78
653-G5LE-1A-E-DC12	G5LE-1A-E-DC12	B2	SPST-NO	33.3	360.0	12	400	2.36	1.97	1.87	1.77
653-G5LE-1A-E-DC24	G5LE-1A-E-DC24	B2	SPST-NO	16.7	1440.0	24	400	2.36	1.97	1.87	1.77

## G5NB SERIES: 3A SPST-NO PCB RELAYS

### Specifications:

- Rated load: 3A@125VAC/30VDC for Standard
- 5A@250VAC / 3A@30VDC for High-Capacity
- Contact resistance: 100mΩ max.

### Features:

- Standard models switch up to 3A and high-capacity models switch up to 5A (AC loads only)
- Low power consumption (200mW)



### Standard, Flux-Tight

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Rated Current (mA)	Coil Resistance (Ω)	Coil Voltage (VDC)	Price Each	Price Each			
							1	25	50	100
653-G5NB-1A-DC5	G5NB-1A-DC5	C3	40.0	125	5	1.93	1.73	1.54	1.39	
653-G5NB-1A-DC12	G5NB-1A-DC12	C3	16.7	720	12	1.93	1.70	1.61	1.53	
653-G5NB-1A-DC24	G5NB-1A-DC24	C3	8.3	2880	24	1.92	1.75	1.59	1.47	

### Standard, Sealed

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Rated Current (mA)	Coil Resistance (Ω)	Coil Voltage (VDC)	Price Each	Price Each			
							1	25	50	100
653-G5NB-1A4-DC5	G5NB-1A4-DC5	C3	40.0	125	5	2.04	1.92	1.87	1.77	
653-G5NB-1A4-DC12	G5NB-1A4-DC12	C3	16.7	720	12	2.04	1.84	1.63	1.47	
653-G5NB-1A4-DC24	G5NB-1A4-DC24	C3	8.3	2880	24	2.33	2.19	2.12	2.02	

### High-Capacity, Flux-Tight

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Rated Current (mA)	Coil Resistance (Ω)	Coil Voltage (VDC)	Price Each	Price Each			
							1	25	50	100
653-G5NB-1A-E-DC5	G5NB-1A-E-DC5	C3	40.0	125	5	2.05	1.84	1.64	1.48	
653-G5NB-1A-E-DC24	G5NB-1A-E-DC24	C3	8.3	2880	24	2.22	2.00	1.77	1.60	

### High-Capacity, Sealed

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Rated Current (mA)	Coil Resistance (Ω)	Coil Voltage (VDC)	Price Each	Price Each			
							1	25	50	100
653-G5NB-1A4-E-DC5	G5NB-1A4-E-DC5	C3	40.0	125	5	1.99	1.86	1.82	1.72	
653-G5NB-1A4-E-DC12	G5NB-1A4-E-DC12	C3	16.7	720	12	2.16	1.94	1.75	1.57	
653-G5NB-1A4-E-DC24	G5NB-1A4-E-DC24	C3	8.3	2880	24	2.40	2.25	2.18	2.06	

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# OMRON Power PCB Relays

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## G2RL SERIES: LOW PROFILE POWER PCB RELAYS

### Specifications:

- Rated load: 12A @ 250VAC/24VDC GP 1-Pole  
8A @ 250VAC/30VDC GP 2-Pole  
16A @ 250VAC/30VDC High-Capacity  
10A @ 250VAC/24VDC High-Sensitivity
- Contact material: Ag alloy (Cd free)

### Features:

- Designed for cooking and HVAC controls: blower motor, damper, active air purification, duct flow boost fans, etc.
- Coil insulation system: Class F
- Clearance and creepage distance: 10mm/10mm
- Tracking resistance: CTI>250



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Rated Current (mA)	Coil Resistance ( $\Omega$ )	Coil Voltage (VDC)	Price Each			
							1	25	50	100
<b>General Purpose, Flux Protected</b>										
653-G2RL-1A-DC5	G2RL-1A-DC5	A1	SPST-NO	80.00	62.5	5	2.45	2.03	1.93	1.84
653-G2RL-1A-DC12	G2RL-1A-DC12	A1	SPST-NO	33.30	360.0	12	2.37	1.97	1.88	1.78
653-G2RL-1A-DC24	G2RL-1A-DC24	A1	SPST-NO	16.70	1440.0	24	2.47	2.05	1.95	1.85
653-G2RL-1-DC12	G2RL-1-DC12	A2	SPDT	33.30	360.0	12	2.69	2.24	2.13	2.02
653-G2RL-1-DC24	G2RL-1-DC24	A2	SPDT	16.70	1440.0	24	2.69	2.24	2.13	2.02
653-G2RL-2A-DC24	G2RL-2A-DC24	A3	DPST-NO	16.70	1440.0	24	3.38	2.81	2.67	2.53
653-G2RL-2-DC5	G2RL-2-DC5	A4	DPDT	80.00	62.5	5	3.70	3.07	2.92	2.77
653-G2RL-2-DC12	G2RL-2-DC12	A4	DPDT	33.30	360.0	12	3.70	3.07	2.92	2.77
653-G2RL-2-DC24	G2RL-2-DC24	A4	DPDT	16.70	1440.0	24	3.69	3.07	2.92	2.77
<b>General Purpose, Fully Sealed</b>										
653-G2RL-1A4-DC12	G2RL-1A4-DC12	A1	SPST-NO	33.30	360.0	12	3.12	2.59	2.47	2.34
653-G2RL-14-DC5	G2RL-14-DC5	A2	SPDT	80.00	62.5	5	3.26	2.71	2.58	2.45
653-G2RL-14-DC12	G2RL-14-DC12	A2	SPDT	33.30	360.0	12	3.26	2.71	2.58	2.45
653-G2RL-14-DC24	G2RL-14-DC24	A2	SPDT	16.70	1440.0	24	3.26	2.71	2.58	2.45
653-G2RL-14DC48	G2RL-14 DC48	A2	SPDT	8.96	5358.0	48	4.25	3.54	3.36	3.19
653-G2RL-244-DC24	G2RL-2A4-DC24	A3	DPST-NO	16.70	1440.0	24	4.17	3.46	3.30	3.13
653-G2RL-24-DC12	G2RL-24-DC12	A4	DPDT	33.30	360.0	12	4.42	3.67	3.49	3.32
653-G2RL-24-DC24	G2RL-24-DC24	A4	DPDT	16.70	1440.0	24	4.45	3.70	3.52	3.34
<b>High-Capacity, Flux Protected</b>										
653-G2RL-1A-E-DC12	G2RL-1A-E-DC12	A5	SPST-NO	33.30	360.0	12	2.89	2.40	2.29	2.17
653-G2RL-1A-E-CFDC9	G2RL-1A-E-CF DC9	A5	SPST-NO	44.40	202.5	9	3.61	3.00	2.86	2.71
653-G2RL-1-E-DC5	G2RL-1-E-DC5	A6	SPDT	80.00	62.5	5	3.16	2.63	2.50	2.37
653-G2RL-1-E-DC12	G2RL-1-E-DC12	A6	SPDT	33.30	360.0	12	3.18	2.64	2.52	2.39
653-G2RL-1-E-DC24	G2RL-1-E-DC24	A6	SPDT	16.70	1440.0	24	3.16	2.63	2.50	2.37
653-G2RL-1-EDC48	G2RL-1-E DC48	A6	SPDT	8.96	5358.0	48	3.46	3.11	2.77	2.49
<b>High-Capacity, Fully Sealed</b>										
653-G2RL-1A4-E-DC12	G2RL-1A4-E-DC12	A5	SPST-NO	33.30	360.0	12	5.98	4.97	4.73	4.49
653-G2RL-1A4-DC24	G2RL-1A4-E-CFDC24	A5	SPST-NO	16.70	1440.0	24	4.33	3.60	3.42	3.25
653-G2RL-14-E-DC5	G2RL-14-E-DC5	A6	SPDT	80.00	62.5	5	4.45	3.70	3.52	3.34
653-G2RL-14-E-DC12	G2RL-14-E-DC12	A6	SPDT	33.30	360.0	12	4.41	3.66	3.48	3.31
653-G2RL-14-E-DC24	G2RL-14-E DC24	A6	SPDT	16.70	1440.0	24	3.82	3.17	3.02	2.86
<b>High-Sensitivity, Flux Protected</b>										
653-G2RL1HDC5	G2RL-1-H-DC5	A2	SPDT	50.00	100.0	5	4.01	3.33	3.17	3.01

## G5RL SERIES: 16A POWER PCB RELAYS

### Specifications:

- Rated load: SPST-NO 16A @ 250VAC/24VDC  
SPDT 5A @ 250VAC/24VDC
- Contact material: Ag alloy (Cd free)

### Features:

- Creepage distance 8mm between coil and contacts
- 10kV impulse withstand voltage
- Enclosure rating: Flux protection



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Rated Current (mA)	Coil Resistance ( $\Omega$ )	Coil Voltage (VDC)	Price Each			
							1	25	50	100
<b>12A General Purpose, Low Noise</b>										
653-G5RL-1A-LN-DC12	G5RL-1A-LN-DC12	A7	SPST-NO	44.2	272.0	12	3.81	3.22	3.04	2.74
653-G5RL-1A-LN-DC24	G5RL-1A-LN-DC24	A7	SPST-NO	22.1	1086.0	24	3.35	3.04	2.78	2.57
<b>16A High-Capacity, AC Coil</b>										
653-G5RL-1E-AC120	G5RL-1-E-AC115/120	A6	SPDT	5.35/5.70	11600.0	120VAC	7.89	7.22	6.17	6.05
653-G5RL-1E-AC240	G5RL-1-E-AC230/240	A6	SPDT	2.76/2.88	47600.0	240VAC	15.09	13.57	12.06	10.86
<b>16A High-Capacity, High Inrush</b>										
653-G5RL-1AEHR-DC5	G5RL-1A-E-HR-DC5	A5	SPST-NO	80.0	62.5	5	3.17	2.90	2.66	2.51
653-G5RL-1AEHR-DC12	G5RL-1A-E-HR-DC12	A5	SPST-NO	33.3	360.0	12	2.77	2.70	2.66	2.51
653-G5RL-1AEHR-DC24	G5RL-1A-E-HR-DC24	A5	SPST-NO	16.7	1440.0	24	3.52	3.16	2.81	2.53
653-G5RL-1-E-HR-DC5	G5RL-1-E-HR-DC5	A6	SPDT	80.0	62.5	5	3.96	3.55	3.16	2.84
653-G5RL-1-E-HR-DC12	G5RL-1-E-HR-DC12	A6	SPDT	33.3	360.0	12	3.52	3.22	2.95	2.78
653-G5RL-1-E-HR-DC24	G5RL-1-E-HR-DC24	A6	SPDT	16.7	1440.0	24	4.25	4.00	3.61	3.45
<b>16A High-Capacity, Low Noise</b>										
653-G5RL-1A-E-LN-DC5	G5RL-1A-E-LN-DC5	A5	SPST-NO	106.0	47.2	5	3.81	3.43	3.04	2.74
653-G5RL-1A-E-LNDC12	G5RL-1A-E-LN-DC12	A5	SPST-NO	44.2	272.0	12	3.81	3.43	3.04	2.74
653-G5RL-1A-E-LNDC24	G5RL-1A-E-LN-DC24	A5	SPST-NO	22.1	1086.0	24	3.81	3.43	3.04	2.74

## G5SB SERIES: SPDT COMPACT POWER PCB RELAYS

### Specifications:

- Rated load: 3A(NO)/3A(NC) @ 125VAC  
5A(NO)/3A(NC) @ 125VAC/30VDC  
5A(NO) @ 250VAC  
3A(NC) @ 250VAC
- Contact material: Ag alloy

### Features:

- Switches up to 5A (NO)
- Ideal for fan control of air conditioners and heating control of small appliances
- Ensures an impulse withstand voltage of 8000V between coil and contacts



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Rated Current (mA)	Coil Resistance ( $\Omega$ )	Coil Voltage (VDC)	Price Each			
							1	25	50	100
<b>Flux Protected</b>										
653-G5SB-1DC12	G5SB-1 DC12	B8	SPDT	33.3	360.0	12	2.08	1.86	1.66	1.49
<b>Sealed</b>										
653-G5SB-1A4-DC5	G5SB-1A4-DC5	B9	SPST-NO	80.0	62.5	5	2.08	1.86	1.66	1.49
653-G5SB-1A4-DC12	G5SB-1A4-DC12	B9	SPST-NO	33.3	360.0	12	2.08	1.86	1.66	1.49
653-G5SB-14-DC5	G5SB-14-DC5	B8	SPDT	80.0	62.5	5	1.80	1.71	1.62	1.53
653-G5SB-14-DC9	G5SB-14-DC9	B8	SPDT	44.4	202.0	9	1.94	1.77	1.63	1.49
653-G5SB-14-DC12	G5SB-14-DC12	B8	SPDT	33.3	360.0	12	1.62	1.54	1.48	1.36
653-G5SB-14-DC24	G5SB-14-DC24	B8	SPDT	16.7	1440.0	24	1.50	1.42	1.40	1.36

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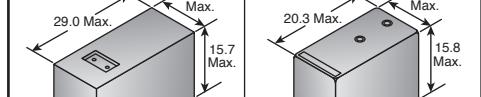
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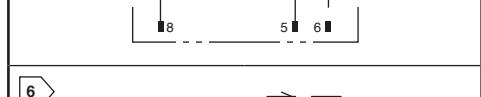
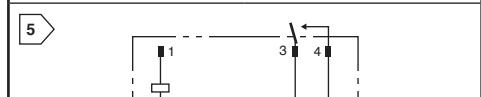
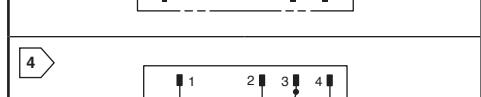
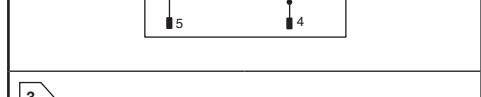
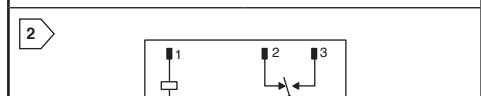
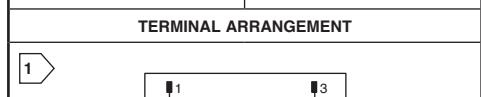
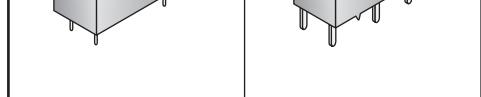
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### DIMENSIONS: mm



### TERMINAL ARRANGEMENT



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1961

# OMRON Power PCB Relays

RoHS Compliant

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## G2R SERIES: VERSATILE POWER PCB RELAYS

### Specifications:

- Rated load: @ 250VAC/30VDC
- 1-Pole (General Purpose/Upper Mount) 10A
- 1-Pole (High-Capacity) 16A
- 2-Pole (General Purpose) 5A
- 2-Pole (High-Sensitivity/Latching) 3A
- Contact material: Ag alloy

### Features:

- Creepage distance of 8.0mm between coil and contact
- Highly stable magnetic circuit for latching endurance and excellent resistance to vibration and shock
- Safety-oriented design assures high surge resistance: 10,000V min. between coil and contacts

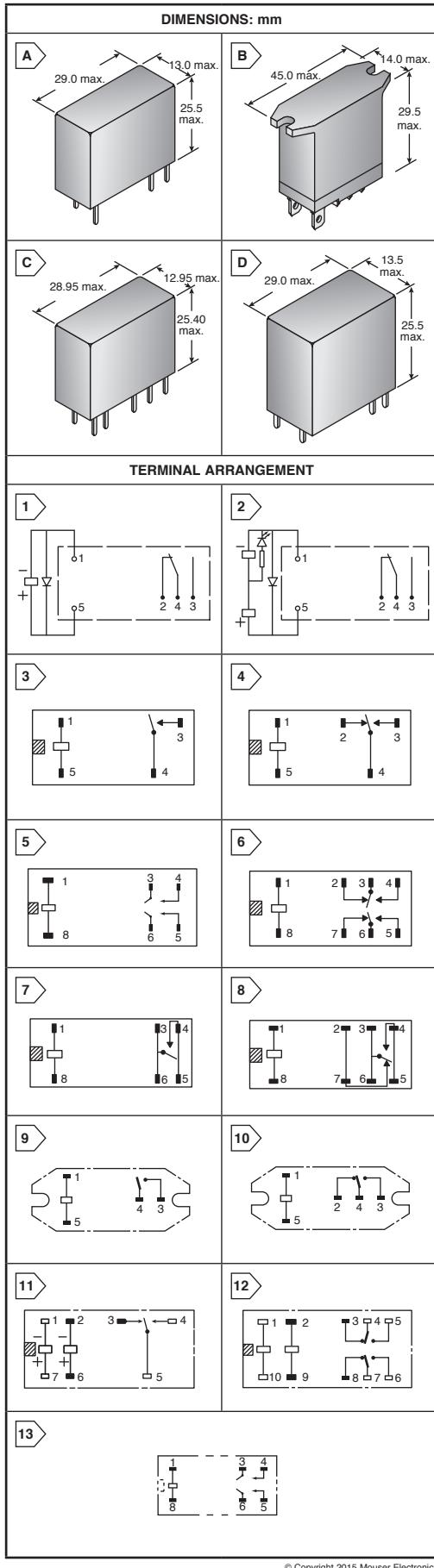


\*Rated current @ 60Hz    \*\*Class B Insulation

† Set Coil Ratings

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Rated Current (mA)	Coil Resistance ( $\Omega$ )	Coil Voltage (VDC)	Price Each			
							1	25	50	100
<b>General Purpose, Unsealed, Plug-in Terminals</b>										
653-G2R-1-SDC6S	G2R-1-SDC6(S)	A1	SPDT	87.0	69	6	4.47	4.14	3.80	3.58
<b>LED Indicator and Diode, Unsealed, Plug-in Terminals</b>										
653-G2R-1 SND-DC12S	G2R-1 SND-DC12S	A2	SPDT	43.6	275	12	10.58	9.62	8.67	7.82
<b>LED Indicator and Diode with Test Button, Unsealed</b>										
653-G2R-1 SNDI-DC24S	G2R-1 SNDI-DC24S	A2	SPDT	21.6	1113	24	10.72	10.17	9.05	8.70
<b>General Purpose, Semi-Sealed, Non-Latching, PCB Terminals</b>										
653-G2R-1A-DC24	G2R-1A-DC24	A3	SPST-NO	21.8	1100	24	6.21	5.59	4.93	4.53
653-G2R-1-DC5	G2R-1-DC5	A4	SPDT	106.0	47	5	4.16	3.74	3.32	2.99
653-G2R-1-DC12	G2R-1-DC12	A4	SPDT	43.6	275	12	3.08	2.98	2.82	2.73
653-G2R-1-DC24	G2R-1-DC24	A4	SPDT	21.8	1100	24	3.58	3.35	3.20	2.99
653-G2R-2A-DC12	G2R-2A-DC12	A5	DPST-NO	43.6	275	12	4.54	4.08	3.63	3.27
653-G2R-2A-DC24	G2R-2A-DC24	A5	DPST-NO	21.8	1100	24	4.25	3.77	3.58	3.40
653-G2R-2-DC5	G2R-2-DC5	A6	DPDT	106.0	47	5	4.89	4.07	3.87	3.66
653-G2R-2-DC6	G2R-2-DC6	A6	DPDT	88.2	68	6	4.66	4.14	3.92	3.53
653-G2R-2-DC12	G2R-2-DC12	A6	DPDT	43.6	275	12	3.60	3.37	3.22	3.09
653-G2R-2-DC24	G2R-2-DC24	A6	DPDT	21.8	1100	24	3.05	2.89	2.74	2.62
653-G2R-2-DC48	G2R-2-DC48	A6	DPDT	11.5	4170	48	5.02	4.18	3.97	3.64
* 653-G2R-2-AC24	G2R-2-AC24	A6	DPDT	37.5	260	24VAC	7.91	7.44	6.61	5.95
* 653-G2R-2-AC120	G2R-2-AC120	A6	DPDT	7.5	6500	120VAC	8.84	8.29	7.91	7.58
<b>General Purpose, Sealed, Non-Latching, PCB Terminals</b>										
653-G2R-1A4-DC5	G2R-1A4-DC5	A3	SPST-NO	106.0	47	5	4.80	4.32	3.84	3.45
653-G2R-1A4-DC12	G2R-1A4-DC12	A3	SPST-NO	43.6	275	12	4.24	4.12	3.88	3.76
653-G2R-1A4-DC24	G2R-1A4-DC24	A3	SPST-NO	21.8	1100	24	4.41	4.14	3.94	3.77
* 653-G2R-1A4-AC120	G2R-1A4-AC120	A3	SPST-NO	7.5	6500	120VAC	8.84	7.95	7.06	6.35
653-G2R-14-DC5	G2R-14-DC5	A4	SPDT	106.0	47	5	3.58	3.48	3.39	3.30
653-G2R-14-DC12	G2R-14-DC12	A4	SPDT	43.6	275	12	4.02	3.76	3.60	3.45
653-G2R-14-DC24	G2R-14-DC24	A4	SPDT	21.8	1100	24	4.19	3.94	3.75	3.50
653-G2R-14-DC48	G2R-14-DC48	A4	SPDT	11.5	4170	48	5.07	4.56	4.05	3.64
* 653-G2R-14-AC24	G2R-14-AC24	A4	SPDT	37.5	260	24VAC	7.52	7.05	6.73	6.45
* 653-G2R-14-AC120	G2R-14-AC120	A4	SPDT	7.5	6500	120VAC	8.69	8.17	7.26	6.53
653-G2R-2A4-DC12	G2R-2A4-DC12	A5	DPST-NO	43.6	275	12	5.31	4.99	4.43	3.99
653-G2R-2A4-DC24	G2R-2A4-DC24	A5	DPST-NO	21.8	1100	24	5.55	4.99	4.43	3.99
653-G2R-24-DC5	G2R-24-DC5	A6	DPDT	106.0	47	5	4.82	4.54	4.32	4.15
653-G2R-24-DC12	G2R-24-DC12	A6	DPDT	43.6	275	12	4.83	4.55	4.33	4.06
653-G2R-24-DC24	G2R-24-DC24	A6	DPDT	21.8	1100	24	6.09	5.03	4.80	4.61
* 653-G2R-24-AC24	G2R-24-AC24	A6	DPDT	37.5	260	24VAC	8.81	7.30	7.00	6.78
* 653-G2R-24-AC120	G2R-24-AC120	A6	DPDT	7.5	6500	120VAC	7.86	7.62	7.39	7.17
<b>High-Capacity, Semi-Sealed, Non-Latching, PCB Terminals</b>										
653-G2R-1A-E-DC5	G2R-1A-E-DC5	A7	SPST-NO	106.0	47	5	4.53	4.07	3.62	3.26
653-G2R-1A-E-DC12	G2R-1A-E-DC12	A7	SPST-NO	43.6	275	12	3.74	3.56	3.40	3.25
653-G2R-1A-E-DC24	G2R-1A-E-DC24	A7	SPST-NO	21.8	1100	24	3.17	2.98	2.85	2.73
653-G2R-1A-E-DC48	G2R-1A-E-DC48	A7	SPST-NO	11.5	4170	48	6.22	5.59	4.97	4.47
** 653-G2R-1A-ET13-DC24	G2R-1A-ET13-DC24	A7	SPST-NO	21.8	1100	24	4.51	4.39	4.28	4.17
* 653-G2R-1A-E-AC120	G2R-1A-E-AC120	A7	SPST-NO	7.5	6500	120VAC	8.84	7.95	7.06	6.35
653-G2R-1-E-DC5	G2R-1-E-DC5	A8	SPDT	106.0	47	5	4.77	4.49	4.30	3.87
653-G2R-1-E-DC12	G2R-1-E-DC12	A8	SPDT	37.5	260	24VAC	7.76	7.05	6.48	5.97
653-G2R-1-E-DC18	G2R-1-E-DC18	A8	SPDT	29.4	612	18	4.87	4.44	4.07	3.75
653-G2R-1-E-DC24	G2R-1-E-DC24	A8	SPDT	21.8	1100	24	3.49	3.38	3.27	3.18
* 653-G2R-1-E-AC120	G2R-1-E-AC120	A8	SPDT	7.5	6500	120VAC	8.24	7.72	7.37	6.66
<b>Upper Mounting Bracket, Non-Latching, QC Terminals</b>										
653-G2R-1A-T-DC12	G2R-1A-T-DC12	B9	SPST-NO	43.6	275	12	4.26	3.99	3.78	3.64
653-G2R-1A-T-DC24	G2R-1A-T-DC24	B9	SPST-NO	21.8	1100	24	4.24	3.98	3.80	3.62
* 653-G2R-1A-T-AC24	G2R-1A-T-AC24	B9	SPST-NO	37.5	260	24VAC	7.76	7.05	6.48	5.97
* 653-G2R-1-TAC120	G2R-1-TAC120	B9	SPST-NO	7.5	6500	120VAC	7.77	7.29	6.95	6.66
653-G2R-1-T-DC5	G2R-1-T-DC5	B10	SPDT	106.0	47	5	5.57	5.06	4.65	4.28
* 653-G2R-1-T-AC24	G2R-1-T-AC24	B10	SPDT	37.5	260	24VAC	6.46	6.05	5.79	5.56
* 653-G2R-1-T-AC120	G2R-1-T-AC120	B10	SPDT	7.5	6500	120VAC	7.20	6.73	6.43	6.16
<b>High-Sensitivity, Sealed, Non-Latching, PCB Terminals</b>										
653-G2R-24-H-DC12	G2R-24-H-DC12	A6	DPDT	30.0	400	12	7.19	6.46	5.74	5.17
<b>Dual Coil Latching, Semi-Sealed</b>										
† 653-G2RK-1-DC24	G2RK-1-DC24	C11	SPDT	34.6	694	24	10.00	9.08	8.33	7.69
† 653-G2RK-2-DC12	G2RK-2-DC12	C12	DPDT	70.6	170	12	17.84	16.05	14.27	12.84
† 653-G2RK-2-DC24	G2RK-2-DC24	C12	DPDT	34.6	694	24	9.59	8.53	8.10	7.67



# OMRON Power PCB Relays

This page of product is RoHS compliant.

## G6B SERIES: SWITCHING, SUBMINIATURE POWER PCB RELAYS

### Specifications:

- Rated load: 5A @ 250VAC/30VDC
- 8A @ 250VAC/30VDC for High-Capacity
- Contact material: Ag alloy
- Terminals: PCB straight

\*Reverse coil polarity

\*\*Contact material: AgSnIn

### Features:

- Low power consumption: 200mW
- Unique moving loop armature reduces relay size, magnetic interference, and contact bounce time
- Fully sealed construction



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Rated Current (mA)	Coil Resist. (Ω)	Coil Voltage (VDC)	Price Each			
							1	25	50	100

### Non-Latching

653-G6B-1114P-DC5	G6B-1114P-US-DC5	A1	SPST-NO	40.0	125.0	5	5.16	4.91	4.59	4.19
653-G6B-1114PUSDC6	G6B-1114P-US-DC6	A1	SPST-NO	33.3	180.0	6	5.32	4.87	4.45	4.10
653-G6B-1114P-DC12	G6B-1114P-US-DC12	A1	SPST-NO	16.7	720.0	12	5.14	4.91	4.66	4.19
653-G6B-1114P-DC12	G6B-1114P-1-US-DC12	A1	SPST-NO	16.7	720.0	12	5.66	5.34	4.80	4.32
653-G6B-1114P-DC24	G6B-1114P-US-DC24	A1	SPST-NO	8.3	2880.0	24	5.64	5.07	4.50	4.05
653-G6B-1114P-DC24	G6B-1114P-1-US-DC24	A1	SPST-NO	8.3	2880.0	24	6.39	5.74	5.10	4.59
653-G6B-1114PFDUSDC24	G6B-1114P-FD-US-DC24	A1	SPST-NO	8.3	2880.0	24	7.17	6.79	6.16	5.55
653-G6B-2114P-USDC5	G6B-2114P-1-US DC5	B2	SPST-NO+SPST-NC	40.0	125.0	5	7.73	6.95	6.18	5.56
653-G6B-2114P-DC6	G6B-2114P-US-DC6	B2	SPST-NO+SPST-NC	33.3	180.0	6	7.35	6.61	5.88	5.29
653-G6B-2114PUSDC12	G6B-2114P-1-US-DC12	B2	SPST-NO+SPST-NC	16.7	720.0	12	7.03	6.63	6.10	5.56
653-G6B-2114P-DC24	G6B-2114P-1-US-DC24	B2	SPST-NO+SPST-NC	8.3	2880.0	24	7.09	6.49	5.93	5.47
653-G6B-2214P-USDC5	G6B-2214P-US-DC5	B3	DPST-NO	60.0	83.3	5	6.44	5.80	5.71	5.29
653-G6B-2214P-DC12	G6B-2214P-US-DC12	B3	DPST-NO	25.0	480.0	12	5.00	4.90	4.80	4.68
653-G6B-2214P-DC24	G6B-2214P-US-DC24	B3	DPST-NO	12.5	1920.0	24	6.13	6.05	5.85	5.53
653-G6B-2014P-USDC5	G6B-2014P-US DC5	B4	DPST-NC	60.0	83.3	5	7.35	6.61	5.88	5.29

### Dual-Coil Latching

653-G6BK-1114P-DC5	G6BK-1114P-US-DC5	A5	SPST-NO	56.0	89.2	5	6.48	6.06	5.81	5.56
653-G6BK-1114P-US-DC12	G6BK-1114P-US-DC12	A5	SPST-NO	23.3	515.0	12	7.62	6.93	6.36	5.86

### High-Capacity, Non-Latching

653-G6B-1174P-DC5	G6B-1174P-US-DC5	C1	SPST-NO	60.0	83.3	5	6.49	6.03	5.75	5.17
653-G6B-1174P-DC12	G6B-1174P-US-DC12	C1	SPST-NO	16.7	720.0	12	6.16	5.95	5.75	5.17
653-G6B-1174P-DC24	G6B-1174P-US-DC24	C1	SPST-NO	8.3	2880.0	24	5.53	5.22	5.08	4.86
653-G6B1174PFDUSDC24	G6B-1174P-FD-US-DC24	C1	SPST-NO	8.3	2880.0	24	7.27	7.01	6.68	6.35

### Sockets for G6B Series

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Fits Series				1	25	50	100
				1	2	3	4				
653-P6B-04P	P6B-04P			G6B-1114P, G6B-1174P				2.16	1.95	1.73	1.56
653-P6B-06P	P6B-06P			G6BK-1114P				2.19	2.12	1.99	1.93
653-P6B-26P	P6B-26P			G6B-2114P, G6B-2214P				2.80	2.52	2.24	2.01

## G6C SERIES: SUBMINIATURE POWER PCB RELAYS

### Specifications:

- Rated load: 10A @ 250VAC/30VDC SPST-NO
- 8A @ 250VAC/30VDC SPST-NO+SPST-NC
- Terminals: PCB straight

### Features:

- Low power consumption: 200mW
- Unique moving loop armature reduces interference and contact bounce



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Rated Current (mA)	Coil Resist. (Ω)	Coil Voltage (VDC)	Price Each			
							1	25	50	100
653-G6C-1117PUSDC24	G6C-1117P-US-DC24	D1	SPST-NO	8.3	2880.0	24	6.92	6.29	5.70	5.13
653-G6C-2117P-USDC5	G6C-2117P-US-DC5	D2	SPST-NO+SPST-NC	40.0	125.0	5	7.51	6.76	6.01	5.40
653-G6C-2117PUSDC8	G6C-2117P-US-DC8	D2	SPST-NO+SPST-NC	25.0	320.0	8	7.90	7.40	6.58	6.26
653-G6C-2117P-DC12	G6C-2117P-US-DC12	D2	SPST-NO+SPST-NC	16.7	720.0	12	6.62	5.98	5.49	5.08

### Non-Latching, Semi-sealed

653-G6C-1114P-DC5	G6C-1114P-US-DC5	D1	SPST-NO	40.0	125.0	5	5.96	5.59	5.41	5.20
653-G6C-1114P-DC12	G6C-1114P-US-DC12	D1	SPST-NO	16.7	720.0	12	6.18	5.81	5.56	5.20
653-G6C-1114P-DC24	G6C-1114P-US-DC24	D1	SPST-NO	8.3	2880.0	24	6.36	5.71	5.45	5.23
653-G6C-2114P-US-DC3	G6C-2114P-US-DC3	D2	SPST-NO+SPST-NC	67.0	45.0	3	8.24	7.41	6.59	5.93
653-G6C-2114P-DC5	G6C-2114P-US-DC5	D2	SPST-NO+SPST-NC	40.0	125.0	5	6.07	5.70	5.42	5.04
653-G6C-2114P-DC12	G6C-2114P-US-DC12	D2	SPST-NO+SPST-NC	16.7	720.0	12	6.08	5.71	5.44	5.22
653-G6C-2114P-DC24	G6C-2114P-US-DC24	D2	SPST-NO+SPST-NC	8.3	2880.0	24	7.46	6.86	6.65	6.08

### Dual-Coil Latching, Fully Sealed

653-G6CK-2114P-DC5	G6CK-2114P-US-DC5	D6	SPST-NO+SPST-NC	56.0	89.3	5	10.69	9.61	8.54	7.69
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### Sockets for G6C Series

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Fits Series				1	25	50	100
				1	2	3	4				
653-P6C-06P	P6C-06P			G6C-1114P, G6C-2114P, G6C-1117, G6C-2117P				2.85	2.56	2.27	2.05

## G6D-ASI SERIES: SLIM, MINIATURE POWER PCB RELAYS

### Specifications:

- Rated load: 5A @ 250VAC/30VDC
- Terminals: PCB straight

\* Non-paraffin coil

### Features:

- Reduced board space ideal for high-density mounting
- Sealed construction allows automatic soldering and cleaning



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Rated Current (mA)	Coil Resist. (Ω)	Coil Voltage (VDC)	Price Each			
							1	25	50	100
653-G6D1A-ASI-DC5	G6D1A-ASI-DC5	E7	SPST-NO	40.0	125.0	5	4.96	4.64	4.45	4.26
653-G6D1A-ASI-DC12	G6D1A-ASI-DC12	E7	SPST-NO	16.7	720.0	12	4.40	4.12	3.94	3.89
653-G6D1A-ASI-DC24	G6D1A-ASI-DC24	E7	SPST-NO	8.3	2880.0	24	4.58	4.30	4.11	3.94
* 653-G6D1AASINPDC24	G6D1A-ASI-NP DC24	E7	SPST-NO	8.3	2880.0	24	7.10	6.38	5.67	5.10

### Sockets for G6D Series

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Fits Series				1	25	50	100
				1	2	3	4				
653-P6D-04P	P6D-04P			G6D				2.60	2.45	2.30	2.24

## G6DS SERIES: SLIM, MINIATURE POWER PCB RELAYS

### Specifications:

- Rated load: 5A @ 250VAC/30VDC
- Power consumption: 180mW (120mW High-Sensitivity)

### Features:

- Fully sealed
- Ideal for high-density mounting



For quantities greater than listed, call for quote.

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# OMRON Power PCB and Automotive Relays

OMRON

## G6M SERIES: SIL PACKAGE POWER PCB RELAYS

**Specifications:**

- Rated load: 3A @ 250VAC/30VDC
- Power consumption: 120mW

**Features:**

- Fully sealed
- Reduced area is ideal for high density mounting.



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Rated Current (mA)	Coil Resistance (Ω)	Coil Voltage (VDC)	Price Each			
							1	25	50	100
653-G6M-1A-DC5	G6M-1A-DC5	A1	SPST-NO	24.0	208	5	5.64	5.32	4.73	4.25
653-G6M-1A-DC12	G6M-1A-DC12	A1	SPST-NO	10.0	1200	12	5.91	5.32	4.73	4.25
653-G6M-1A-DC24	G6M-1A-DC24	A1	SPST-NO	5.0	4800	24	6.23	5.73	5.09	4.58

## G6RL SERIES: LOW PROFILE POWER PCB RELAYS

**Specifications:**

- Rated load: 10A @ 250VAC, NO  
8A @ 250VAC/5A @ 30VDC, NC  
8A @ 250VAC/5A @ 24VDC, NC 1(A), 1(A)-4ASI

**Features:**

- Max. switching capacity: 2500VA (NO)
- Clearance and creepage distance: 10mm
- Applications: Boilers, PLCs, I/O ports, timers



For quantities greater than listed, call for quote.

Flux Protected, AgSnIn Contacts

653-G6RL-1A-ASIDC24	G6RL-1A-ASI DC24	B2	SPST-NO	9.2	2618	24	3.45	3.07	2.92	2.68
653-G6RL-1A-ASIDC12	G6RL-1A-ASI DC12	B3	SPDT	18.3	654	12	3.71	3.35	2.97	2.68

Flux Protected, AgNi Contacts

653-G6RL-1A-DC3	G6RL-1A-DC3	B2	SPST-NO	73.3	40	3	3.43	3.08	2.74	2.46
653-G6RL-1A-DC5	G6RL-1A-DC5	B2	SPST-NO	44.0	113	5	3.18	2.83	2.68	2.46
653-G6RL-1A-DC12	G6RL-1A-DC12	B2	SPST-NO	18.3	654	12	3.43	3.08	2.74	2.46
653-G6RL-1-DC5	G6RL-1-DC5	B3	SPDT	44.0	113	5	3.53	3.17	2.82	2.54
653-G6RL-1-DC12	G6RL-1-DC12	B3	SPDT	18.3	654	12	4.14	3.72	3.31	2.98
653-G6RL-1-DC24	G6RL-1-DC24	B3	SPDT	9.2	2618	24	3.27	2.91	2.76	2.54

Fully Sealed, AgSnIn Contacts

653-G6RL-1A-ASIDC5	G6RL-1A-ASI DC5	B2	SPST-NO	44.0	113	5	3.54	3.19	2.84	2.55
653-G6RL-14-ASIDC5	G6RL-14-ASI DC5	B3	SPDT	44.0	113	5	3.73	3.36	2.99	2.69
653-G6RL-14-ASIDC12	G6RL-14-ASI DC12	B3	SPDT	18.3	654	12	3.73	3.36	2.98	2.69
653-G6RL-14-ASIDC24	G6RL-14-ASI DC24	B3	SPDT	9.2	2618	24	3.86	3.48	3.09	2.78

## G6RN SERIES: HEAVY-DUTY, MINIATURE POWER PCB RELAYS

**Specifications:**

- Rated load: 8A @ 250VAC/5A @ 30VDC
- Sealed plastic construction
- Contact material: Ag alloy + gold plating
- Ideal for switching contactors, solenoids and motors

**Features:**

• Sealed plastic construction  
• Ideal for switching contactors, solenoids and motors

For quantities greater than listed, call for quote.

653-G6RN-1A-DC5	G6RN-1A-DC5	C4	SPST-NO	43.9	114	5	3.33	3.00	2.66	2.40
653-G6RN-1A-DC12	G6RN-1A-DC12	C4	SPST-NO	18.3	655	12	2.89	2.61	2.31	2.09
653-G6RN-1A-DC24	G6RN-1A-DC24	C4	SPST-NO	9.2	2620	24	3.43	3.09	2.73	2.46
653-G6RN-1-DC5	G6RN-1-DC5	C5	SPDT	43.9	114	5	2.94	2.75	2.65	2.53
653-G6RN-1-DC12	G6RN-1-DC12	C5	SPDT	18.3	655	12	2.45	2.30	2.25	2.22
653-G6RN-1-DC24	G6RN-1-DC24	C5	SPDT	9.2	2620	24	3.53	3.18	2.82	2.54
653-G6RN-1-DC48	G6RN-1-DC48	C5	SPDT	5.2	9210	48	3.58	3.20	2.94	2.71

## G8P SERIES: COMPACT POWER PCB RELAYS

**Specifications:**

- Rated load: SPST-NO 30A @ 250VAC / 20A @ 28VDC
- SPST-NO (-BG) 20A @ 250VAC / 28VDC
- SPDT 10A / 20A @ 250VAC / 28VDC

**Features:**

- Up to 30A switching capacity in compact package
- UL Class F coil insulation standard
- Minimum 6kV impulse surge withstand
- G8P-1A4P-BG models feature big contact gap and high dielectric strength

Ideal for home and industrial appliances, HVAC and many other applications

For quantities greater than listed, call for quote.

653-G8P1C4PVDC121	G8P-1C4P-V DC12	D6	SPDT	77.0	155	12	3.74	3.40	3.12	2.88
653-G8P1C4PVDC181	G8P-1C4P-V DC18	D6	SPDT	47.0	380	18	3.50	3.18	2.92	2.69

Omrion

PCB Relays

## G8HN SERIES: MICRO ISO AUTOMOTIVE RELAYS

**Specifications:**

- Max. switching current: 60A (NO), 30A (NC), steady 20A (NO), 10A (NC)
- Coil resistance ±20: 110Ω
- Electrical service life: 100,000 cycles min.

**Features:**

- Contact material: Silver tin oxide (cadmium free)
- Rated voltage: 12VDC

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Power Consumption	Price Each			
					1	25	50	100
653-G8HN1C2TRDC12	G8HN-1C2T-R-DC12	A	SPDT	1309mW	3.98	3.65	3.40	3.18

## G8JN SERIES: GENERAL PURPOSE AUTOMOTIVE RELAYS

**Specifications:**

- Contact form: SPDT
- Standard ISO terminal footprint
- Resistance without suppression resistor: 78Ω ±15%
- Rated voltage: 12VDC

**Features:**

- Max. resistive load: 35A (NO)/20A (NC)
- Max. inrush current (inductive load): 100A (NO)/40A (NC)
- Electrical service life: 100,000 cycles min.

For quantities greater than listed, call for quote.

653-G8JN1C7TDC12	G8JN-1C7T-DC12	B	-	-	6.26	5.93	5.54	5.15
653-G8JN1C7TMFDC12	G8JN-1C7T-MF-DC12	C	-	Molded plastic	5.11	4.84	4.53	4.20
653-G8JN1C7TRDC12	G8JN-1C7T-R-DC12	B	680Ω	-	3.72	3.71	3.61	3.47
653-G8JN1C7TMFRDC12	G8JN-1C7T-MF-R-DC12	C	680Ω	Molded plastic	6.57	6.24	5.72	5.15
<b>Weatherproof Covers</b>								
653-G8JN1C6TDC12	G8JN-1C6T-DC12	D	-	-	7.09	6.38	5.77	5.19
653-G8JN1C6TRDC12	G8JN-1C6T-R-DC12	D	680Ω	-	5.73	5.16	4.58	4.12
653-G8JN1C6TFRDC12	G8JN-1C6T-F-R-DC12	E	680Ω	Metal	4.00	3.89	3.79	3.69
653-G8JN1C6TFDC12	G8JN-1C6T-F-DC12	E	-	Metal	8.17	7.74	7.11	6.40

## G8JR SERIES: POWER, MINI ISO AUTOMOTIVE RELAYS

**Specifications:**

- Contact form: SPST
- Fully automated assembly
- ISO footprint and terminals

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Rated Voltage	Coil Resistance ±15%	Coil Resistance with 680Ω	Price Each			
						1	25	50	100
653-G8JR1A7TRDC12	G8JR-1A7T-R-DC12	F	12VDC	71Ω	64.5Ω	7.01	6.30	5.60	5.04

## G8W SERIES: PLUG-IN, MINI-280 ISO AUTOMOTIVE RELAYS

**Specifications:**

- Supplied with suppression resistor 680Ω
- Resistance without suppression resistor: 91Ω ±15%
- Electrical service life: 100,000 cycles min.

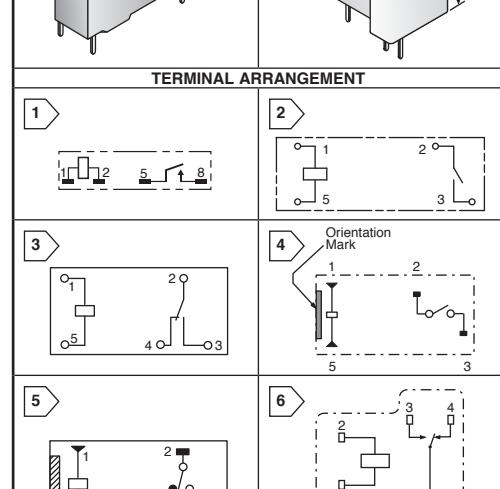
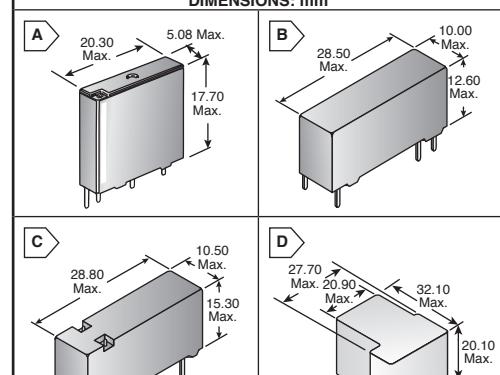
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Description	Price Each			
					1	25	50	100
653-G8W1A7TRDC12	G8W-1A7T-R-DC12	G	SPST-NO	Standard with resistor	4.74	4.26	3.78	3.40
653-G8W1C7TRDC12	G8W-1C7T-R-DC12	G	SPDT	Standard with resistor	5.62	5.05	4.49	4.04
653-G8W1C6TRDC12	G8W-1C6T-R-DC12	G	SPDT	Weatherproof with resistor	4.71	4.60	4.42	4.15
653-G8W1A6TFRDC12	G8W-1A6T-F-R-DC12	G	SPST-NO	Weatherproof w/ straight metal bracket w/ resistor	5.78	5.26	4.67	4.21
653-G8W1C6TFRDC12	G8W-1C6T-F-R-DC12	G	SPDT	Weatherproof w/ straight metal bracket w/ resistor	5.03	4.58	4.07	3.66

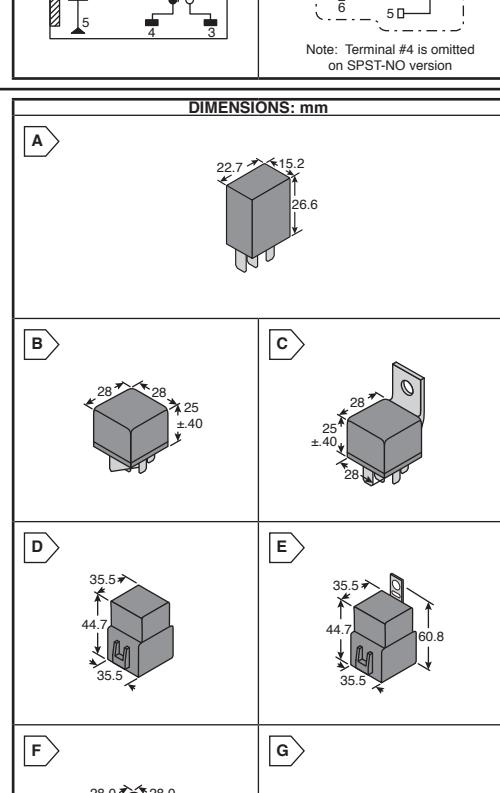
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Note: Terminal #4 is omitted on SPST-NO version



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(800) 346-6873

# PANASONIC Power Relays

Panasonic

Panasonic Power relays are RoHS compliant and ideal for Home Appliances, HVAC and vehicle applications as well as Lighting, Spa and Elevator Control and Industrial Equipment. Miniature package types for space savings with low power consumption. Polarized Latching types featuring high switching capacity and excellent vibration resistance. Safety Relays, with EN50205 forcibly guided contacts High Capacity DC Cutoff types up to 300A General Purpose - available with sockets.

## ADJ SERIES

• Mounting Style: PC Board

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Nominal Operating Current (mA)	Coil Resist. (Ω)	Price Each			
							1	10	100	500
<b>Contact Arrangement : 1 Form A</b>										
769-ADJ23005	ADJ23005-2	A	16	5	-	100	15.80	15.16	10.97	9.68
769-ADJ24005	ADJ24005-2	A	16	5	-	100	15.80	15.16	10.97	9.68
<b>Contact Arrangement : 1 Form C</b>										
769-ADJ14005	ADJ14005-2	A	16	5	-	100	15.80	15.16	10.97	9.68
769-ADJ14012	ADJ14012-2	A	16	12	-	576	15.80	15.16	10.97	9.68

## ADQ SERIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-ADQ23Q012	ADQ23Q012	B	30	12	1 Form A	PCB	23.10	22.17	16.04	14.15
769-ADQ23Q04H	ADQ23Q04H	B	30	4.5	1 Form A	PCB	23.10	22.17	16.04	14.15

## ADW1 SERIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Nominal Operating Current (mA)	Coil Resist. (Ω)	Price Each			
							1	10	100	500
<b>Mounting Style: PC Board</b>										
769-ADW1103W	ADW1103W	C	8	3	66.7	45	8.55	7.86	5.94	5.24
769-ADW1105W	ADW1105W	C	8	5	40.0	125	8.55	7.86	5.94	5.24
769-ADW1112W	ADW1112W	C	8	12	16.7	720	8.55	7.86	5.94	5.24
769-ADW1124W	ADW1124W	C	8	24	8.3	2880	8.55	7.86	5.94	5.24
769-ADW1203W	ADW1203W	C	8	3	66.7	45	9.68	8.89	6.72	5.93
769-ADW1205W	ADW1205W	C	8	5	44.0	125	9.86	8.06	6.71	5.92
769-ADW1206W	ADW1206W	C	8	6	33.3	180	9.86	8.06	6.71	5.92
769-ADW1212W	ADW1212W	C	8	12	16.7	720	9.86	8.06	6.71	5.92

**Mounting Style: Thru-Hole**

769-ADW1109TW	ADW1109TW	D	8	9	22.2	405	7.74	7.11	5.38	4.74
769-ADW1112TW	ADW1112TW	D	8	12	16.7	720	7.74	7.11	5.38	4.74
769-ADW1212TW	ADW1212TW	D	8	12	33.3/33.3	360/360	8.87	8.15	6.16	5.43
769-ADW1224TW	ADW1224TW	D	8	24	16.7/16.7	1440/1440	8.87	8.15	6.16	5.43
769-ADW1103HT	ADW1103HT	E	8	3	66.7	45	7.76	6.34	5.28	4.66
769-ADW1105HT	ADW1105HT	E	8	3	40	125	7.76	6.34	5.28	4.66
769-ADW1106HT	ADW1106HT	E	8	6	33.3	180	7.76	6.34	5.28	4.66
769-ADW1109HT	ADW1109HT	E	8	9	22.2	405	7.76	6.34	5.28	4.66
769-ADW1112HT	ADW1112HT	E	8	12	16.7	720	7.76	6.34	5.28	4.66
769-ADW1124HT	ADW1124HT	E	8	24	8.3	2880	7.76	6.34	5.28	4.66
769-ADW1203HT	ADW1203HT	E	8	3	133.3	22.5	8.81	7.20	6.00	5.29
769-ADW1205HT	ADW1205HT	E	8	5	80	62.5	8.81	7.20	6.00	5.29
769-ADW1206HT	ADW1206HT	E	8	6	66.7	90	8.81	7.20	6.00	5.29
769-ADW1209HT	ADW1209HT	E	8	9	44.4	202.5	8.81	7.20	6.00	5.29
769-ADW1212HT	ADW1212HT	E	8	12	33.3	360	8.81	7.20	6.00	5.29
769-ADW1224HT	ADW1224HT	E	8	24	16.7	1440	8.81	7.20	6.00	5.29
769-ADW1103HTW	ADW1103HTW	E	16	3	66.7	45	7.54	6.16	5.13	4.53
769-ADW1105HTW	ADW1105HTW	E	16	3	40	125	7.54	6.16	5.13	4.53
769-ADW1106HTW	ADW1106HTW	E	16	6	33.3	180	7.54	6.16	5.13	4.53
769-ADW1109HTW	ADW1109HTW	E	16	9	22.2	405	7.54	6.16	5.13	4.53
769-ADW1112HTW	ADW1112HTW	E	16	12	16.7	720	7.54	6.16	5.13	4.53
769-ADW1124HTW	ADW1124HTW	E	16	24	8.3	2880	7.54	6.16	5.13	4.53
769-ADW1203HTW	ADW1203HTW	E	16	3	133.3	22.5	8.59	7.02	5.84	5.16
769-ADW1206HTW	ADW1206HTW	E	16	6	66.7	90	8.14	6.65	5.54	4.89
769-ADW1209HTW	ADW1209HTW	E	16	9	44.4	202.5	8.59	7.02	5.84	5.16
769-ADW1212HTW	ADW1212HTW	E	16	12	33.3	360	8.59	7.02	5.84	5.16
769-ADW1224HTW	ADW1224HTW	E	16	24	16.7	1440	8.59	7.02	5.84	5.16

## ALA SERIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-ALA2F05	ALA2F05	F	3	5	2 Form A	PCB	1.96	1.60	1.36	1.20
769-ALA2F24	ALA2F24	F	3	24	2 Form A	PCB	2.03	1.66	1.42	1.25
769-ALA2PF12	ALA2PF12	F	5	12	2 Form A	PCB	2.25	1.84	1.57	1.38

## ALE SERIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-ALE14B24	ALE14B24	G	16	24	1 Form A	PCB	2.45	2.00	1.70	1.50
769-ALE1PB24	ALE1PB24	G	16	24	1 Form A	PCB	2.82	2.30	1.96	1.73

## ALF SERIES

For quantities greater than listed, call for quote.

769-ALF1P12	ALF1P12	H	20	12	75	160	4.02	3.28	2.79	2.46
<b>Mounting Style: TMP</b>										
769-ALF1T12	ALF1T12	I	20	12	75	160	4.02	3.28	2.79	2.46
769-ALF1T24	ALF1T24	I	20	24	37.5	640	4.36	3.56	3.03	2.67

## ALQ SERIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Nominal Operating Current (mA)	Coil Resist. (Ω)	Price Each			
							1	10	100	500
<b>Contact Arrangement: Form A - Nominal Operating Power: 200mW</b>										
769-ALQ305	ALQ305	D	10	5	40.0	125	2.35	1.92	1.64	1.44
769-ALQ306	ALQ306	D	10	6	33.3	180	2.35	1.92	1.64	1.44
769-ALQ309	ALQ309	D	10	9	22.2	405	2.35	1.92	1.64	1.44
769-ALQ312	ALQ312	D	10	12	16.7	720	2.35	1.92	1.64	1.44
769-ALQ318	ALQ318	D	10	18	11.1	1620	2.79	2.28	1.94	1.71
769-ALQ324	ALQ324	D	10	24	8.3	2880	2.79	2.28	1.94	1.71
<b>Contact Arrangement: Form C - Nominal Operating Power: 400mW</b>										
769-ALQ105	ALQ105	D	10	5	80.0	62.5	2.47	2.02	1.72	1.52

# PANASONIC Power Relays

Panasonic Power relays are RoHS compliant and ideal for Home Appliances, HVAC and vehicle applications as well as Lighting, Spa and Elevator Control and Industrial Equipment. Miniature package types for space savings with low power consumption. Polarized Latching types featuring high switching capacity and excellent vibration resistance. Safety Relays, with EN50205 forcibly guided contacts High Capacity DC Cutoff types up to 300A General Purpose - available with sockets.

## ALZ SERIES

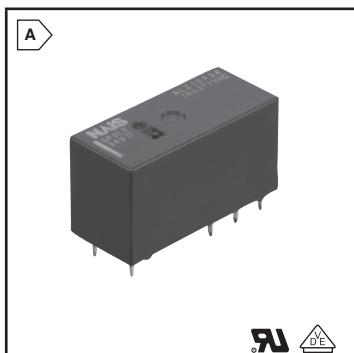
- Contact Arrangement: 1 Form C
- Mounting Style: PC Board

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Nominal Operating Current (mA)	Coil Resist. (Ω)	Price Each			
							1	10	100	500
769-ALZ12B12	ALZ12B12	A	16	12	33.3	360	2.89	2.36	2.01	1.77
769-ALZ12F12	ALZ12F12	A	16	12	33.3	360	3.09	2.97	2.15	1.89
769-ALZ12B24	ALZ12B24	A	16	24	16.7	1440	3.09	2.52	2.15	1.89
769-ALZ12F24	ALZ12F24	A	16	24	16.7	1440	3.21	2.62	2.23	1.97

## DK SERIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
<b>Non-Latching</b>										
769-DK1A-12V-F	DK1A-12V-F	B	10	12	1 Form A	PCB	9.07	8.33	6.29	5.55
769-DK1A-12V	DK1A-12V	B	8	12	1FormA/1FormB	PCB	13.33	12.79	9.25	8.16
769-DK1A-24V	DK1A-24V	B	8	24	1FormA/1FormB	PCB	13.33	12.79	9.25	8.16
769-DK1A-5V	DK1A-5V	B	8	5	1FormA/1FormB	PCB	13.33	12.79	9.25	8.16
769-DK1A-24V-F	DK1A-24V-F	B	8	24	1FormA/1FormB	PCB	9.07	8.33	6.29	5.55
769-DK1A-5V-F	DK1A-5V-F	B	10	5	1 Form A	PCB	9.07	8.33	6.29	5.55
769-DK2A-12V	DK2A-12V	B	8	12	2 Form A	PCB	13.33	12.79	9.25	8.16
769-DK2A-24V	DK2A-24V	B	8	24	2 Form A	PCB	13.33	12.79	9.25	8.16
769-DK2A-5V	DK2A-5V	B	8	5	2 Form A	PCB	13.25	12.72	9.20	8.12
<b>Dual Coil Latching</b>										
769-DK1A-L2-24V-F	DK1A-L2-24V-F	B	10	24	1 Form A	PCB	11.61	10.67	8.05	7.11
769-DK1A-L2-12V-F	DK1A-L2-12V-F	B	10	12	1 Form A	PCB	11.61	10.67	8.06	7.11
769-DK1A1B-L2-12V	DK1A1B-L2-12V	B	8	12	1FormA/1FormB	PCB	15.93	15.28	11.05	9.75
769-DK1A1B-L2-5V	DK1A1B-L2-5V	B	8	5	1FormA/1FormB	PCB	15.93	15.28	11.05	9.75
769-DK2A-L2-12V	DK2A-L2-12V	B	8	12	2 Form A	PCB	15.17	14.55	10.53	9.29
769-DK2A-L2-5V	DK2A-L2-5V	B	8	5	2 Form A	PCB	15.17	14.55	10.53	9.29

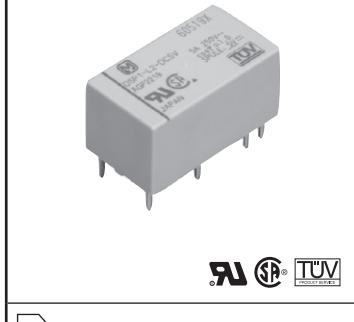


UL cUL TUV

## DSP SERIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
<b>Non-Latching</b>										
769-DSP1A-DC12V	DSP1A-DC12V	C	8	12	1 Form A	PCB	7.62	7.00	5.29	4.67
769-DSP1A-DC24V	DSP1A-DC24V	C	8	24	1 Form A	PCB	7.62	7.00	5.29	4.67
769-DSP1A-DC5V	DSP1A-DC5V	C	8	5	1 Form A	PCB	7.62	7.00	5.29	4.67
769-DSP1A-DC9V	DSP1A-DC9V	C	8	9	1 Form A	PCB	7.62	7.00	5.29	4.67
769-DSP2A-DC12V	DSP2A-DC12V	C	5	12	2 Form A	PCB	8.40	7.72	5.84	5.15
769-DSP2A-DC24V	DSP2A-DC24V	C	5	24	2 Form A	PCB	8.40	7.72	5.84	5.15
769-DSP2A-DC5V	DSP2A-DC5V	C	5	5	2 Form A	PCB	8.60	7.72	5.84	5.15
769-DSP1-DC12V-F	DSP1-DC12V-F	C	5	12	1FormA/1FormB	PCB	9.07	8.33	5.97	5.27
769-DSP1-DC5V-F	DSP1-DC5V-F	C	5	5	1FormA/1FormB	PCB	8.60	7.90	5.97	5.27
<b>Dual Coil Latching</b>										
769-DSP1A-L2-DC12V	DSP1A-L2-DC12V	C	8	12	1 Form A	PCB	8.60	7.90	5.97	5.27
769-DSP1A-L2-DC24V	DSP1A-L2-DC24V	C	8	24	1 Form A	PCB	8.59	7.02	5.96	5.26
769-DSP1A-L2-DC5V	DSP1A-L2-DC5V	C	8	5	1 Form A	PCB	8.60	7.90	5.97	5.27
769-DSP2A-L2-DC12V	DSP2A-L2-DC12V	C	5	12	2 Form A	PCB	9.41	8.64	6.53	5.76
769-DSP2A-L2-DC24V	DSP2A-L2-DC24V	C	5	24	2 Form A	PCB	9.41	8.64	6.53	5.76
769-DSP2A-L2-DC5V	DSP2A-L2-DC5V	C	5	5	2 Form A	PCB	9.41	8.64	6.53	5.76
769-DSP1-L2-DC12V-F	DSP1-L2-DC12V-F	C	5	12	1FormA/1FormB	PCB	9.07	8.33	6.29	5.55
769-DSP1-L2-DC24V-F	DSP1-L2-DC24V-F	C	5	24	1FormA/1FormB	PCB	9.07	8.33	6.29	5.55
769-DSP1-L2-DC5V-F	DSP1-L2-DC5V-F	C	5	5	1FormA/1FormB	PCB	9.07	8.33	6.29	5.55

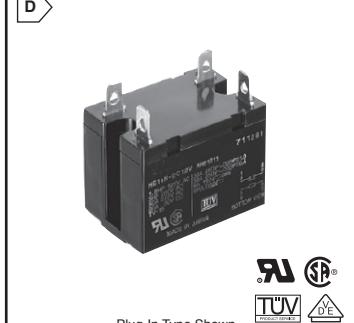


UL cUL TUV

## HE SERIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage	Contact Arrangement	Mounting Type	Price Each			
							1	10	25	50
<b>HE1AN Series</b>										
769-HE1AN-DC12V	HE1AN-DC12V	D	30	12VDC	1 Form A	Plug-In	23.42	22.47	20.79	19.12
769-HE1AN-DC24V	HE1AN-DC24V	D	30	24VDC	1 Form A	Plug-In	23.42	22.47	20.79	19.12
769-HE1AN-AC24V	HE1AN-AC24V	D	30	24VAC	1 Form A	Plug-In	28.15	27.01	25.00	22.98
769-HE1AN-AC120V	HE1AN-AC120V	D	30	120VAC	1 Form A	Plug-In	28.14	22.98	21.83	20.68
769-HE1AN-AC240V	HE1AN-AC240V	D	30	240VAC	1 Form A	Plug-In	28.15	27.01	25.00	22.98
769-HE2AN-DC12V	HE2AN-DC12V	D	20	12VDC	2 Form A	Plug-In	24.69	20.16	19.15	18.14
769-HE2AN-DC24V	HE2AN-DC24V	D	20	24VDC	2 Form A	Plug-In	24.70	23.69	21.92	20.16
769-HE1AN-Q-DC12V	HE1AN-Q-DC12V	D	30	12VDC	1 Form A	Top Mount	23.42	22.47	20.79	19.12
769-HE1AN-Q-DC24V	HE1AN-Q-DC24V	D	30	24VDC	1 Form A	Top Mount	23.42	22.47	20.80	19.12
769-HE1AN-Q-DC48V	HE1AN-Q-DC48V	D	30	48VDC	1 Form A	Top Mount	23.42	22.47	20.80	19.12
769-HE1AN-Q-AC120V	HE1AN-Q-AC120V	D	30	120VAC	1 Form A	Top Mount	28.14	22.98	21.83	20.68
769-HE2AN-Q-DC12V	HE2AN-Q-DC12V	D	25	12VDC	2 Form A	Top Mount	24.69	20.16	19.15	18.14
769-HE2AN-Q-AC24V	HE2AN-Q-AC24V	D	20	24VAC	2 Form A	Top Mount	29.59	24.16	22.95	21.74
769-HE2AN-Q-AC120V	HE2AN-Q-AC120V	D	20	120VAC	2 Form A	Top Mount	29.59	24.16	22.95	21.74
769-HE2AN-Q-DC24V	HE2AN-Q-DC24V	D	25	24VDC	2 Form A	Top Mount	24.69	20.16	19.15	18.14
769-HE1AN-S-AC120V	HE1AN-S-AC120V	D	30	120VAC	1 Form A	Screw Term. 36.11	30.70	29.45	28.00	25.06
769-HE1AN-S-DC12V	HE1AN-S-DC12V	D	30	12VDC	1 Form A	Screw Term. 33.58	33.59	32.22	29.82	27.42
769-HE1AN-S-DC24V	HE1AN-S-DC24V	D	30	24VDC	1 Form A	Screw Term. 33.58	28.54	27.38	26.05	23.30
769-HE2AN-S-DC24V	HE2AN-S-DC24V	D	25	24VDC	2 Form A	Screw Term. 34.86	34.86	33.45	30.98	28.46
769-HE2AN-SW-DC24V	HE2AN-SW-DC24V	D	25	24VDC	2 Form A	Screw Term. 33.85	33.85	27.64	26.25	24.87



Plug-In Type Shown

## HE-V SERIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage	Contact Arrangement	Mounting Type	Price Each				
							1	2	5	10	
<b>HEV2AN Series</b>											
769-HEV2AN-P-DC6V	HEV2aN-P-DC6V	E	20	6VDC	2 Form A	PCB	135.17	132.41	131.03	129.65	
769-HEV2AN-P-DC12V	HEV2aN-P-DC12V	E	20	12VDC	2 Form A	PCB	135.17	132.41	131.03	129.65	
769-HEV2AN-P-DC24V	HEV2aN-P-DC24V	E	20	24VDC	2 Form A	PCB	135.17	132.41	131.03	129.65	
<b>SOCKETS</b>											
MOUSER STOCK NO.	Panasonic Part No.	Fig.	Description					Price Each			
			1	10	100	500					
769-DSP1A-PS	DSP1A-PS		For DSP1A Relays					3.14	2.56	2.18	1.92
769-DSP2A-PS	DSP2A-PS		For DSP2A Relays					5.66	4.62	3.93	3.47
769-DSP2A-PSL2	DSP2A-PSL2		For DSP2A-L2 Relays					6.			

# PANASONIC Power Relays

Panasonic

RoHS Compliant  
Panasonic Power relays are RoHS compliant and ideal for Home Appliances, HVAC and vehicle applications as well as Lighting, Spa and Elevator Control and Industrial Equipment. Miniature package types for space savings with low power consumption. Polarized Latching types featuring high switching capacity and excellent vibration resistance. Safety Relays, with EN50205 forcibly guided contacts High Capacity DC Cutoff types up to 300A General Purpose - available with sockets.

## JM SERIES

• Contact Arrangement: 1 Form A

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Nominal Operating Current (mA)	Coil Resist. (Ω)	Price Each			
							1	10	100	500
769-JM1AN-TMP-DC5V-F	JM1AN-TMP-DC5V-F	A	20	5	180	27.8	6.22	5.72	4.32	3.81

## JQ SERIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-JQ1A-12V-F	JQ1A-12V-F	B	5	12	1 Form A	PCB	4.24	3.46	2.95	2.60
769-JQ1A-24V-F	JQ1A-24V-F	B	5	24	1 Form A	PCB	4.24	3.46	2.95	2.60
769-JQ1A-5V	JQ1A-5V	B	5	5	1 Form A	PCB	4.31	3.53	2.94	2.59
769-JQ1A-5V-F	JQ1A-5V-F	B	5	5	1 Form A	PCB	4.24	3.46	2.95	2.60
769-JQ1AP-12V-F	JQ1AP-12V-F	B	10	12	1 Form A	PCB	4.66	3.80	3.23	2.85
769-JQ1AP-24V-F	JQ1AP-24V-F	B	10	24	1 Form A	PCB	4.66	3.80	3.23	2.85
769-JQ1AP-5V-F	JQ1AP-5V-F	B	5	5	1 Form A	PCB	4.66	3.80	3.23	2.85
769-JQ1-12V-F	JQ1-12V-F	B	5	12	1 Form C	PCB	4.66	3.80	3.23	2.85
769-JQ1-24V-F	JQ1-24V-F	B	5	24	1 Form C	PCB	4.66	3.80	3.23	2.85
769-JQ1-5V-F	JQ1-5V-F	B	5	5	1 Form C	PCB	4.66	3.80	3.23	2.85
769-JQ1P-12V-F	JQ1P-12V	B	10	12	1 Form C	PCB	5.10	4.16	3.54	3.12
769-JQ1P-24V-F	JQ1P-24V-F	B	10	24	1 Form C	PCB	5.10	4.16	3.54	3.12
769-JQ1P-5V-F	JQ1P-5V-F	B	10	5	1 Form C	PCB	5.10	4.16	3.54	3.12

## JS SERIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-JS1A-12V-F	JS1A-12V-F	C	10	12	1 Form A	PCB	1.62	1.32	1.13	.99
769-JS1A-24V-F	JS1A-24V-F	C	10	24	1 Form A	PCB	1.64	1.34	1.14	1.01
769-JS1A-48V-F	JS1A-48V-F	C	10	48	1 Form A	PCB	2.16	1.76	1.50	1.32
769-JS1A-5V-F	JS1A-5V-F	C	10	5	1 Form A	PCB	1.62	1.32	1.13	.99
769-JS1-12V-F	JS1-12V-F	C	10	12	1 Form C	PCB	1.67	1.36	1.16	1.02
769-JS1-24V-F	JS1-24V-F	C	10	24	1 Form C	PCB	1.86	1.52	1.30	1.14
769-JS1-48V-F	JS1-48V-F	C	10	48	1 Form C	PCB	2.23	1.82	1.55	1.37
769-JS1-5V-F	JS1-5V-F	C	10	5	1 Form C	PCB	1.67	1.36	1.16	1.02
769-JS1-6V-F	JS1-6V-F	C	10	6	1 Form C	PCB	1.67	1.36	1.16	1.02
769-JS1-9V-F	JS1-9V-F	C	10	9	1 Form C	PCB	1.67	1.36	1.16	1.02
769-JS1-B-12V-F	JS1-B-12V-F	C	10	12	1 Form C	PCB	1.86	1.52	1.30	1.14
769-JS1-B-24V-F	JS1-B-24V-F	C	10	24	1 Form C	PCB	1.89	1.54	1.31	1.16

## JTN SERIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Nominal Operating Current (mA)	Coil Resist. (Ω)	Price Each			
							1	10	100	500
<b>Mounting Style: PC Board</b>										
769-JTN1AS-PA-F-DC5V	JTN1AS-PA-F-DC5V	D	30	5	1 Form A	161.3	4.02	3.28	2.79	2.46
769-JTN1AS-PA-F-DC12V	JTN1AS-PA-F-DC12V	D	10/20	12	1 Form C	66.6	4.34	3.54	3.01	2.66
769-JTN1ASPAFDC12V	JTN1AS-PA-F-DC12V	D	30	12	1 Form A	66.6	4.02	3.28	2.79	2.46
769-JTN1AS-PA-F-DC24V	JTN1AS-PA-F-DC24V	D	10/20	24	1 Form C	33.3	4.41	3.60	3.06	2.70
769-JTN1ASPAFDC24V	JTN1AS-PA-F-DC24V	D	30	24	1 Form A	33.3	4.09	3.34	2.84	2.51
<b>Mounting Style: TMP</b>										
769-JTN1ASTMPFDC5V	JTN1AS-TMP-F-DC5V	E	30	5	1 Form A	161.3	4.34	3.54	3.01	2.66
769-JTN1ASTMPFDC6V	JTN1AS-TMP-F-DC6V	E	30	6	1 Form A	133.3	4.34	3.54	3.01	2.66
769-JTN1ASTMPFDC12V	JTN1AS-TMP-F-DC12V	E	10/20	12	1 Form C	66.6	4.63	3.78	3.22	2.84
769-JTN1ASTMPFDC12V	JTN1AS-TMP-F-DC12V	E	30	12	1 Form A	66.6	4.34	3.54	3.01	2.66
769-JTN1ASTMPFDC24V	JTN1AS-TMP-F-DC24V	E	30	24	1 Form A	33.3	4.41	3.60	3.06	2.70

## JVN SERIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-JVN1A-12V-F	JVN1A-12V-F	F	10/20	12	1 Form A	PCB	7.25	6.66	5.04	4.44

## JW SERIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-JW1FSN-B-DC12V	JW1FSN-B-DC12V	G	10	12	1 Form C	PCB	3.33	2.72	2.32	2.04
769-JW1FSN-B-DC24V	JW1FSN-B-DC24V	G	10	24	1 Form C	PCB	3.55	2.90	2.47	2.18
769-JW1FSN-B-DC5V	JW1FSN-B-DC5V	G	10	5	1 Form C	PCB	3.33	2.72	2.32	2.04
769-JW1FSN-DC12V	JW1FSN-DC12V	G	10	12	1 Form C	PCB	3.36	2.74	2.33	2.06
769-JW1FSN-DC24V	JW1FSN-DC24V	G	10	24	1 Form C	PCB	3.53	2.88	2.45	2.16
769-JW1FSN-DC48V	JW1FSN-DC48V	G	10	48	1 Form C	PCB	3.65	2.98	2.54	2.24
769-JW1FSN-DC5V	JW1FSN-DC5V	G	10	5	1 Form C	PCB	3.36	2.74	2.33	2.06
769-JW1FSN-DC6V	JW1FSN-DC6V	G	10	6	1 Form C	PCB	3.33	2.72	2.32	2.04
769-JW1FSN-DC9V	JW1FSN-DC9V	G	10	9	1 Form C	PCB	3.33	2.72	2.32	2.04
769-JW2ASN-DC12V	JW2ASN-DC12V	G	5	12	2 Form A	PCB	3.53	2.88	2.45	2.16
769-JW2ASN-DC24V	JW2ASN-DC24V	G	5	24	2 Form A	PCB	3.68	3.00	2.55	2.25
769-JW2ASN-DC5V	JW2ASN-DC5V	G	5	5	2 Form A	PCB	3.63	2.96	2.52	2.22
769-JW2SN-B-DC12V	JW2SN-B-DC12V	G	5	12	2 Form C	PCB	3.92	3.20	2.72	2.40
769-JW2SN-DC12V	JW2SN-DC12V	G	5	12	2 Form C	PCB	3.80	3.10	2.64	2.33
769-JW2SN-DC24V	JW2SN-DC24V	G	5	24	2 Form C	PCB	4.02	3.28	2.79	2.46
769-JW2SN-DC48V	JW2SN-DC48V	G	5	48	2 Form C	PCB	4.12	3.36	2.86	2.52
769-JW2SN-DC5V	JW2SN-DC5V	G	5	5	2 Form C	PCB	3.80	3.10	2.64	2.33
769-JW2SN-DC6V	JW2SN-DC6V	G	5	6	2 Form C	PCB	3.80	3.10	2.64	2.33
769-JW2SN-DC9V	JW2SN-DC9V	G	5	9	2 Form C	PCB	3.80	3.10	2.64	2.33

## SOCKETS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Description			Price Each			
			1	10	100	500			
769-JW1-PS	JW1-PS		For JW1 Series	3.50	2.86	2.44	2.14		
769-JW2-PS	JW2-PS		For JW2 Relays	3.92	3.20	2.72	2.72		

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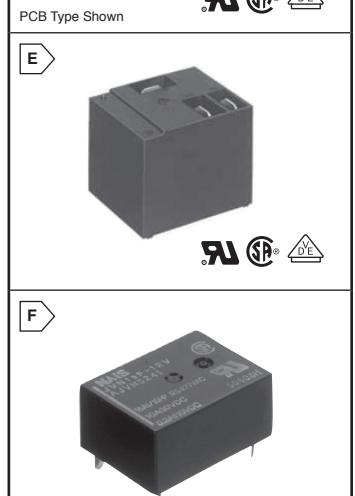
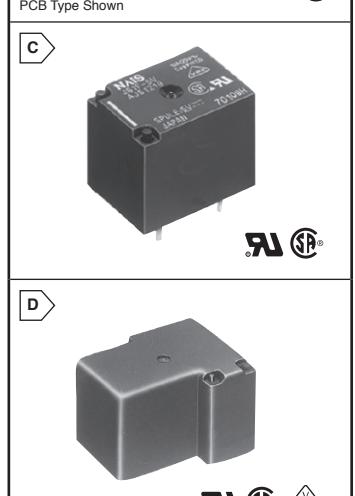
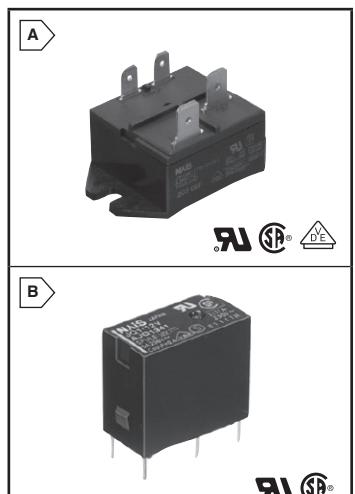
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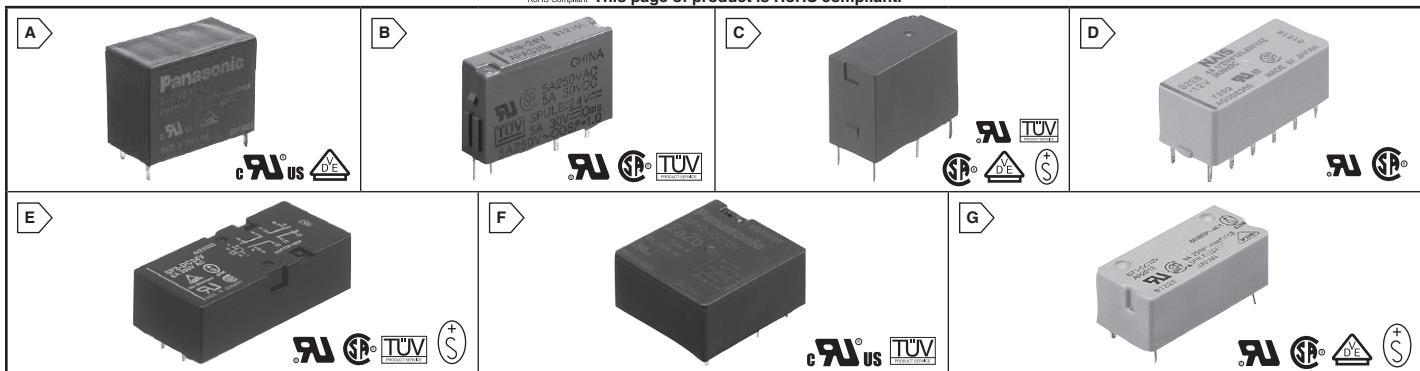
1967



# PANASONIC Power Relays

Panasonic

RoHS Compliant This page of product is RoHS compliant.



Panasonic Power relays are RoHS compliant and ideal for Home Appliances, HVAC and vehicle applications as well as Lighting, Spa and Elevator Control and Industrial Equipment. Miniature package types for space savings with low power consumption. Polarized Latching types featuring high switching capacity and excellent vibration resistance Safety Relays, with EN50205 forcibly guided contacts High Capacity DC Cutoff types up to 300A General Purpose - available with sockets.

## LF-G SERIES

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Operating Current (mA)	Nominal Coil Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-ALFG1PF241	ALFG1PF241	A	59	24	1 Form A	PCB	7.17	5.85	4.87	4.30
769-ALFG2PF121	ALFG2PF121	A	117	12	1 Form A	PCB	9.91	8.10	6.74	5.95
769-ALFG2PF241	ALFG2PF241	A	59	24	1 Form A	PCB	10.14	8.28	6.90	6.09

For quantities greater than listed, call for quote.

PA SERIES • Contact Arrangement: 1 Form A • Mounting Style: PC Board

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Nominal Operating Current (mA)	Coil Resist.(Ω)	Price Each			
							1	10	100	500
769-PA1A-5V	PA1A-5V	B	5	5	180	27.8	8.38	7.61	5.82	5.13
769-PA1A-12V	PA1A-12V	B	5	12	75	160	8.38	7.61	5.82	5.13
769-PA1A-24V	PA1A-24V	B	5	24	37.5	640	8.38	7.61	5.82	5.13

For quantities greater than listed, call for quote.

## PQ SERIES

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Nominal Operating Current (mA)	Coil Resist.(Ω)	Price Each			
							1	10	100	500
769-PQ1A-24V	PQ1A-24V	C	5	24	1 Form A	PCB	5.95	4.86	4.14	3.65

For quantities greater than listed, call for quote.

## S SERIES

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-S2EB-12V	S2EB-12V	D	4	12	2 Form A/2 Form B	PCB	18.42	17.68	12.79	11.28
769-S2EB-24V	S2EB-24V	D	4	24	2 Form A/2 Form B	PCB	18.42	17.68	12.79	11.28
769-S2EB-48V	S2EB-48V	D	4	48	2 Form A/2 Form B	PCB	20.11	19.30	13.96	12.32
769-S2EB-5V	S2EB-5V	D	4	5	2 Form A/2 Form B	PCB	18.42	17.68	12.79	11.28
769-S2EB-6V	S2EB-6V	D	4	6	2 Form A/2 Form B	PCB	18.42	17.68	12.79	11.28
769-S2EB-L2-12V	S2EB-L2-12V	D	4	12	2 Form A/2 Form B	PCB	19.94	19.13	13.84	12.21
769-S2EB-L2-24V	S2EB-L2-24V	D	4	24	2 Form A/2 Form B	PCB	19.94	19.13	13.84	12.21
769-S2EB-L2-5V	S2EB-L2-5V	D	4	5	2 Form A/2 Form B	PCB	19.94	19.13	13.84	12.21
769-S4EB-12V	S4EB-12V	D	4	12	4 Form A	PCB	19.60	18.80	13.60	12.00
769-S4EB-24V	S4EB-24V	D	4	24	4 Form A	PCB	19.60	18.80	13.60	12.00
769-S4EB-5V	S4EB-5V	D	4	5	4 Form A	PCB	19.60	18.80	13.60	12.00

For quantities greater than listed, call for quote.

## SF SERIES

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-SF2D-DC12V	SF2D-DC12V	E	6	12	2 Form A/2 Form B	PCB	35.04	33.61	24.31	21.45
769-SF2D-DC24V	SF2D-DC24V	E	6	24	2 Form A/2 Form B	PCB	35.70	34.24	24.77	21.86
769-SF4D-DC12V	SF4D-DC12V	E	6	12	4 Form A/4 Form B	PCB	46.67	44.77	32.39	28.58
769-SF4D-DC24V	SF4D-DC24V	E	6	24	4 Form A/4 Form B	PCB	53.40	43.60	37.06	32.69

For quantities greater than listed, call for quote.

## SF-Y SERIES

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-SFY2-DC12V	SFY2-DC12V	F	6	12	2 Form A/2 Form B	PCB	44.42	42.61	30.83	27.20
769-SFY2-DC18V	SFY2-DC18V	F	6	18	2 Form A/2 Form B	PCB	45.30	36.99	30.82	27.19
769-SFY2-DC21V	SFY2-DC21V	F	6	21	2 Form A/2 Form B	PCB	45.30	36.99	30.82	27.19
769-SFY2-DC24V	SFY2-DC24V	F	6	24	2 Form A/2 Form B	PCB	44.42	42.61	30.83	27.20
769-SFY2-DC5V	SFY2-DC5V	F	6	5	2 Form A/2 Form B	PCB	44.42	42.61	30.83	27.20
769-SFY3-DC24V	SFY3-DC24V	F	6	24	3 Form A/1 Form B	PCB	44.42	42.61	30.83	27.20
769-SFY3-DC5V	SFY3-DC5V	F	6	5	3 Form A/1 Form B	PCB	44.42	42.61	30.83	27.20
769-SFY4-DC24V	SFY4-DC24V	F	6	24	4 Form A/2 Form B	PCB	49.83	47.80	34.58	30.51
769-SFY5-DC24V	SFY5-DC24V	F	6	24	5 Form A/1 Form B	PCB	49.83	47.80	34.58	30.51

For quantities greater than listed, call for quote.

## ST SERIES

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-ST1-DC12V-F	ST1-DC12V-F	G	8	12	1 Form A/1 Form B	PCB	14.70	14.10	10.20	9.00
769-ST1-DC24V-F	ST1-DC24V-F	G	8	24	1 Form A/1 Form B	PCB	13.35	12.81	9.27	8.18
769-ST1-DC48V-F	ST1-DC48V-F	G	8	48	1 Form A/1 Form B	PCB	16.81	13.73	11.44	10.09
769-ST1-DC5V-F	ST1-DC5V-F	G	8	5	1 Form A/1 Form B	PCB	13.35	12.81	9.27	8.18
769-ST1-L2-DC12V-F	ST1-L2-DC12V-F	G	8	12	1 Form A/1 Form B	PCB	17.27	16.57	11.99	10.58
769-ST1-L2-DC24V-F	ST1-L2-DC24V-F	G	8	24	1 Form A/1 Form B	PCB	17.27	16.57	11.99	10.58
769-ST1-L2-DC5V-F	ST1-L2-DC5V-F	G	8	5	1 Form A/1 Form B	PCB	17.27	16.57	11.99	10.58
769-ST2-DC12V-F	ST2-DC12V-F	G	8	12	2 Form A	PCB	13.35	12.81	9.27	8.18
769-ST2-DC24V-F	ST2-DC24V-F	G	8	24	2 Form A	PCB	13.35	12.81	9.27	8.18
769-ST2-DC5V-F	ST2-DC5V-F	G	8	5	2 Form A	PCB	13.35	12.81	9.27	8.18
769-ST2-L2-DC5V-F	ST2-L2-DC5V-F	G	8	5	2 Form A	PCB	15.12	14.50	10.49	9.26

For quantities greater than listed, call for quote.

## SOCKETS

MOUSER STOCK NO.	Panasonic Part No.		Description			Price Each			
			1	10	100	500			
769-PA1A-PS	PA1A-PS		For PA1A Relays			3.72	3.04	2.59	2.28
769-ST-PS	ST-PS		For ST1/ST2 PCB			3.01	2.46	2.10	1.85
769-S-PS	S-PS		For S Series			3.38	2.76	2.35	2.07

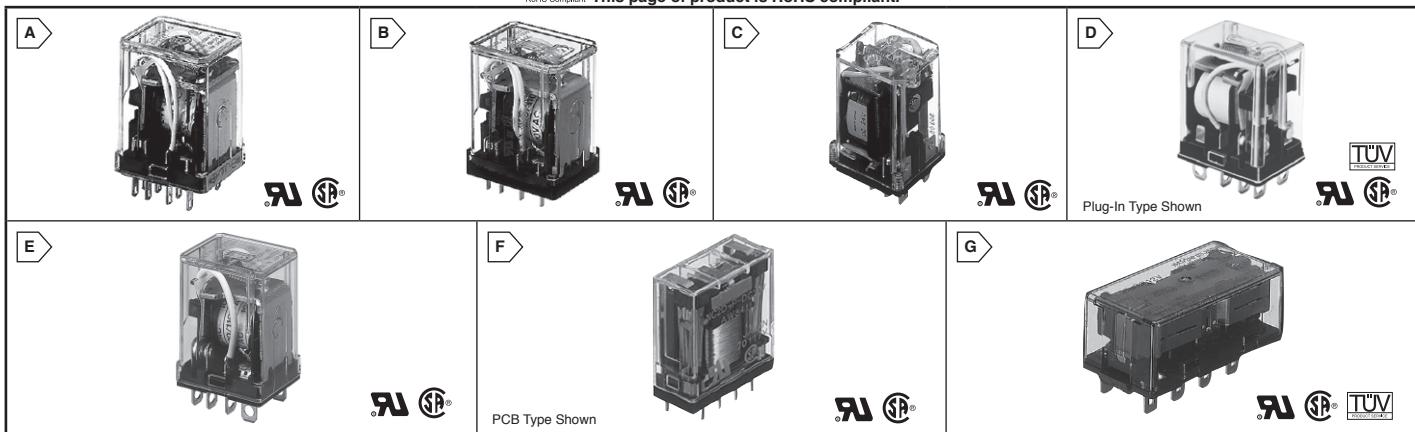
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# PANASONIC Power Relays

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Panasonic



Panasonic Power relays are RoHS compliant and ideal for Home Appliances, HVAC and vehicle applications as well as Lighting, Spa and Elevator Control and Industrial Equipment. Miniature package types for space savings with low power consumption. Polarized Latching types featuring high switching capacity and excellent vibration resistance. Safety Relays, with EN50205 forcibly guided contacts. High Capacity DC Cutoff types up to 300A General Purpose - available with sockets.

## HC SERIES

For quantities greater than listed, call for quote.

Mfr.	Mfr Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage	Contact Arrang.	Mount. Type	Price Each		
							1	10	25
769-HC4-H-DC12V	A	5	12VDC	4 Form C	Plug-In	14.26	11.65	10.84	
769-HC4-H-AC24V	A	5	24VAC	4 Form C	Plug-In	14.26	11.65	10.84	
769-HC4D-H-DC24V	A	5	24VDC	4 Form C	Plug-In	18.60	17.84	16.51	
769-HC4-H-DC24V	A	5	24VDC	4 Form C	Plug-In	13.99	13.42	12.42	
769-HC4D-H-AC115V	A	5	115VAC	4 Form C	Plug-In	20.31	19.49	18.04	
769-HC4-H-AC115V	A	5	115VAC	4 Form C	Plug-In	15.78	15.14	14.01	
769-HC2-H-DC6V-F	A	7	6VDC	2 Form C	Plug-In	12.01	11.52	9.80	
769-HC2-H-DC12V-F	A	7	12VDC	2 Form C	Plug-In	12.01	11.52	9.80	
769-HC2-H-DC24V-F	A	7	24VDC	2 Form C	Plug-In	12.01	11.52	9.80	
769-HC2-H-AC24V-F	A	7	24VAC	2 Form C	Plug-In	12.01	11.52	9.80	
769-HC2-H-AC115V-F	A	7	115VAC	2 Form C	Plug-In	13.70	13.14	12.16	
769-HC2-H-AC240V-F	A	7	220/240VAC	2 Form C	Plug-In	15.95	15.30	14.16	
769-HC3-H-DC24V-F	A	7	24VDC	3 Form C	Plug-In	13.06	12.53	11.59	
769-HC3-H-AC115V-F	A	7	115VAC	3 Form C	Plug-In	14.75	14.15	13.10	
769-HC1-H-DC12V-F	A	10	12VDC	1 Form C	Plug-In	9.95	9.55	8.12	
769-HC4-HP-DC12V	B	5	12VDC	4 Form C	PCB	13.99	13.42	12.42	
769-HC4-HP-DC24V	B	5	24VDC	4 Form C	PCB	13.99	13.42	12.42	
769-HC4D-HP-AC115V	B	5	115VAC	4 Form C	PCB	20.71	16.91	15.75	
769-HC4-HP-AC115V	B	5	115VAC	4 Form C	PCB	15.78	15.14	14.01	
769-HC2-HP-DC12V-F	B	7	12VDC	2 Form C	PCB	12.01	11.52	9.80	
769-HC2-HP-AC24V-F	B	7	24VAC	2 Form C	PCB	12.01	11.52	9.80	
769-HC2-HP-DC24V-F	B	7	24VDC	2 Form C	PCB	12.01	11.52	9.80	
769-HC2-HP-AC115V-F	B	7	115VAC	2 Form C	PCB	13.70	13.14	12.16	
769-HC3-HP-DC24V-F	B	7	24VDC	3 Form C	PCB	13.06	12.53	11.60	
769-HC1-HP-DC24V-F	B	10	24VDC	1 Form C	PCB	10.12	9.71	8.26	

## HJ SERIES

For quantities greater than listed, call for quote.

Mfr.	Mfr Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage	Contact Arrang.	Mount. Type	Price Each		
							1	10	25
769-HJ4-DC12V	C	5	12VDC	4 Form C	Plug-In	7.11	6.82	5.80	
769-HJ4-L-DC24V	C	5	24VDC	4 Form C	Plug-In	8.33	7.99	6.80	

## HL SERIES

For quantities greater than listed, call for quote.

Mfr.	Mfr Part No.	Fig.	Current Rating (A)	Nominal Coil Voltage	Contact Arrang.	Mount. Type	Price Each		
							1	10	25
769-HL2-H-AC120V-F	D	10	110/120VAC	2 Form C	Plug-In	14.36	13.78	12.75	
769-HL2-H-AC24V-F	D	10	24VAC	2 Form C	Plug-In	13.06	12.53	11.60	
769-HL2-H-DC12V-F	D	10	12VDC	2 Form C	Plug-In	13.06	12.53	11.60	
769-HL2-H-DC24V-F	D	10	24VDC	2 Form C	Plug-In	13.06	12.53	11.59	
769-HL1-H-DC12V-F	D	15	12VDC	1 Form C	Plug-In	11.25	10.79	9.18	
769-HL1-H-DC24V-F	D	15	24VDC	1 Form C	Plug-In	11.25	10.79	9.18	
769-HL2-HP-DC12V-F	D	10	12VDC	2 Form C	PCB	13.08	12.55	11.62	
769-HL2-HP-DC24V-F	D	10	24VDC	2 Form C	PCB	13.08	12.55	11.62	
769-HL2-HP-AC120V-F	D	10	110/120VAC	2 Form C	PCB	14.36	13.78	12.75	
769-HL2-HTM-DC12V-F	D	10	12VDC	2 Form C	Top Mount	13.08	12.55	11.62	
769-HL2-HTM-AC24V-F	D	10	24VAC	2 Form C	Top Mount	13.08	12.55	11.62	
769-HL1-HTM-DC24V-F	D	15	24VDC	2 Form C	Top Mount	11.25	10.79	9.18	
769-HL1-HTM-AC120V-F	D	15	110/120VAC	1 Form C	Top Mount	12.79	12.27	11.36	
769-HL1-L-DC6V-F	E	10	6VDC	1 Form C	Plug-In	33.57	32.20	29.80	
769-HL1-L-DC12V-F	E	10	12VDC	1 Form C	Plug-In	33.57	32.20	29.80	
769-HL1-L-DC24V-F	E	10	24VDC	1 Form C	Plug-In	33.57	32.20	29.80	
769-HL1-L-DC48V-F	E	10	48VDC	1 Form C	Plug-In	33.57	32.20	29.80	
769-HL1-L-DC100V-F	E	10	100VDC	1 Form C	Plug-In	33.57	32.20	29.80	

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## HL SERIES (CONT.)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Current Rating (A)	Nominal Coil Voltage	Contact Arrang.	Mount. Type	Price Each		
						1	10	25
769-HL2-L-DC6V-D-F	E	15	6VDC	2 Form C	Plug-In	37.39	35.87	33.20
769-HL2-L-DC12V-D-F	E	15	12VDC	2 Form C	Plug-In	37.39	35.87	33.20
769-HL2-L-DC24V-D-F	E	15	24VDC	2 Form C	Plug-In	37.39	35.87	33.20
769-HL2-L-DC48V-D-F	E	15	48VDC	2 Form C	Plug-In	37.39	35.87	33.20
769-HL2-L-DC100V-D-F	E	15	100VDC	2 Form C	Plug-In	37.39	35.87	33.20

## NC SERIES

For quantities greater than listed, call for quote.

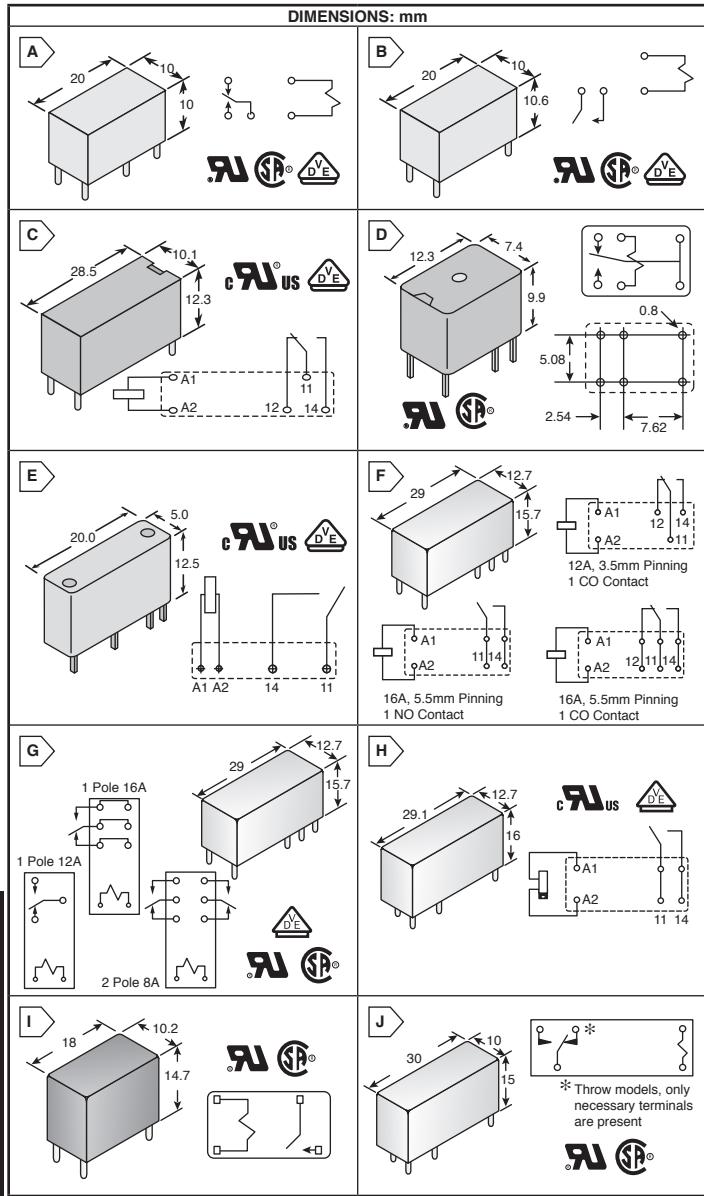
MOUSER STOCK NO.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Contact Arrang.	Mount. Type	Price Each		
						1	10	100
769-NC2D-DC12V	F	5	12	2 Form C	Plug-In	13.45	12.91	9.34
769-NC2D-DC24V	F	5	24	2 Form C	Plug-In	13.45	12.91	9.34
769-NC2EBD-DC24V	F	3	24	2 Form C	Plug-In	17.42	16.71	12.09
769-NC4D-DC24V	F	4	24	4 Form C	Plug-In	17.13	16.43	11.89
769-NC4EBD-DC24V	F	2	24	4 Form C	Plug-In	21.07	20.21	14.62
769-NC2D-JP-DC12V	F	5	12	2 Form C	PCB	13.45	12.91	9.34
769-NC2D-JP-DC24V	F	5	24	2 Form C	PCB	13.45	12.91	9.34
769-NC2D-JP-DC5V	F	5	5	2 Form C	PCB	13.45	12.91	9.34
769-NC2D-P-DC12V	F	5	12	2 Form C	PCB	13.45	12.91	9.34
769-NC2D-P-DC24V	F	5	24	2 Form C	PCB	13.45	12.91	9.34
769-NC2EBD-JP-DC5V	F	3	5	2 Form C	PCB	17.42	16.71	12.09
769-NC2EBD-JP-DC24V	F	3	24	2 Form C	PCB	17.42	16.71	12.09
769-NC2EBD-P-DC12V	F	3	12	2 Form C	PCB	17.42	16.71	12.09
769-NC2EBD-P-DC24V	F	3	24	2 Form C	PCB	17.42	16.71	12.09
769-NC4D-JP-DC24V	F	4	24	4 Form C	PCB	17.13	16.43	11.89
769-NC4D-JP-DC5V	F	4	5	4 Form C	PCB	17.13	16.43	11.89
769-NC4D-P-DC5V	F	4	5	4 Form C	PCB	17.13	16.43	11.89
769-NC4EBD-JP-DC12V	F	2	12	4 Form C	PCB	21.07	20.21	14.62
769-NC4EBD-JP-DC24V	F	2	24	4 Form C	PCB	21.07	20.21	14.62
769-NC4EBD-P-DC12V	F	2	12	4 Form C	PCB	21.48	17.54	14.62

## SP SERIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Current Rating (A)	Nominal Coil Voltage (VDC)	Contact Arrang.	Mount. Type	Price Each		
						1	10	100
769-SP2-DC12V	G	15	12	2 Form C	Plug-In	25.68	24.63	17.82
769-SP2-DC24V	G	15	24	2 Form C	Plug-In	25.68	24.63	17.82
769-SP2-DC5V	G	15	5	2 Form C	Plug-In	25.68	24.63	17.82
769-SP2-L2-DC12V	G	15	12	2 Form C	Plug-In	28.77	27.59	19.96
769-SP2-L2-DC5V	G	15	5	2 Form C	Plug-In	28.77	27.59	19.96
769-SP2-P-DC24V	G	15	24	2 Form C	Plug-In	28.77	27.59	19.96
769-SP4-DC12V	G	10	12	4 Form C	Plug-In	34.23	32.83	23.75
769-SP4-DC24V	G	10	24	4 Form C	Plug-In	34.23	32.83	23.75
769-SP4-P-DC24V	G	10	24	4 Form C	Plug-In	34.23	32.83	23.75
769-SP4-L2-DC12V	G	10	12	4 Form C	Plug-In	41.23	39.56	28.62
769-SP4-L2-DC24V	G	10	24	4 Form C	Plug-In	41.23	39.56	28.62
769-SP4-L2-DC5V	G	10	5	4 Form C	Plug-In	37.34	35.82	25.91
769-SP4-L2-PS24V	G	10						

## TE PCB Relays

  
Authorized Distributor
**PE SERIES: 5 AMP MINIATURE PCB RELAYS**

## Specifications:

- Flux-light for wave soldering
- Contact material: Silver-Nickel 90/10
- Expected Mechanical life: 15 million operations min.
- Operate/Release/Bounce Time: 5ms/2ms/1ms typical

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Coil Voltage	Contact Form	Nominal Coil Current	Price Each			
						1	25	50	100
655-PE014005	PE014005	A	5VDC	SPDT	40mA	6.09	5.54	5.08	4.45
655-PE014012	PE014012	A	12VDC	SPDT	17.5mA	6.36	5.56	5.03	3.97
655-PE014024	PE014024	A	24VDC	SPDT	8.8mA	5.50	4.81	4.59	4.50

**RE SERIES: 6 AMP MINIATURE PCB RELAYS**

## Specifications:

- Fully sealed with vent hole
- Contact material: Silver-cadmium oxide
- Expected Mechanical life: 30 million operations min.
- Operate/Release/Bounce Time: 6ms/1ms/1ms typical

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Coil Voltage	Contact Form	Nominal Coil Current	Price Each			
						1	25	50	100
655-RE030005	RE030005	B	5VDC	SPST-NO	40mA	4.37	3.82	3.45	2.98
655-RE030012	RE030012	B	12VDC	SPST-NO	16.7mA	5.25	4.59	4.15	3.38
655-RE030024	RE030024	B	24VDC	SPST-NO	4.2mA	5.26	4.63	4.29	-

**RY11 SERIES: 8A MINIATURE POWER PCB RELAYS**

## Specifications:

- Contact form: SPDT
- Contact material: Silver nickel 0.15
- Rated current: 8A
- Contact assembly: Single contact
- Conforms to UL508

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Coil Voltage	Case Type	Nom. Coil Current	Price Each			
						1	25	50	100
655-RY611005	RY611005	C	5VDC	Washable	220mW	4.67	4.10	3.69	2.94
655-RY611012	RY611012	C	12VDC	Washable	220mW	5.31	4.66	4.19	3.31
655-RY611024	RY611024	C	24VDC	Washable	220mW	4.70	4.12	3.71	2.95

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**TSC SERIES: 1AMP MINIATURE PCB RELAYS**

## Specifications:

- Low coil power requirement for IC compatibility
- Sealed plastic case
- Nominal power: Standard coil = 300mW; Sensitive coil = 150mW

## Common Applications:

- Telecommunications
- Appliances
- Office machines
- Security systems

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	OEG Part No.	Fig.	Coil Voltage	Contact Form	Nominal Coil Current	Price Each			
						1	25	50	100
677-TSC-105D3H	TSC-105D3H,000	D	5VDC	SPDT	60mA	2.88	2.52	2.28	1.80
677-TSC-112D3H	TSC-112D3H,000	D	12VDC	SPDT	25mA	2.88	2.52	2.28	1.80
677-TSC-124D3H	TSC-124D3H,000	D	24VDC	SPDT	12.5mA	1.71	1.69	1.66	1.65

MOUSER STOCK NO.	TE Part No.	Fig.	Coil Voltage	Contact Form	Nominal Coil Current	Price Each			
						1	25	50	100
677-TSC-105L3H	TSC-105L3H,000	D	5VDC	SPDT	30mA	2.69	2.35	2.12	1.68
677-TSC-112L3H	TSC-112L3H,000	D	12VDC	SPDT	12.5mA	2.70	2.36	2.13	1.84
677-TSC-124L3H	TSC-124L3H,000	D	24VDC	SPDT	6.3mA	2.98	2.60	2.36	2.60

**PCN SERIES: 3AMP MINIATURE PCB RELAYS**

## Specifications:

- Contact form: SPST-NO
- Rated current: 3A
- Rated voltage: 250VAC

- Contact material: Silver nickel
- Contact assembly: Bifurcated contact
- Conforms to UL508

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Coil Voltage	Contact Form	Nominal Coil Current	Price Each			
						1	25	50	100
677-PCN-105D3MHZ	PCN-105D3MHZ	E	5VDC	SPST-NO	120mW	1.81	1.58	1.42	1.34
677-PCN-112D3MHZ	PCN-112D3MHZ	E	12VDC	SPST-NO	120mW	2.01	1.75	1.58	1.39
677-PCN-124D3MHZ	PCN-124D3MHZ	E	24VDC	SPST-NO	120mW	2.13	1.85	1.68	1.62

**RZ SERIES: PCB RELAYS**

## Specifications:

- 1 pole 12/16A, 1 CO or 1 NO contact
- DC-coil 400mW
- 5kV/10mm coil-contact, reinforced insulation

- Ambient temperature 85°C (clear cover: 70°C)

- Product in accordance to IEC60335-1

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Coil Voltage	Contact Form	Nominal Coil Current	Price Each			
						1	25	50	100
655-RZ01-1C4-D012	1-1415899-0	F	12VDC	1 Form C (CO)	12A	2.85	2.70	2.44	2.15
655-RZ01-1C4-D024	1-1415899-1	F	24VDC	1 Form C (CO)	12A	2.50	2.36	2.14	1.88
655-RZ03-1A4-D012	1-1415899-6	F	12VDC	1 Form A (NO)	16A	2.53	2.40	2.17	1.91
655-RZ03-1C4-D005	1-1415899-9	F	5VDC	1 Form C (CO)	16A	2.84	2.48	2.24	1.97
655-RZ03-1C4-D024	2-1415899-3	F	24VDC	1 Form C (CO)	16A	3.18	2.78	2.51	2.21

**RT SERIES: MINIATURE PCB RELAYS**

## Specifications:

- Enclosure: RT 1,3,4 - Flux-light, top vented, plastic case
- RT B,D,E - Immersion cleanable, plastic case
- Pin spacing: RT 1,B - 3.5mm, RT 3,D,E - 5mm
- Contact material: Silver-Nickel 90/10
- Expected Mechanical life: 10 million operations min.

- Operate/Release Time: 7ms/3ms typical
- DC - UL Class F coil insulation; AC - UL Class A coil insulation

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Coil Voltage	Contact Form	Nominal Coil Current	Price Each			
						1	25	50	100
655-RT114012F	1419108-2	G	12VDC	SPDT	12A	3.91	3.59	3.37	3.13
655-RT114024F	1419108-3	G	24VDC	SPDT	12A	3.75	3.38	3.35	2.67
655-RTB14005F	2-1419108-4	G	5VDC	SPDT	12A	4.32	3.78	3.42	2.70
655-RTB14012F	2-1419108-5	G	12VDC	SPDT	12A	3.14	2.76	2.57	2.57
655-RTB14024F	2-1419108-6	G	24VDC	SPDT	12A	3.34	2.76	2.57	2.46
655-RTB14615	2-1393238-5	G	115VAC	SPDT	12A	6.88	6.01	5.43	4.28
655-RTB34012F	2-1419108-7	G	24VDC	SPST-NO	12A	3.56	3.11	2.81	2.47
655-RTB34024F	9-1419082-4	G	24VDC	SPST-NO	12A	2.88	2.52	2.27	2.07
655-RTD14005F	2-1419108-8	G	5VDC	SPDT	16A	4.32	3.78	3.42	2.70
655-RTD14012F	2-1419108-9	G	12VDC	SPDT	16A	4.32	3.78	3.42	2.70
655-RTD14024F	3-1419108-1	G	24VDC	SPDT	16A	3.34	2.82	2.62	2.52
655-RTD1615	7-1393238-5	G	115VAC	SPDT	16A	6.89	6.01	5.43	4.28
655-RTD34012F	3-1419108-6	G	24VDC	SPST-NO	16A	3.93	3.25	3.11	2.71
655-RTD34024F	3-1419108-9	G	24VDC	SPST-NO	16A	3.92	3.45	3.15	2.49
655-RTE24005F	4-1419108	G	5VDC	DPDT	8A	3.34	2.93	2.38	2.28
655-RTE24012F	3-1393237-1	G	12VDC	DPDT	8A	3.66	3.33	3.32	2.97
655-RTE24024F	3-1393237-3	G	24VDC	DPDT	8A	3.62	3.06	2.84	2.73
655-RT44012F	4-1419108-2	G	12VDC	DPST-NO	8A	6.52	6.18	5.98	5.87

**T73/T77/T7N SERIES: 10 AMP MINIATURE PCB RELAYS**

## Specifications:

- Flux-light for wave soldering
- Contact arrangement: 1 form A (NO) contact
- Rated voltage: 250VAC
- Rated current: 16A
- Mechanical endurance: >105 operations
- Contact style and material

# P&B PCB and Panel Mount Relays



This page of product is RoHS compliant.



## T90 SERIES: PCB RELAYS

### Specifications:

- UL Class F coil insulation system
- Contact material: Silver-cadmium oxide
- Meets UL 508 and UL 873 spacing
- Expected Mechanical life: 10 million operations min.

- Operate/Release Time (Including bounce): 15ms/15ms
- Max. coil power: 2.8 Watts
- Contacts: Silver-cadmium oxide



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	P&B Part No.	Fig.	Coil Voltage	Contact Form	Coil Res. (Ω)	Price Each			
						1	25	50	100
<b>Open Case Model</b>									
655-T90N1D12-12	T90N1D12-12	A	12VDC	SPST-NO	30A	3.33	3.02	2.27	1.99
655-T90N1D12-24	T90N1D12-24	A	24VDC	SPST-NO	30A	3.40	2.98	2.70	2.23
655-T90N5D12-12	T90N5D12-12	A	12VDC	SPDT	20A	3.19	2.77	2.58	2.21
655-T90N5D12-24	T90N5D12-24	A	24VDC	SPDT	20A	3.25	2.81	2.63	2.24
<b>Tape Sealed (Immersion Cleanable) Model</b>									
655-T90S1D12-5	T90S1D12-5	B	5VDC	SPST-NO	30A	3.89	3.40	3.07	2.43
655-T90S1D12-12	T90S1D12-12	B	12VDC	SPST-NO	30A	2.98	2.71	2.48	2.29
655-T90S1D12-24	T90S1D12-24	B	24VDC	SPST-NO	30A	3.26	3.01	2.77	2.42
655-T90S5D12-5	T90S5D12-5	B	5VDC	SPDT	20A	3.51	2.54	2.45	2.39
655-T90S5D12-12	T90S5D12-12	B	12VDC	SPDT	20A	4.12	3.60	3.26	2.81
655-T90S5D12-24	T90S5D12-24	B	24VDC	SPDT	20A	3.50	3.06	2.77	2.19
<b>Accessory for T90 Series</b>									
655-35C620A	[35C620A]			Description		.86	.75	.68	.54

## T92 SERIES: 2 POLE 30 AMP RELAYS

### Specifications:

- Designed to control compressor loads to 3.5 tons, 25.3 FLA, 110 LRA
- UL Class F coil insulation construction
- Meets UL 508 and UL 873 spacing
- Expected Mechanical life: 5 million operations min.

- Operate/Release Time (Typical): 15ms/10ms
- UL approved for 600VAC switching (1.5HP)
- Flange type: .250" x .032" QC terminals
- Contact material: Silver-cadmium oxide



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	P&B Part No.	Fig.	Coil Voltage	Contact Form	Mounting Type	Price Each			
						1	25	50	100
<b>Dust Cover (Unsealed) Model</b>									
655-T92P11A22-120	T92P11A22-120	C	120 VAC	DPDT	Flange	12.79	11.47	10.99	9.95
655-T92P11A22-240	T92P11A22-240	C	240 VAC	DPDT	Flange	17.22	15.71	14.23	11.23
655-T92P11D22-12	T92P11D22-12	C	12 VDC	DPDT	Flange	12.56	11.90	10.59	8.24
655-T92P11D22-24	T92P11D22-24	C	24 VDC	DPDT	Flange	13.46	12.65	11.58	9.84
655-T92P7A22-24	T92P7A22-24	C	24 VAC	DPST-NO	Flange	12.51	10.72	9.95	8.87
655-T92P7A22-120	T92P7A22-120	C	120 VAC	DPST-NO	Flange	12.28	10.44	9.63	8.35
655-T92P7A22-240	T92P7A22-240	C	240 VAC	DPST-NO	Flange	13.43	11.75	10.62	9.52
655-T92P7D12-12	T92P7D12-12	D	12 VDC	DPST-NO	PCB	12.50	11.54	8.78	-
655-T92P7D22-12	T92P7D22-12	C	12 VDC	DPST-NO	Flange	13.34	11.29	10.49	9.33
655-T92P7D22-24	T92P7D22-24	D	24 VDC	DPST-NO	PCB	17.46	14.86	12.99	11.76
<b>Tape Sealed (Immersion Cleanable) Model</b>									
655-T92S1A22-24	T92S1A22-24	C	24 VAC	DPDT	Flange	15.13	13.22	11.77	10.25
655-T92S1A22-120	T92S1A22-120	C	120 VAC	DPDT	Flange	15.13	13.22	11.97	10.26
655-T92S1D12-12	T92S1D12-12	D	12 VDC	DPDT	PCB	15.52	13.56	12.28	9.68
655-T92S1D12-24	T92S1D12-24	D	24 VDC	DPDT	PCB	13.16	11.08	10.26	9.77
655-T92S1D22-12	T92S1D22-12	C	12 VDC	DPDT	Flange	11.63	10.47	10.15	9.61
655-T92S1D22-24	T92S1D22-24	C	24 VDC	DPDT	Flange	13.42	11.74	10.62	9.13
655-T92S7A22-24	T92S7A22-24	C	24 VAC	DPST-NO	Flange	13.36	11.80	11.10	9.62
655-T92S7A22-120	T92S7A22-120	C	120 VAC	DPST-NO	Flange	13.36	11.69	10.93	9.61
655-T92S7A12-240	T92S7A12-240	D	240 VAC	DPST-NO	PCB	13.60	12.47	11.51	10.69
655-T92S7D12-12	T92S7D12-12	D	12 VDC	DPST-NO	PCB	12.45	11.84	10.92	9.03
655-T92S7D22-12	T92S7D22-12	D	24 VDC	DPST-NO	PCB	10.65	9.83	9.07	8.67
655-T92S7D22-12	T92S7D22-12	C	12 VDC	DPST-NO	Flange	12.53	10.94	9.91	9.04
655-T92S7D22-24	T92S7D22-24	C	24 VDC	DPST-NO	Flange	11.37	9.77	9.34	8.75

## T9A SERIES: PCB AND PANEL MOUNT RELAYS

### Specifications:

- UL Class F coil insulation system
- Contact material: Silver-cadmium oxide
- Meets UL 508 and UL 873 spacing
- Expected Mechanical life: 10 million operations min.

- Operate/Release Time (Including bounce): 15ms/15ms
- Max. coil power: 2.8 Watts
- Enclosure: T9AP - unsealed plastic dust cover; T9AS - Immersion cleanable with knock-off nib sealed plastic case

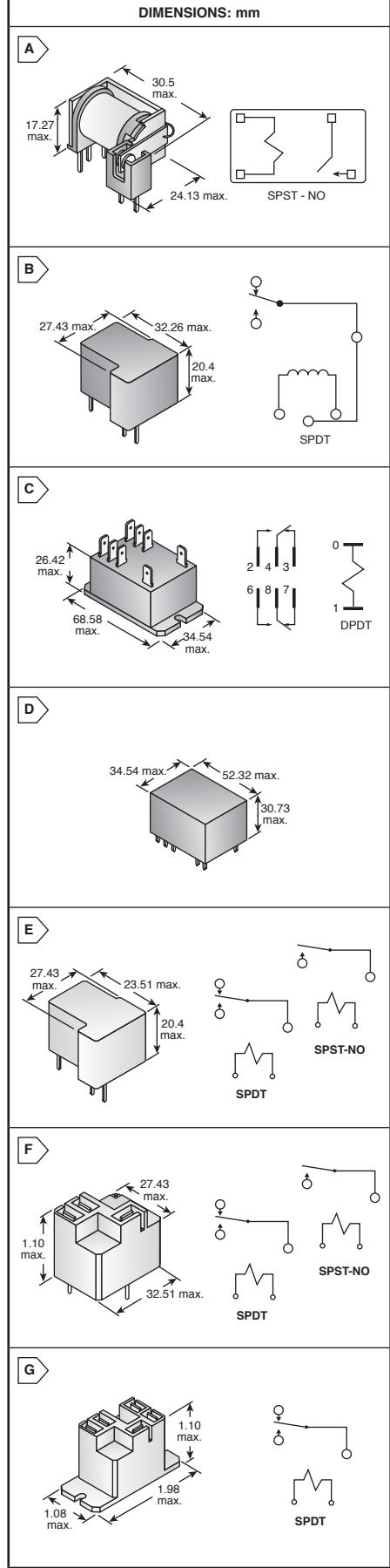


For quantities greater than listed, call for quote.

MOUSER STOCK NO.	P&B Part No.	Fig.	Coil Voltage	Contact Form	Contact Rating	Price Each			
						1	25	50	100
<b>PCB Terminals Coil and Contacts</b>									
655-T9AS1D12-12	T9AS1D12-12	E	12VDC	SPST-NO	30A	2.94	2.67	2.45	2.27
655-T9AS1D12-24	T9AS1D12-24	E	24VDC	SPST-NO	30A	3.19	2.90	2.66	2.33
655-T9ASSD12-12	T9ASSD12-12	E	12VDC	SPDT	20A	3.17	2.90	2.62	2.30
655-T9ASSD12-24	T9ASSD12-24	E	24VDC	SPDT	20A	3.98	3.48	3.15	2.72
<b>PCB Terminals Coil and Contacts, and .250" Contact QC</b>									
655-T9AS1D22-12	T9AS1D22-12	F	12VDC	SPST-NO	30A	3.92	3.43	3.09	2.44
655-T9AS1D22-24	T9AS1D22-24	F	24VDC	SPST-NO	30A	3.92	3.42	3.10	2.45
655-T9ASSD22-12	T9ASSD22-12	F	12VDC	SPDT	20A	3.90	3.40	3.08	2.42
655-T9ASSD22-24	T9ASSD22-24	F	24VDC	SPDT	20A	3.57	3.11	2.81	2.45
<b>Flange Mount with .187" Coil QC and .250" Contact QC</b>									
655-T9AP5D52-12	T9AP5D52-12	G	12VDC	SPDT	20A	4.51	3.94	3.55	2.81
655-T9AP5D52-24	T9AP5D52-24	G	24VDC	SPDT	20A	4.06	3.54	3.19	2.50

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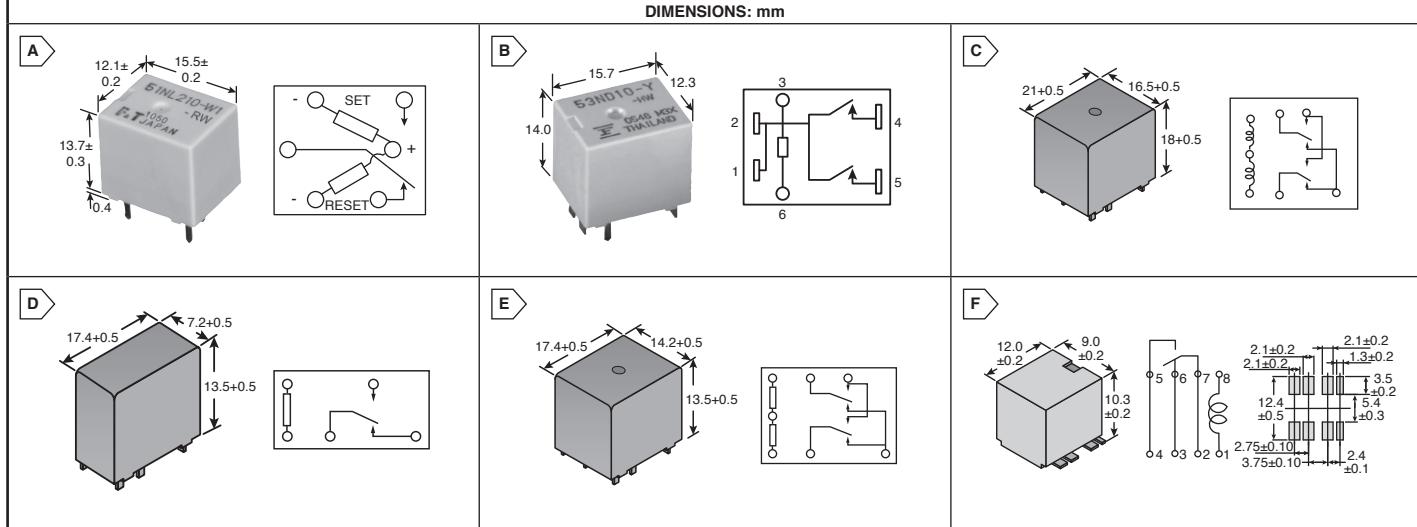
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1971

# FUJITSU Automotive Relays

**FUJITSU**

DIMENSIONS: mm



## FBR51 LATCHING SERIES: 2 POLE - 30A FOR AUTOMOTIVE APPLICATIONS

### Features:

- Magnetically latched PCB relay
- Increased ambient temperature range up to 125°C
- Two coils with set and reset function
- Reflow soldering capable
- Two types of contact materials

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fujitsu Part No.	Fig.	Nominal Voltage (VDC)	Nominal Power	Coil Resistance ( $\pm @ 20^\circ\text{C}$ )	Price Each			
						1	25	50	100
817-FBR51NL210-W1-RW	FBR51NL210-W1-RW	A	10	1.11W	50Ω	4.46	3.84	3.64	3.36

## FBR53-HW SERIES: 1 POLE - 40A FOR AUTOMOTIVE APPLICATIONS

### Features:

- High temperature grade (-40°C to 125°C)
- Contact arrangement Form U (form A)
- Inrush current 80A
- Coil wire temperature class: H
- Surface mount compatible (reflow capability)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fujitsu Part No.	Fig.	Nominal Voltage (VDC)	Nominal Power	Coil Resistance ( $\pm @ 20^\circ\text{C}$ )	Price Each			
						1	25	50	100
817-FBR53ND10-Y-HW	FBR53ND10-Y-HW	B	10	860mW	117Ω	2.10	1.80	1.70	1.58

## FTR-P2 SERIES: 1 POLE X 2, H-BRIDGE, 25A SILENT TWIN FOR AUTOMOTIVE APPLICATIONS

### Features:

- Low operating sound
- Compact, high density package
- High capacity
- Ease of PCB layout
- High breaking capacity

### Applications:

- Power windows
- Doorlocks
- Power seat
- Wiper (for H-bridge circuit)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fujitsu Part No.	Fig.	Nominal Voltage (VDC)	Nominal Power	Coil Resistance ( $\pm @ 20^\circ\text{C}$ )	Price Each			
						1	100	500	1000
817-FTR-P2CN010W1	FTR-P2CN010W1	C	10	455mW	220Ω	6.25	5.32	4.55	4.17

## FTR-P3 SERIES: 1 POLE - 25A FOR AUTOMOTIVE APPLICATIONS

### Features:

- Compact, high density package
- High contact capacity

### Applications:

- Power windows/seat
- Sun roof
- Doorlocks
- Wiper/I/W

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fujitsu Part No.	Fig.	Nominal Voltage (VDC)	Nominal Power	Coil Resistance ( $\pm @ 20^\circ\text{C}$ )	Price Each			
						1	100	500	1000
817-FTR-P3CN010W1	FTR-P3CN010W1	D	10	0.6W	167Ω	1.63	1.38	1.18	1.08

## FTR-P4 SERIES: 1 POLE X 2, H-BRIDGE 25A FOR AUTOMOTIVE APPLICATIONS

### Features:

- High density package
- High contact capacity
- Coil power savings

### Applications:

- Power windows/seat
- Tilt steering
- Doorlocks
- Sun roof
- Retractable antenna

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fujitsu Part No.	Fig.	Nominal Voltage (VDC)	Nominal Power	Coil Resistance ( $\pm @ 20^\circ\text{C}$ )	Price Each			
						1	100	500	1000
817-FTR-P4CN009W1	FTR-P4CN009W1	E	9	0.6W	135Ω	2.95	2.51	2.15	1.97
817-FTR-P4CN010W1	FTR-P4CN010W1	E	10	0.6W	167Ω	2.95	2.51	2.15	1.97

## FTR-P6 SERIES: 1 POLE - 25A MICRO SURFACE MOUNT RELAY FOR AUTOMOTIVE APPLICATIONS

### Specifications:

- Miniature size
- High contact capacity with proven contact material
- Coil power savings
- Semi-quiet relay (average acoustic noise level: 60dB distance 5cm)

### Typical Applications:

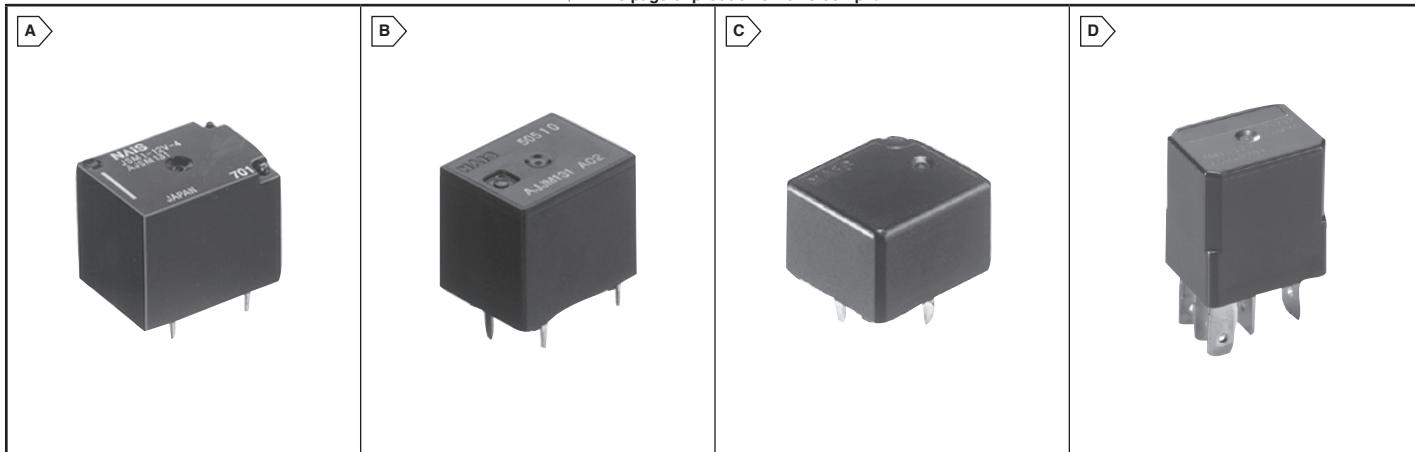
- Power window
- Door lock
- Power seat

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fujitsu Part No.	Fig.	Nominal Voltage (VDC)	Nominal Power	Coil Resistance ( $\pm @ 20^\circ\text{C}$ )	Price Each			
						1	100	500	1000
817-FTR-P6GN012WA	FTR-P6GN012WA	F	12	0.8W	180Ω	2.89	2.42	2.09	1.88

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Panasonic automotive relays offer a sealed construction, ideal for harsh environments where resistance to moisture and contamination is essential. In addition to standard automotive applications, they are used extensively in construction and agricultural vehicles, as well as recreational vehicles and commercial landscaping equipment. Panasonic offers a full range of automotive relays.

## CM SERIES, PLUG-IN TYPE

### Features:

- Micro-ISO type terminals
- Wide line-up
- Uses international standard ISO terminal arrangement
- Dimensions: L=20(.787), W=15(.591), H=22(.866)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-CM1-12V	CM1-12V	A	35	12	1 Form A	Plug-in	4.88	3.98	3.39	2.99
769-CM1-R-12V	CM1-R-12V	A	35	12	1 Form C	Plug-in	4.73	3.86	3.29	2.90

## CP SERIES

### Features:

- Low profile
- PC board terminal type: 9.5mm (.37")
- Sealed construction suitable for harsh environments
- Simple footprint pattern enables ease of PC board layout
- Dimensions: L=13(.512), W=14(.551), H=9.5(.374)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-CP1-12V	CP1-12V	B	20	12	1 Form C	PCB	3.50	2.86	2.44	2.15
769-CP1A-12V	CP1A-12V	B	20	12	1 Form A	PCB	3.41	2.78	2.37	2.09

## JJ-M SERIES

### Features:

- Perfect for automobile electrical systems
- Standard terminal pitch employed
- Compact (half-size)
- Plastic sealed type
- Dimensions: L=15.5(.610), W=12(.472), H=13.9(.547)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-JJM1-12V	JJM1-12V	C	20	12	1 Form C	PCB	3.63	2.96	2.52	2.22

## JS-M SERIES

### Features:

- Low pick-up voltage for high ambient use
- Sealed construction
- Global standard terminal pitch
- Usable at high temperature: 85°C, 185°F
- Dimensions: L=22(.866) W=16(.630) H=16(.630)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-JSM1-12V-4	JSM1-12V-4	D	10	12	1 Form C	PCB	1.72	1.40	1.19	1.05
769-JSM1-12V-5	JSM1-12V-5	D	15	12	1 Form C	PCB	1.72	1.40	1.19	1.05
769-JSM1A-12V-4	JSM1A-12V-4	D	10	12	1 Form A	PCB	1.40	1.14	.969	.855

# PANASONIC Signal Relays

Panasonic

 This page of product is RoHS compliant.

Panasonic automotive relays offer a sealed construction, ideal for harsh environments where resistance to moisture and contamination is essential. In addition to standard automotive applications, they are used extensively in construction and agricultural vehicles, as well as recreational vehicles and commercial landscaping equipment. Panasonic offers a full range of automotive relays.

## GQ RELAYS (AGQ)

### Features:

- Compact flat body saves space
- High sensitivity single side stable type (Nominal operating power: 100mW) is available
- Outstanding surge resistance
- The use of twin crossbar contacts ensures high contact reliability
- Increased packaging density
- Nominal operating power: 140mW
- Outstanding vibration and shock resistance
- Sealed construction allows automatic washing

### Typical Applications:

- Telephone switchboard
- Telecommunications equipment
- Security
- Measurement equipment
- Consumer electronic and audio visual equipment

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Contact Arrangement	Coil Voltage (VDC)	Mounting Type	Price Each			
						1	10	100	500
769-AGQ2601H	AGQ2601H	A	2 Form C	1.5	PCB	5.92	4.83	4.02	3.55
769-AGQ26003	AGQ26003	A	2 Form C	3	PCB	5.81	4.74	4.03	3.56
769-AGQ2604H	AGQ2604H	A	2 Form C	4.5	PCB	5.81	4.74	4.03	3.56
769-AGQ26012	AGQ26012	A	2 Form C	12	PCB	5.81	4.74	4.03	3.56
769-AGQ26024	AGQ26024	A	2 Form C	24	PCB	6.95	5.67	4.72	4.17
769-AGQ260S1H	AGQ260S1H	B	2 Form C	1.5	SMD S TYPE	6.09	4.98	4.14	3.66
769-AGQ260S03	AGQ260S03	B	2 Form C	3	SMD S TYPE	5.98	4.88	4.15	3.66
769-AGQ260S4H	AGQ260S4H	B	2 Form C	4.5	SMD S TYPE	5.98	4.88	4.15	3.66
769-AGQ260S06	AGQ260S06	B	2 Form C	6	SMD S TYPE	6.09	4.98	4.14	3.66
769-AGQ260S09	AGQ260S09	B	2 Form C	9	SMD S TYPE	6.09	4.98	4.14	3.66
769-AGQ260S12	AGQ260S12	B	2 Form C	12	SMD S TYPE	5.98	4.88	4.15	3.66
769-AGQ260S24	AGQ260S24	B	2 Form C	24	SMD S TYPE	7.09	5.79	4.82	4.26
769-AGQ260A1H	AGQ260A1H	B	2 Form C	1.5	SMD A TYPE	6.09	4.98	4.14	3.66
769-AGQ260A03	AGQ260A03	B	2 Form C	3	SMD A TYPE	5.98	4.88	4.15	3.66
769-AGQ260A06	AGQ260A06	B	2 Form C	6	SMD A TYPE	6.09	4.98	4.14	3.66
769-AGQ260A12	AGQ260A12	B	2 Form C	12	SMD A TYPE	5.98	4.88	4.15	3.66
769-AGQ260A24	AGQ260A24	B	2 Form C	24	SMD A TYPE	6.96	6.39	4.83	4.26

## TQ SERIES

- Flat compact size: L=14.0(.551) × W=9.0(.354) × H=5.0(.197)
- High density mounting possible
- DIL terminal array enables use of IC sockets
- Low thermal electromotive force

- A range of surface-mount types is also available:

SA: Low-profile surface-mount terminal type  
SL: High connection reliability surface mount terminal type  
SS: Space saving surface mount

### PC Board Type

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-TQ2-12V	TQ2-12V	C	1	12	2 Form C	PCB	3.45	2.82	2.40	2.12
769-TQ2-24V	TQ2-24V	C	1	24	2 Form C	PCB	4.17	3.40	2.89	2.55
769-TQ2-3V	TQ2-3V	C	1	3	2 Form C	PCB	3.45	2.82	2.40	2.12
769-TQ2-4.5V	TQ2-4.5V	C	1	4.5	2 Form C	PCB	3.45	2.82	2.40	2.12
769-TQ2-48V	TQ2-48V	C	1	48	2 Form C	PCB	5.37	4.38	3.73	3.29
769-TQ2-5V	TQ2-5V	C	1	5	2 Form C	PCB	3.45	2.82	2.40	2.12
769-TQ2-6V	TQ2-6V	C	1	6	2 Form C	PCB	3.45	2.82	2.40	2.12
769-TQ2-9V	TQ2-9V	C	1	9	2 Form C	PCB	3.45	2.82	2.40	2.12
769-TQ2H-5V	TQ2H-5V	C	1	5	2 Form C	PCB	3.45	2.82	2.40	2.12
769-TQ2-L2-12V	TQ2-L2-12V	C	1	12	2 Form C	PCB	4.34	3.54	3.01	2.66
769-TQ2-L2-24V	TQ2-L2-24V	C	1	24	2 Form C	PCB	4.92	4.02	3.41	3.01
769-TQ2-L2-3V	TQ2-L2-3V	C	1	3	2 Form C	PCB	4.34	3.54	3.01	2.66
769-TQ2-L2-4.5V	TQ2-L2-4.5V	C	1	4.5	2 Form C	PCB	4.34	3.54	3.01	2.66
769-TQ2-L2-5V	TQ2-L2-5V	C	1	5	2 Form C	PCB	4.34	3.54	3.01	2.66
769-TQ2-L2-6V	TQ2-L2-6V	C	1	6	2 Form C	PCB	4.34	3.54	3.01	2.66
769-TQ2-L2-9V	TQ2-L2-9V	C	1	9	2 Form C	PCB	4.34	3.54	3.01	2.66
769-TQ2-L3V	TQ2-L3V	C	1	3	2 Form C	PCB	4.17	3.40	2.89	2.55
769-TQ2-L2-5V	TQ2-L2-5V	C	1	5	2 Form C	PCB	4.17	3.40	2.89	2.55

### SA SMD Type

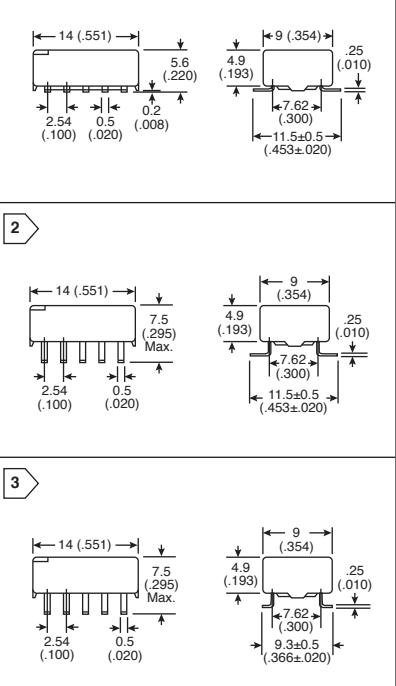
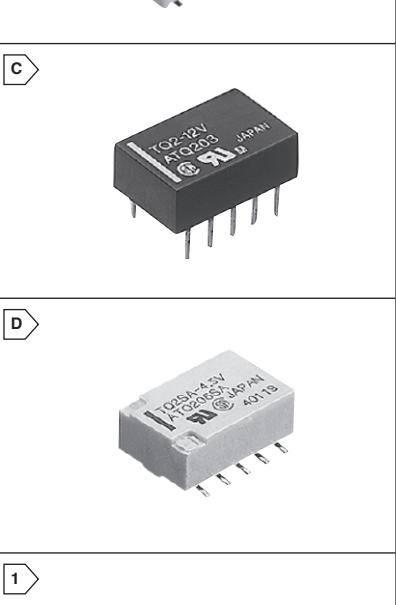
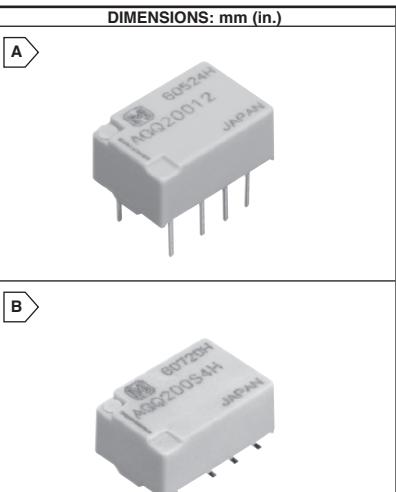
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-TQ2SA-1.5V	TQ2SA-1.5V	D1	2	1.5	2 Form C	SMD	3.75	3.06	2.61	2.30
769-TQ2SA-12V	TQ2SA-12V	D1	2	12	2 Form C	SMD	3.75	3.06	2.61	2.30
769-TQ2SA-24V	TQ2SA-24V	D1	2	24	2 Form C	SMD	4.48	3.66	3.12	2.75
769-TQ2SA-3V	TQ2SA-3V	D1	2	3	2 Form C	SMD	3.75	3.06	2.61	2.30
769-TQ2SA-4.5V	TQ2SA-4.5V	D1	2	4.5	2 Form C	SMD	3.75	3.06	2.61	2.30
769-TQ2SA-48V	TQ2SA-48V	D1	2	48	2 Form C	SMD	5.78	4.72	4.02	3.54
769-TQ2SA-5V	TQ2SA-5V	D1	2	5	2 Form C	SMD	3.75	3.06	2.61	2.30
769-TQ2SA-9V	TQ2SA-9V	D1	2	9	2 Form C	SMD	3.75	3.06	2.61	2.30
769-TQ2SA-L2-12V	TQ2SA-L2-12V	D1	2	12	2 Form C	SMD	4.70	3.84	3.27	2.88
769-TQ2SA-L2-24V	TQ2SA-L2-24V	D1	2	24	2 Form C	SMD	5.24	4.28	3.64	3.21
769-TQ2SA-L2-3V	TQ2SA-L2-3V	D1	2	3	2 Form C	SMD	4.70	3.84	3.27	2.88
769-TQ2SA-L2-4.5V	TQ2SA-L2-4.5V	D1	2	4.5	2 Form C	SMD	4.70	3.84	3.27	2.88
769-TQ2SA-L2-5V	TQ2SA-L2-5V	D1	2	5	2 Form C	SMD	4.70	3.84	3.27	2.88
769-TQ2SA-L4.5V	TQ2SA-L4.5V	D1	2	4.5	2 Form C	SMD	4.48	3.66	3.12	2.75
769-TQ2SA-L5V	TQ2SA-L5V	D1	2	5	2 Form C	SMD	4.48	3.66	3.12	2.75

### SL SMD Type

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Current Rating (A)	Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-TQ2SL-12V	TQ2SL-12V	D2	2	12	2 Form C	Hi-Conn SMD	3.58	2.92	2.49	2.19
769-TQ2SL-24V	TQ2SL-24V	D2	2	24	2 Form C	Hi-Conn SMD	4.48	3.66	3.12	2.75
769-TQ2SL-3V	TQ2SL-3V	D2	2	3	2 Form C	Hi-Conn SMD	3.75	3.06	2.61	2.30
769-TQ2SL-5V	TQ2SL-5V	D2	2	5	2 Form C	Hi-Conn SMD	3.75	3.06	2.61	2.30
769-TQ2SL-L2-4.5V	TQ2SL-L2-4.5V	D2	2	4.5	2 Form C	Hi-Conn SMD	4.79	3.92	3.26	2.88
769-TQ2SL-L2-5V	TQ2SL-L2-5V	D2	2	5	2 Form C	Hi-Conn SMD	4.79	3.92	3.26	2.88

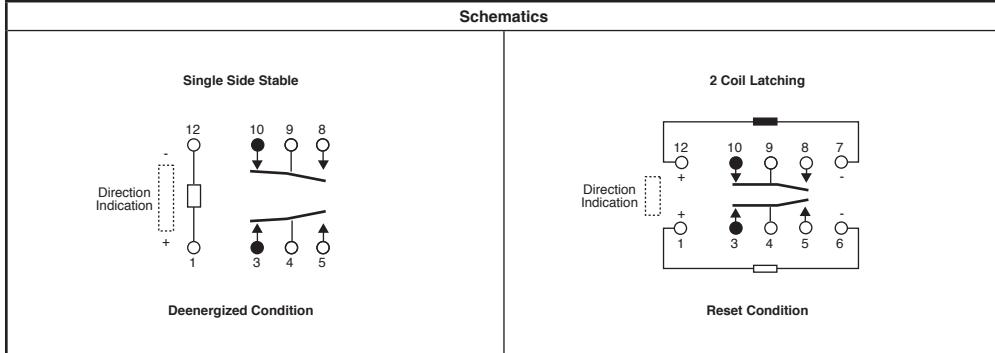


# PANASONIC Signal Relays

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Panasonic

## Schematics



Panasonic automotive relays offer a sealed construction, ideal for harsh environments where resistance to moisture and contamination is essential. In addition to standard automotive applications, they are used extensively in construction and agricultural vehicles, as well as recreational vehicles and commercial landscaping equipment. Panasonic offers a full range of automotive relays.

## TX SERIES

- 2,000V breakdown voltage between contact and coil
- Outstanding surge resistance
- Outstanding vibration and shock resistance
- Nominal operating power: High sensitivity of 140mW
- The use of gold-clad twin crossbar contacts ensures high contact reliability
- Sealed construction allows automatic washing

- A range of surface-mount types is also available:

SA: Low-profile surface-mount terminal type  
SL: High connection reliability surface mount terminal type  
SS: Space saving surface mount terminal type

\* Coil latching

## PC Board Type

MOUSER STOCK NO.	Datal Part No.	Fig.	Current Rating (A)	Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-TX2-12V	TX2-12V	A1	2	12	2 Form C	PCB	3.65	2.98	2.54	2.24
769-TX2-24V	TX2-24V	A1	2	24	2 Form C	PCB	4.31	3.52	3.00	2.64
769-TX2-3V	TX2-3V	A1	2	3	2 Form C	PCB	3.65	2.98	2.54	2.24
769-TX2-4.5V	TX2-4.5V	A1	2	4.5	2 Form C	PCB	3.65	2.98	2.54	2.24
769-TX2-48V	TX2-48V	A1	2	48	2 Form C	PCB	5.64	4.60	3.91	3.45
769-TX2-5V	TX2-5V	A1	2	5	2 Form C	PCB	3.65	2.98	2.54	2.24
769-TX2-9V	TX2-9V	A1	2	9	2 Form C	PCB	3.65	2.98	2.54	2.24
* 769-TX2-L2-12V	TX2-L2-12V	A1	2	12	2 Form C	PCB	4.58	3.74	3.18	2.81
* 769-TX2-L2-24V	TX2-L2-24V	A1	2	24	2 Form C	PCB	5.12	4.18	3.56	3.14
* 769-TX2-L2-4.5V	TX2-L2-4.5V	A1	2	4.5	2 Form C	PCB	4.58	3.74	3.18	2.81
* 769-TX2-L2-5V	TX2-L2-5V	A1	2	5	2 Form C	PCB	4.58	3.74	3.18	2.81
* 769-TX2-L2-9V	TX2-L2-9V	A1	2	9	2 Form C	PCB	4.58	3.74	3.18	2.81
* 769-TX2-L3V	TX2-L3V	A1	2	3	2 Form C	PCB	4.31	3.52	3.00	2.64
769-TX2-L4.5V	TX2-L4.5V	A1	2	4.5	2 Form C	PCB	4.31	3.52	3.00	2.64
769-TX2-L5V	TX2-L5V	A1	2	5	2 Form C	PCB	4.31	3.52	3.00	2.64
769-TXD2-12V	TXD2-12V	A1	2	12	2 Form C	PCB	4.70	3.84	3.27	2.88
769-TXD2-24V	TXD2-24V	A1	2	24	2 Form C	PCB	5.34	4.36	3.71	3.27
769-TXD2-5V	TXD2-5V	A1	2	5	2 Form C	PCB	4.70	3.84	3.27	2.88
769-TXS2-12V	TXS2-12V	A1	1	12	2 Form C	PCB	4.58	3.74	3.18	2.81
769-TXS2-24V	TXS2-24V	A1	1	24	2 Form C	PCB	5.39	4.40	3.74	3.30
769-TXS2-3V	TXS2-3V	A1	1	3	2 Form C	PCB	4.58	3.74	3.18	2.81
769-TXS2-4.5V	TXS2-4.5V	A1	1	4.5	2 Form C	PCB	4.58	3.74	3.18	2.81
769-TXS2-9V	TXS2-9V	A1	1	9	2 Form C	PCB	4.58	3.74	3.18	2.81
* 769-TXS2-L2-12V	TXS2-L2-12V	A1	1	12	2 Form C	PCB	5.39	4.40	3.74	3.30
* 769-TXS2-L2-4.5V	TXS2-L2-4.5V	A1	1	4.5	2 Form C	PCB	5.39	4.40	3.74	3.30

## SA SMD Type

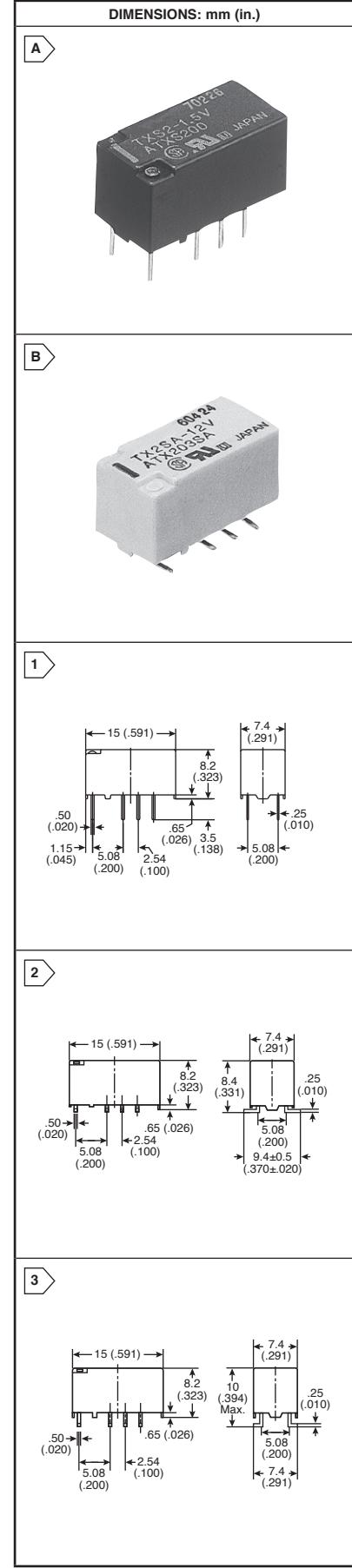
MOUSER STOCK NO.	Datal Part No.	Fig.	Current Rating (A)	Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-TX2SA-12V	TX2SA-12V	B2	2	12	2 Form C	SMD	3.75	3.06	2.61	2.30
769-TX2SA-24V	TX2SA-24V	B2	2	24	2 Form C	SMD	4.46	3.64	3.10	2.73
769-TX2SA-3V	TX2SA-3V	B2	2	3	2 Form C	SMD	3.75	3.06	2.61	2.30
769-TX2SA-4.5V	TX2SA-4.5V	B2	2	4.5	2 Form C	SMD	3.75	3.06	2.61	2.30
769-TX2SA-5V	TX2SA-5V	B2	2	5	2 Form C	SMD	3.75	3.06	2.61	2.30
769-TX2SA-9V	TX2SA-9V	B2	2	9	2 Form C	SMD	3.75	3.06	2.61	2.30
* 769-TX2SA-L2-12V	TX2SA-L2-12V	B2	2	12	2 Form C	SMD	4.70	3.84	3.27	2.88
* 769-TX2SA-L2-3V	TX2SA-L2-3V	B2	2	3	2 Form C	SMD	4.70	3.84	3.27	2.88
* 769-TX2SA-L2-4.5V	TX2SA-L2-4.5V	B2	2	4.5	2 Form C	SMD	5.27	4.30	3.66	3.23
* 769-TX2SA-L2-5V	TX2SA-L2-5V	B2	2	5	2 Form C	SMD	4.70	3.84	3.27	2.88
769-TDX2SA-3V	TXD2SA-3V	B2	2	3	2 Form C	SMD	4.83	3.94	3.35	2.96
769-TDX2SA-5V	TXD2SA-5V	B2	2	5	2 Form C	SMD	4.83	3.94	3.35	2.96
769-TXS2SA-12V	TXS2SA-12V	B2	1	12	2 Form C	SMD	4.70	3.84	3.27	2.88
769-TXS2SA-3V	TXS2SA-3V	B2	1	3	2 Form C	SMD	4.70	3.84	3.27	2.88
769-TXS2SA-4.5V	TXS2SA-4.5V	B2	1	4.5	2 Form C	SMD	4.70	3.84	3.27	2.88
* 769-TXS2SA-L2-4.5V	TXS2SA-L2-4.5V	B2	1	4.5	2 Form C	SMD	5.56	4.54	3.86	3.41

## SS SMD Type

MOUSER STOCK NO.	Datal Part No.	Fig.	Current Rating (A)	Voltage (VDC)	Contact Arrangement	Mounting Type	Price Each			
							1	10	100	500
769-TX2SS-24V	TX2SS-24V	B3	2	24	2 Form C	Space Save SMD	4.46	3.64	3.10	2.73
769-TX2SS-4.5V	TX2SS-4.5V	B3	2	4.5	2 Form C	Space Save SMD	3.75	3.06	2.61	2.30
769-TX2SS-48V	TX2SS-48V	B3	2	48	2 Form C	Space Save SMD	5.81	4.74	4.02	3.55
769-TX2SS-5V	TX2SS-5V	B3	2	5	2 Form C	Space Save SMD	3.75	3.06	2.61	2.30
769-TXS2SS-12V	TXS2SS-12V	B3	1	12	2 Form C	Space Save SMD	4.70	3.84	3.27	2.88
769-TXS2SS-4.5V	TXS2SS-4.5V	B3	1	4.5	2 Form C	Space Save SMD	4.70	3.84	3.27	2.88

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# COTO Reed Relays

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## SPARTAN SIP RELAYS

### Features:

- High Insulation Resistance:  $10^{10}\Omega$
- High Speed Switching
- UL File # E67117, CSA File # LR 28537
- Coaxial Shield for 50Ω Impedance and Switching

### Specifications:

- Storage Temp: -35°C to +100°C
- Operating Temp: -20°C to +85°C
- Solder Temp: 270°C max; 10 sec max
- Vibration: 20Gs to 2000Hz; Shock: 50Gs

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Coto Part No.	Fig.	Circuit	Coil Voltage DC	Switching Current	Carry Current (A)	Price Each			
							1	10	50	100
816-9007-05-00	9007-05-00	A	SPST	5	0.5	1	1.02	.979	.927	.854
816-9007-12-00	9007-12-00	A	SPST	12	0.5	1	1.08	1.02	.946	.872

## SURFACE MOUNT REED RELAYS

### Features:

- 50Ω Coaxial Shield for RF and Fast Rise Time Pulse Switching
- External Magnetic Shield

### Specifications:

- Storage Temp: -35°C to +100°C
- Operating Temp: -20°C to +85°C
- Vibration: 20Gs to 2000Hz; Shock: 50Gs

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Coto Part No.	Fig.	Circuit	Coil Voltage DC	Switching Current	Carry Current (A)	Price Each			
							1	10	50	100
816-9290-05-00	9290-05-00	B	SPST	5	0.5	1.5	6.97	5.89	4.93	3.96
816-9402-05-20	9402-05-20	C	SPST	5	0.5	1	6.26	5.74	5.55	5.07

## MAGNETICALLY SHIELDED SURFACE MOUNT REED RELAYS

### Features:

- High Insulation Resistance:  $10^{12}\Omega$
- High Speed Switching
- Small Surface Mount Package (0.225" x 0.550")
- 50Ω Coaxial Shield for RF and Fast Rise Time Pulse Switching

### Specifications:

- Storage Temp: -35°C to +100°C
- Operating Temp: -20°C to +85°C
- Vibration: 20Gs to 2000Hz; Shock: 50Gs

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Coto Part No.	Fig.	Circuit	Coil Voltage DC	Switching Current	Carry Current (A)	Price Each			
							1	10	50	100
816-9814-03-00	9814-03-00	D	SPST	3.3	0.25	0.5	6.65	6.35	5.74	5.23
816-9814-05-00	9814-05-00	D	SPST	5	0.25	0.5	7.33	7.00	6.33	5.76

## SURFACE MOUNT FORM C REED RELAY

### Features:

- High Insulation Resistance:  $10^{12}\Omega$
- High Speed Switching
- Small Surface Mount Package (0.225" x 0.550")
- 50Ω Coaxial Shield for RF and Fast Rise Time Pulse Switching
- External Magnetic Shield

### Specifications:

- Storage Temp: -35°C to +100°C
- Operating Temp: -20°C to +85°C
- Vibration: 20Gs to 2000Hz; Shock: 50Gs

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Coto Part No.	Fig.	Circuit	Coil Voltage DC	Switching Current	Carry Current (A)	Price Each			
							1	10	50	100
816-9852-05-00	9852-05-00	D	SPDT	5	0.1	0.2	33.55	32.03	28.97	26.38

## 9092 SERIES: MINIATURE SIP RELAYS

### Features:

- 10W SIP relay measuring .600" x .150" x .350"
- High speed switching
- Molded thermoset body on integral lead frame design
- High insulation resistance
- Magnetic Shield Option
- Diode Option

### Specifications:

- Storage Temperature: -35°C to +100°C
- Operate Temperature: -20°C to +85°C
- Solder Temperature: 270°C max 10 sec. max
- Vibration: 20Gs to 2000Hz Shock: 50Gs
- Switching Current (A): 0.5
- Carry Current (A): 1.2

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Coto Part No.	Fig.	Coil Voltage	Coil Resist.	Operate Voltage	Release Voltage	Price Each			
							1	10	50	100
816-9092-05-10	9092-05-10	E	5	375	3.75	0.4	7.28	6.89	6.46	6.20
816-9092-05-11	9092-05-11	E	5	375	3.75	0.4	7.40	7.01	6.57	6.31

MOUSER STOCK NO.	Coto Part No.	Fig.	Coil Voltage	Coil Resist.	Operate Voltage	Release Voltage	Price Each			
							1	10	50	100
816-9092-12-10	9092-12-10	E	12	750	9.0	1.0	8.88	8.36	7.89	7.57
816-9092-12-11	9092-12-11	E	12	750	9.0	1.0	8.99	8.46	7.98	7.66

MOUSER STOCK NO.	Coto Part No.	Fig.	Coil Voltage	Coil Resist.	Operate Voltage	Release Voltage	Price Each			
							1	10	50	100
816-9092-12-10	9092-12-10	E	12	750	9.0	1.0	8.88	8.36	7.89	7.57
816-9092-12-11	9092-12-11	E	12	750	9.0	1.0	8.99	8.46	7.98	7.66

## 9104 SERIES: HIGH VOLTAGE SIP REED RELAYS

### Features:

- High voltage switching up to 1000V
- High speed switching
- Molded thermoset body on integral lead frame design
- High insulation resistance
- High dielectric strength 2000VDC
- Diode Option

### Specifications:

- Storage Temp: -35°C to +100°C
- Operate Temp: -20°C to +85°C
- Solder Temp: 270°C max 10 sec. max
- Vibration: 20Gs to 2000Hz Shock: 50Gs
- Switching Current (A): .5
- Carry Current (A): 1.3

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Coto Part No.	Fig.	Coil Voltage	Coil Resist.	Operate Voltage	Release Voltage	Price Each			
							1	10	50	100
816-9104-05-10	9104-05-10	F	5	175	3.75	0.5	8.85	8.37	7.84	7.53
816-9104-05-11	9104-05-11	F	5	175	3.75	0.5	7.40	7.01	6.57	6.31

MOUSER STOCK NO.	Coto Part No.	Fig.	Coil Voltage	Coil Resist.	Operate Voltage	Release Voltage	Price Each			
							1	10	50	100
816-9104-12-11	9104-12-11	F	12	500	9.0	1.0	7.42	6.99	6.59	6.32

## 9117 SERIES: MINIATURE SIP RELAY

### Features:

- 9117 is the smallest 3W SIP relay (.270" x .150" x .385")
- High speed switching
- High insulation resistance
- High reliability, hermetically sealed contacts
- Molded thermoset body on integral lead frame design
- Diode Option

### Specifications:

- Storage Temperature: -35°C to +100°C
- Operate Temperature: -20°C to +85°C
- Solder Temperature: 270°C max 10 sec. max
- Vibration: 20Gs to 2000Hz Shock: 50Gs
- Switching Current (A): .25
- Carry Current (A): .5

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Coto Part No.	Fig.	Coil Voltage	Coil Resist.	Operate Voltage	Release Voltage	Price Each			
							1	10	50	100
816-9117-05-10	9117-05-10	G	5	400	3.75	0.5	7.48	7.08	6.64	6.37

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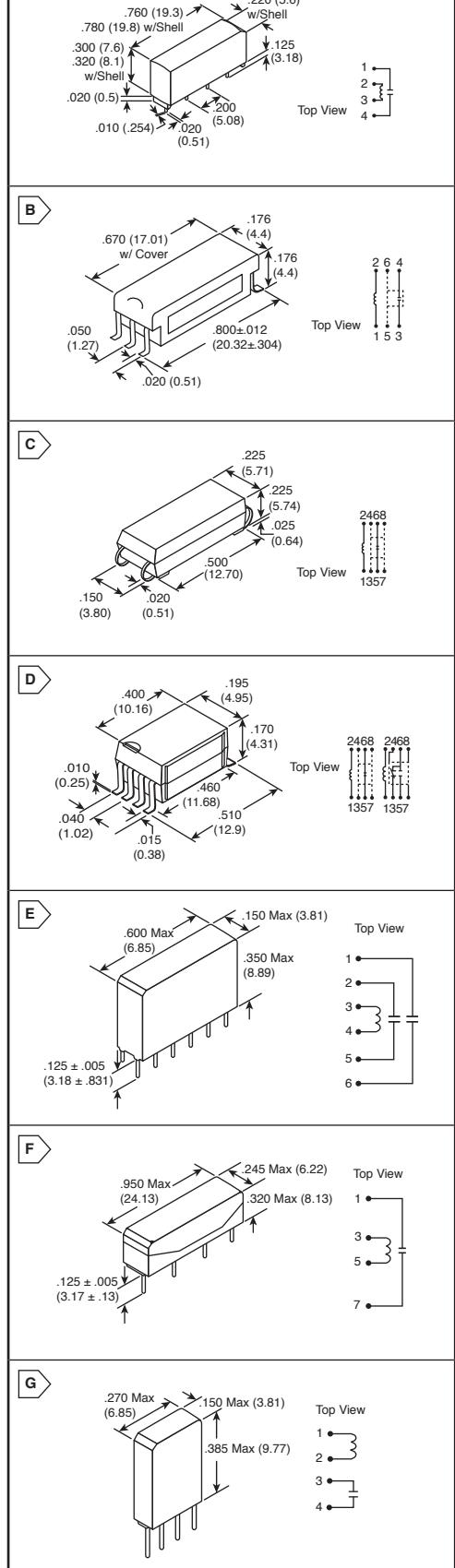
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# HAMLIN Reed Relays

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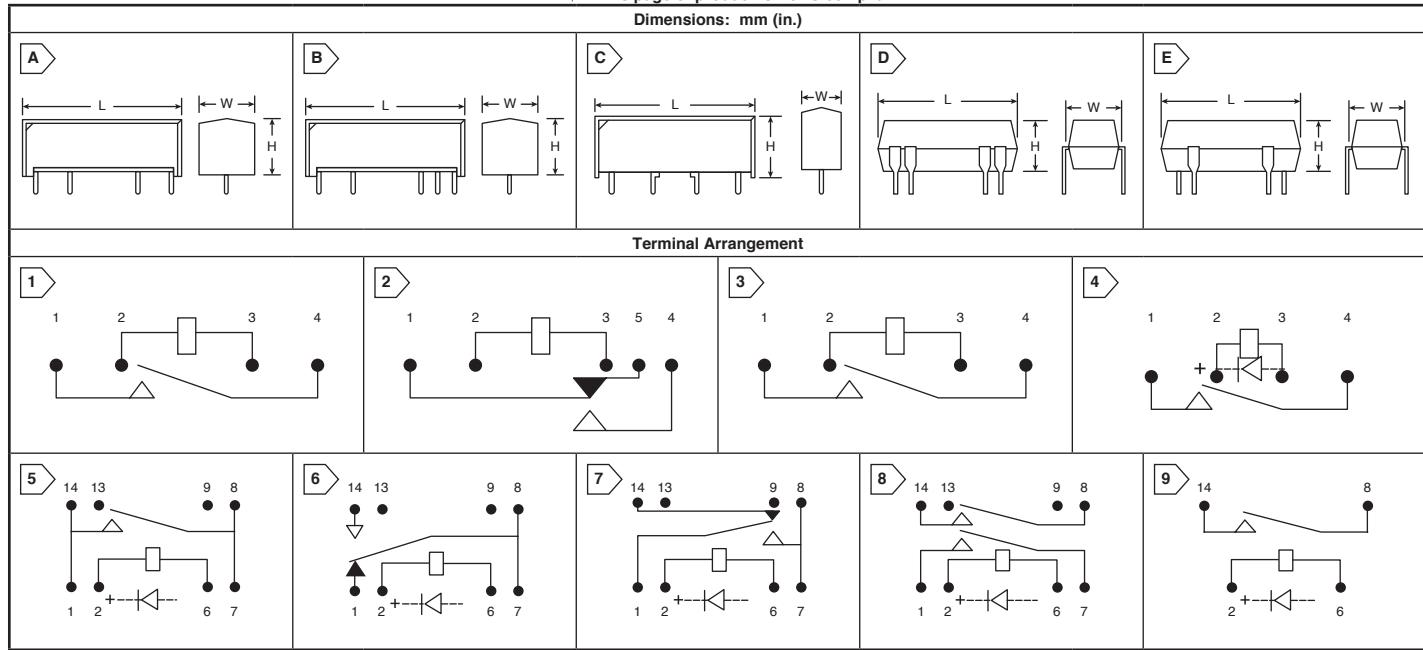
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**Littelfuse**<sup>®</sup>

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## REED RELAYS, NON-LATCHING, THROUGH HOLE MOUNTING TYPE, PC PIN

Relays are molded construction and compatible with automatic insertion and board washing. All contacts are run-in one million operations prior to testing. Operating temperature: -40°C to +85°C. Immune to 50G shock and 20G vibration. 10-2000Hz. Maximum contact resistance: 200mΩ

### Features for HE3300 SIL Series:

- Miniature single in line package
- High voltage switching version
- Normally open and change over contact configurations available

### Features for HE3600 Miniature SIL Series:

- Miniature single in line package
- Normally open contact version

### Features for HE700 Miniature DIL Series:

- Miniature dual in line package
- Choice of normally open, normally closed and change over contacts
- High voltage switching option

### Benefits:

- Lower power coil consumption than competing electromechanical devices
- Hermetically sealed switching contact is immune to the effects of its environment
- Transfer molded package gives maximum component protection

### Applications:

- Security
- Telecoms
- Process Control
- Automatic Test Equipment
- Instrumentation

\* Diode    \*\* External Magnetic Shield and Diode

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Hamlin Part No.	Fig.	Contact Form	Power (W)	Standard Coil (V)	Dimensions: mm (in.)			Price Each		
						Length	Width	Height	1	10	50
<b>HE3300 SIL Series</b>											
934-HE3321A0400	HE3321A0400	A1	1 Form A (SPST-NO)	10	5	24.13(.95)	7(.276)	7.4(.291)	1.75	1.48	1.24
934-HE3321A1200	HE3321A1200	A1	1 Form A (SPST-NO)	10	12	24.13(.95)	7(.276)	7.4(.291)	2.99	2.53	2.11
934-HE3321A2400	HE3321A2400	A1	1 Form A (SPST-NO)	10	24	24.13(.95)	7(.276)	7.4(.291)	2.17	1.84	1.54
934-HE3321C0500	HE3321C0500	B2	1 Form C (SPDT-CO)	5	5	24.13(.95)	7(.276)	7.4(.291)	3.47	2.94	2.46
934-HE3321C1200	HE3321C1200	B2	1 Form C (SPDT-CO)	5	12	24.13(.95)	7(.276)	7.4(.291)	4.94	4.64	4.26
934-HE3321C2400	HE3321C2400	B2	1 Form C (SPDT-CO)	5	24	24.13(.95)	7(.276)	7.4(.291)	5.00	4.23	3.54
934-HE3351A0500	HE3351A0500	A3	1 Form A (SPST-NO)	10	5	24.13(.95)	7(.276)	7.4(.291)	3.08	2.61	2.18
934-HE3351A2400	HE3351A2400	A3	1 Form A (SPST-NO)	10	24	24.13(.95)	7(.276)	7.4(.291)	3.34	2.83	2.36
<b>HE3600 Miniature SIL Series</b>											
934-HE3621A0500	HE3621A0500	C4	1 Form A (SPST-NO)	10	5	19.05(.75)	5.08(.2)	7.45(.293)	1.51	1.27	1.06
* 934-HE3621A0510	HE3621A0510	C4	1 Form A (SPST-NO)	10	5	19.05(.75)	5.08(.2)	7.45(.293)	1.83	1.55	1.29
934-HE3621A1200	HE3621A1200	C4	1 Form A (SPST-NO)	10	12	19.05(.75)	5.08(.2)	7.45(.293)	1.70	1.44	1.21
* 934-HE3621A1210	HE3621A1210	C4	1 Form A (SPST-NO)	10	12	19.05(.75)	5.08(.2)	7.45(.293)	1.59	1.34	1.12
** 934-HE3621A1250	HE3621A1250	C4	1 Form A (SPST-NO)	10	12	19.7(.776)	5.65(.222)	7.87(.31)	2.95	2.50	2.09
934-HE3621A2400	HE3621A2400	C4	1 Form A (SPST-NO)	10	24	19.05(.75)	5.08(.2)	7.45(.293)	2.08	1.76	1.47
* 934-HE3621A2410	HE3621A2410	C4	1 Form A (SPST-NO)	10	24	19.05(.75)	5.08(.2)	7.45(.293)	2.30	1.95	1.63
934-HE3671A1200	HE3671A1200	C4	1 Form A (SPST-NO)	10	12	19.05(.75)	5.08(.2)	7.45(.293)	3.37	2.84	2.38
<b>HE700 Miniature DIL Series</b>											
934-HE721A0500	HE721A0500	D5	1 Form A (SPST-NO)	10	5	19.5(.768)	7.22(.284)	5.5(.217)	1.32	1.11	.932
* 934-HE721A0510	HE721A0510	D5	1 Form A (SPST-NO)	10	5	19.5(.768)	7.22(.284)	5.5(.217)	3.30	2.78	2.32
934-HE721A1200	HE721A1200	D5	1 Form A (SPST-NO)	10	12	19.5(.768)	7.22(.284)	5.5(.217)	1.54	1.30	1.09
* 934-HE721A1210	HE721A1210	D5	1 Form A (SPST-NO)	10	12	19.5(.768)	7.22(.284)	5.5(.217)	1.75	1.48	1.24
934-HE721A2400	HE721A2400	D5	1 Form A (SPST-NO)	10	24	19.5(.768)	7.22(.284)	5.5(.217)	1.56	1.32	1.10
* 934-HE721A2410	HE721A2410	D5	1 Form A (SPST-NO)	10	24	19.5(.768)	7.22(.284)	5.5(.217)	1.63	1.36	1.33
934-HE721C0500	HE721C0500	D6	1 Form C (SPDT-CO)	5	5	19.5(.768)	7.22(.284)	5.5(.217)	5.86	4.95	4.14
* 934-HE721C0510	HE721C0510	D6	1 Form C (SPDT-CO)	5	5	19.5(.768)	7.22(.284)	5.5(.217)	3.58	3.03	2.53
934-HE721C1200	HE721C1200	D6	1 Form C (SPDT-CO)	5	12	19.5(.768)	7.22(.284)	5.5(.217)	4.98	4.20	3.51
* 934-HE721C1210	HE721C1210	D6	1 Form C (SPDT-CO)	5	12	19.5(.768)	7.22(.284)	5.5(.217)	4.61	3.90	3.26
934-HE721C2400	HE721C2400	D6	1 Form C (SPDT-CO)	5	24	19.5(.768)	7.22(.284)	5.5(.217)	3.60	3.05	2.55
* 934-HE721C2410	HE721C2410	D6	1 Form C (SPDT-CO)	5	24	19.5(.768)	7.22(.284)	5.5(.217)	3.66	3.10	2.59
934-HE721R0510	HE721R0510	D7	1 Form C (SPDT-CO)	5	5	19.5(.768)	7.22(.284)	5.5(.217)	10.40	8.80	7.36
934-HE722A0500	HE722A0500	D8	2 Form A (DPST-NO)	10	5	19.5(.768)	7.22(.284)	5.5(.217)	2.96	2.50	2.09
* 934-HE722A0510	HE722A0510	D8	2 Form A (DPST-NO)	10	5	19.5(.768)	7.22(.284)	5.5(.217)	4.00	3.37	2.82
934-HE722A0600	HE722A0600	D8	2 Form A (DPST-NO)	10	5	19.5(.768)	7.22(.284)	5.5(.217)	4.71	3.98	3.33
* 934-HE722A0610	HE722A0610	D8	2 Form A (DPST-NO)	10	5	19.5(.768)	7.22(.284)	5.5(.217)	3.12	2.64	2.20
934-HE722A1200	HE722A1200	D8	2 Form A (DPST-NO)	10	12	19.5(.768)	7.22(.284)	5.5(.217)	2.99	2.53	2.11
* 934-HE722A1210	HE722A1210	D8	2 Form A (DPST-NO)	10	12	19.5(.768)	7.22(.284)	5.5(.217)	3.12	2.64	2.20
934-HE722A2400	HE722A2400	D8	2 Form A (DPST-NO)	10	24	19.5(.768)	7.22(.284)	5.5(.217)	4.18	3.52	2.95
* 934-HE722A2410	HE722A2410	D8	2 Form A (DPST-NO)	10	24	19.5(.768)	7.22(.284)	5.5(.217)	3.70	3.13	2.62
* 934-HE751A0510	HE751A0510	E9	1 Form A (SPST-NO)	10	5	19.5(.768)	7.22(.284)	5.5(.217)	2.39	2.02	1.69
* 934-HE751A1210	HE751A1210	E9	1 Form A (SPST-NO)	10	12	19.5(.768)	7.22(.284)	5.5(.217)	2.37	2.00	1.67
* 934-HE751A2410	HE751A2410	E9	1 Form A (SPST-NO)	10	24	19.5(.768)	7.22(.284)	5.5(.217)	3.05	2.58	2.16

# MAGNECRAFT Reed Relays

RoHS Compliant This page of product is RoHS compliant.

**Schneider**  
Electric

## 117 SIP 4 PIN REED RELAYS

### Specifications:

- Contact resistance: 200mΩ max.
- Pin spacing of 0.2 between pins
- Standard 0.1 grid spacing
- Rated @ 10VA, 0.5 amp switching and can carry up to 1.5 amps
- Dielectric strength: 500Vrms (coil to frame)

### Class 117SIP, SPST-NO without Clamping Diode

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft Part No.	Fig.	Nom. Volts	Coil (Ω)	Max. Pick-up VDC	Nom. Power mW	Price Each			
							1	10	50	100
528-117-1	W117SIP-1	A1	5	500	4	50	5.37	5.12	4.96	4.77
528-117-3	W117SIP-3	A1	12	1000	9.6	144	7.29	6.52	6.02	5.44

### Class 117SIP, SPST-NO with Clamping Diode

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft Part No.	Fig.	Nom. Volts	Coil (Ω)	Max. Pick-up VDC	Nom. Power mW	Price Each			
							1	10	50	100
528-117-6	W117SIP-6	A2	5	500	4	50	4.59	4.37	4.27	4.10

### Class 117SIP, SPST-NC with Clamping Diode

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft Part No.	Fig.	Nom. Volts	Coil (Ω)	Max. Pick-up VDC	Nom. Power mW	Price Each			
							1	10	50	100
528-117-18	W117SIP-18	A3	5	500	4	50	5.81	5.40	5.07	4.76

### Class 117SIP, SPST-NC without Clamping Diode

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft Part No.	Fig.	Nom. Volts	Coil (Ω)	Max. Pick-up VDC	Nom. Power mW	Price Each			
							1	10	50	100
528-117-22	W117SIP-22	A4	5	500	4	50	8.91	8.56	8.13	7.70

## CLASS 107 AND 171 DRY REED RELAYS

### Specifications:

- Contact resistance: 200mΩ max.
- Insulation resistance: 100MΩ @ 500VDC min.
- Dielectric withstanding voltage between contacts: 200Vrms
- With clamping diode

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft Part No.	Fig.	Nom. Volts	Coil (Ω)	Max. Pick-up VDC	Nom. Power mW	Price Each			
							1	10	50	100
Class 107DIP, SPST-NO, 0.5A	528-107-1	B5	5	500	3.8	50	3.94	3.63	3.31	3.04
	528-107-3	B5	12	1000	9	144	7.22	6.75	6.29	5.89
*	528-107-5	B6	5	500	3.8	50	3.32	3.18	3.02	2.83
*	528-107-7	B6	12	1000	9	144	4.85	4.37	4.17	4.01

### Class 171DIP, SPST-NO, 0.5A (No Connection Pin 9 & 13)

For quantities greater than listed, call for quote.

528-171-1	W171DIP-2	B7	5	500	3.8	50	4.79	4.36	3.82	3.51
528-171-4	W171DIP-4	B7	12	1200	9	120	4.07	3.67	3.63	3.33
*	528-171-7	W171DIP-7	B8	5	500	3.8	50	3.72	3.43	3.13
*	528-171-10	W171DIP-10	B8	24	2200	18	270	6.28	5.83	5.39

### Class 171DIP, SPST-NC, 0.5A

For quantities greater than listed, call for quote.

528-171-12	W171DIP-12	B9	5	200	3.8	50	9.66	9.23	8.57	8.05
528-171-14	W171DIP-14	B9	12	1200	9	120	9.00	7.46	6.34	6.13
*	528-171-17	W171DIP-17	B10	5	500	3.8	50	9.06	8.57	7.86

### Class 171DIP, DPST-NO, 0.5A

For quantities greater than listed, call for quote.

528-171-21	W171DIP-21	B11	5	500	3.8	200	8.50	8.02	7.39	6.85
528-171-23	W171DIP-23	B11	12	1000	9	144	9.88	8.83	7.93	7.56
*	528-171-25	W171DIP-25	B12	5	500	3.8	50	6.51	6.20	5.93

### Class 171DIP, DPST-NO, 0.5A

For quantities greater than listed, call for quote.

528-171-28	W171DIP-28	B12	24	2200	18	270	7.05	6.49	5.89	5.61
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## CLASS 172 DRY REED RELAYS

### Specifications:

- Contact resistance: 200mΩ max.
- Insulation resistance: 100MΩ @ 500VDC min.
- Dielectric withstanding voltage between contacts: 200Vrms

With clamping diode

For quantities greater than listed, call for quote.

528-172-1	W172DIP-1	B13	5	200	3.8	125	9.09	8.27	7.58	7.12
528-172-3	W172DIP-3	B13	12	500	9	300	11.81	10.80	9.82	9.37
*	528-172-5	B14	5	200	3.8	125	6.76	6.11	5.70	5.43

### Class 172DIP, SPDT, 0.25A

For quantities greater than listed, call for quote.

528-172-7	W172DIP-7	B14	12	500	9	300	9.13	8.93	8.35	7.99
528-172-8	W172DIP-8	B14	24	2200	18	270	11.23	10.78	8.01	7.68

### Class 172DIP, SPDT, 0.25A

For quantities greater than listed, call for quote.

528-172-141	W172DIP-141	B15	5	200	3.8	125	11.70	10.68	9.82	9.40
528-172-145	W172DIP-145	B15	12	1000	9	144	12.49	10.09	8.72	8.09

### Class 172DIP, SPDT, 0.25A

For quantities greater than listed, call for quote.

528-172-147	W172DIP-147	B16	5	200	3.8	125	8.91	8.49	7.81	7.51
528-172-149	W172DIP-149	B16	12	1000	9	144	10.68	9.91	9.31	8.72
*	528-172-150	B16	24	3200	18	180	11.80	10.13	9.33	8.89

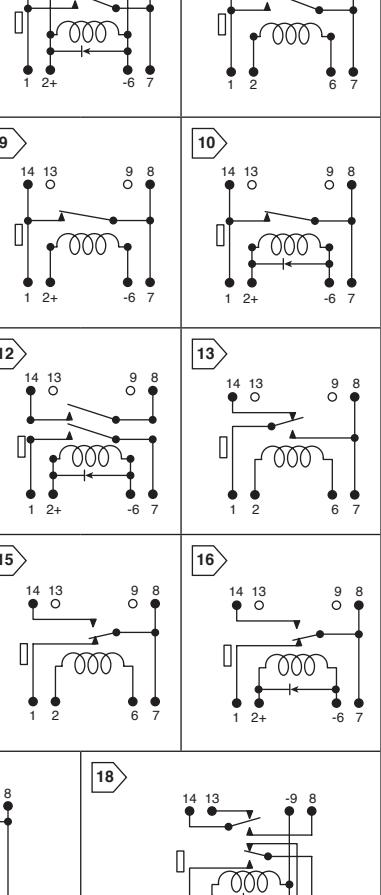
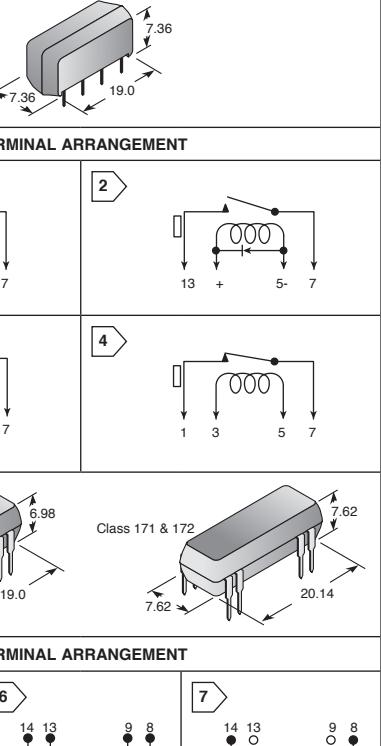
### Class 172DIP, SPDT, 0.25A

For quantities greater than listed, call for quote.

528-172-21	W172DIP-21	B18	5	46	3.8	540	45.68	43.20	38.97	36.28
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# MEDER Reed Relays

**Standex MEDER**  
Custom  
Engineered  
Solutions for  
Tomorrow

## CRF SERIES-7GHz HIGH FREQUENCY

- Features:**
- Available with BGA
  - Minimum path length for RF
  - Very low profile

- Applications:**
- High frequency applications
  - High speed applications

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Meder Part No.	Fig.	Description	Price Each
			1	10
876-CRF05-1A	CRF05-1A	A	Reed Relay 1 Form A, 5V Surface Mount High Frequency	7.63 7.07

## CCR SERIES-SURFACE MOUNT

- Features:**
- Ceramic/Thermoset molded package
  - Very low profile
  - Gold plated leads

- Applications:**
- Telecommunications
  - Test and measurement systems
  - Medical applications

For quantities greater than listed, call for quote.

876-CRR05-1A	CRR05-1A	B	Reed Relay 1 Form A, 5V Surface Mount Ultra Small Low Profile	7.84	6.48
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## DIP SERIES-MOLDED DIP

- Features:**
- Low and high profile package
  - Versions with diode available
  - Standard pin configurations

- Applications:**
- Test and Measurements
  - Telecommunications
  - Security

For quantities greater than listed, call for quote.

876-DIP05-1A72-11D	DIP05-1A72-11D	B	Reed Relay, 1 Form A, 5V Molded Dip with Diode	2.97	2.82
876-DIP05-2A72-21D	DIP05-2A72-21D	B	Reed Relay, 2 Form A, SPST-NO, 5V Molded Dip with Diode	6.68	6.07
876-DIP05-1A72-12L	DIP05-1A72-12L	B	Reed Relay 1 Form A, 5V Molded Dip	2.80	2.66
876-DIP05-1A72-13L	DIP05-1A72-13L	B	Reed Relay, 1 Form A SPST-NO 5V Mold DIP	3.00	3.00
876-DIP05-2A72-21L	DIP05-2A72-21L	B	Reed Relay 2 Form A 5V Molded Dip	4.40	4.00
876-DIP05-1C90-51L	DIP05-1C90-51L	B	Reed Relay 1 Form C, 5V Molded Dip	6.04	5.49
876-DIP12-1A72-12D	DIP12-1A72-12D	B	Reed Relay, 1 Form A, SPST-NO, 12V Molded DIP with Diode	3.88	3.36
876-DIP12-1A72-12L	DIP12-1A72-12L	B	Reed Relay, 1 Form A, SPST-NO, 12V Molded DIP	3.39	3.09
876-DIP12-1C90-51D	DIP12-1C90-51D	B	Reed Relay, 1 Form C, SPDT-Changeover, 12V Molded DIP w/Diode	8.16	7.41
876-DIP12-1C90-51L	DIP12-1C90-51L	B	Reed Relay, 1 Form C, SPDT-Changeover, 12V Molded DIP	7.96	6.25
876-DIP12-2A72-21D	DIP12-2A72-21D	B	Reed Relay, 2 Form A, SPST-NO, 12V Molded Dip with Diode	6.10	5.55
876-DIP12-2A72-21L	DIP12-2A72-21L	B	Reed Relay, 2 Form A, SPST-NO, 12V Molded Dip	5.86	5.32
876-DIP24-1A72-12D	DIP24-1A72-12D	B	Reed Relay, 1 Form A, SPST-NO, 12V Molded DIP with Diode	3.80	3.45
876-DIP24-1A72-12L	DIP24-1A72-12L	B	Reed Relay, 1 Form A, SPST-NO, 12V Molded DIP	3.52	3.20
876-DIP24-1C90-51D	DIP24-1C90-51D	B	Reed Relay, 1 Form C, SPDT-Changeover, 24V Molded DIP w/Diode	8.56	7.77
876-DIP24-1C90-51L	DIP24-1C90-51L	B	Reed Relay, 1 Form C, SPDT-Changeover, 24V Molded DIP	8.04	7.30
876-DIP24-2A72-21D	DIP24-2A72-21D	B	Reed Relay, 2 Form A, SPST-NO, 24V Molded DIP with Diode	6.22	5.66
876-DIP24-2A72-21L	DIP24-2A72-21L	B	Reed Relay, 2 Form A, SPST-NO, 24V Molded DIP	5.98	5.43

## HIGH VOLTAGE/HIGH CURRENT REED RELAYS

A full spectrum of sizes, power, and high voltage switching options are just a few features offered, among the seven types of MEDER High Voltage/High Current Reed Relays. Switching voltages as high as 10kVDC and breakdown voltages to 15kVDC. Continuous carry currents up to 15 Amps and pulsed currents 30 Amps.

For quantities greater than listed, call for quote.

H Series		C	Reed Relay, 1 Form A SPST-NO 12V HiV PCB	82.35	74.51
876-H24-1A83	H24-1A83	C	Reed Relay, 1 Form A SPST-NO 12V HiV PCB	82.35	74.51
HE Series					
876-HE12-1A83-02	HE12-1A83-02	D	Reed Relay 1 Form A SPST-NO 12V High Voltage PCB	37.27	35.94
876-HE12-1A83-03	HE12-1A83-03	D	Reed Relay 1 Form A SPST-NO 12V High Voltage PCB	37.27	35.94
HM Series					
876-HM12-1A69-150	HM12-1A69-150	E	Reed Relay, 1 Form A SPST-NO 12V HiV PCB	65.52	62.07

## LI SERIES-MINIATURE HIGH VOLTAGE PCB MOUNTING

- Features:**
- Smallest possible housing
  - High resistance available
  - Spacing saving package

- Applications:**
- High voltage test systems
  - Cable and in-circuit test equipment
  - Battery operated high voltage test equipment

For quantities greater than listed, call for quote.

876-LI12-1A85	LI12-1A85	F	Reed Relay 1 Form A, 12V High Volt. PCB Mounting (Small Package)	7.49	6.93
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## MS SERIES MICRO SIL REED RELAY

- Features:**
- Contact Form 1A, 1B and 2A
  - Internal magnetic shield on all relays
  - Coaxial shield option for 1A

- Internal magnetic shield on all relays
- Diode option available
- High coil resistance option for 1A
- UL available on most models

For quantities greater than listed, call for quote.

876-MS05-1A87-75DHR	MS05-1A87-75DHR	G	Reed Relay 1 Form A 5V Micro SIL w/diode	5.38	4.68
876-MS05-1A87-75LHR	MS05-1A87-75LHR	G	Reed Relay 1 Form A 5V Micro SIL hi resist	4.02	3.82
876-MS05-2A87-78D	MS05-2A87-78D	G	Reed Relay 2 Form A DPST-NO 5V Micro SIL with Diode	10.68	9.75
876-MS05-2A87-78L	MS05-2A87-78L	G	Reed Relay, 2 Form A, DPST-NO, 5V Micro SIL (Single In-Line)	10.22	9.72
876-MS05-2A87-78L	MS05-2A87-78L	G	Reed Relay, 2 Form A, DPST-NO, 5V Micro SIL (Single In-Line)	10.22	9.72
876-MS12-1A87-75D	MS12-1A87-75D	G	Reed Relay 1 Form A 12V Micro SIL with diode	5.56	5.29

## MRX SERIES-EX-APPROVED REED RELAYS

- Features:**
- Up to 4 form A switches or 1 form C switch are available according to the different castings

For quantities greater than listed, call for quote.

876-MRX05-1A71	MRX05-1A71	H	Ex-Approved Relays , 1 Form A, SPST-NO, 5V	14.18	13.09
876-MRX12-1C90	MRX12-1C90	H	Ex-Approved Relays, 1 Form C, SPDT, 12V	25.24	22.72

## SIL SERIES-SINGLE IN LINE

- Features:**
- High resistance coils of up to 2000Ω at 12V
  - Breakdown voltage coil-contact up to 4.25kVDC
  - Magnetic shield available

- Applications:**
- ATE
  - Measurement equipment

For quantities greater than listed, call for quote.

876-SIL05-1A72-71D	SIL05-1A72-71D	I	Reed Relay 1 Form A, 5V SIL (Single In-Line) w/Diode	3.54	3.27
876-SIL05-1A72-71L	SIL05-1A72-71L	I	Reed Relay 1 Form A, 5V SIL (Single In-Line)	3.51	3.14
876-SIL05-1A85-76D2K	SIL05-1A85-76D2K	I	Reed Relay RELAY REED SPST-NO 5V 100W SIL	19.98	18.25
876-SIL05-1A85-76L2K	SIL05-1A85-76L2K	I	Reed Relay RELAY REED SPST-NO 5V 100W SIL	10.23	9.33
876-SIL051A8576L3K	SIL051A8576L3K	I	Reed Relay, 1 Form A, SPST-NO, 5V SIL, High Power, 3kV breakdown	5.29	4.81
876-SIL051A8576L4K	SIL051A8576L4K	I	Reed Relay, 1 Form A, SPST-NO, 5V SIL, High Power, 4kV breakdown	8.34	8.14
876-SIL12-1A72-71L	SIL12-1A72-71L	I	Reed Relay, 1 Form A SPST-NO, 5V SIL, HP 4kV with Diode	13.42	11.18
876-SIL12-1A72-71L	SIL12-1A72-71L	I	Reed Relay, 1 Form A, SPST-NO, 5V SIL, HP 4kV with Diode	3.97	3.28
876-SIL12-1A72-71D	SIL12-1A72-71D	I	Reed Relay, 1 Form A, SPST-NO, 12V SIL (Single In-Line) w/Diode	2.83	2.32
876-SIL24-1A72-71D	SIL24-1A72-71D	I	Reed Relay, 1 Form A, SPST-NO, 24V SIL (Single In-Line) w/Diode	2.92	2.40
876-SIL24-1A72-71L	SIL24-1A72-71L	I	Reed Relay, 1 Form A, SPST-NO, 24V SIL (Single In-Line)	3.27	2.95

## UMS SERIES/MICRO SIL REED RELAYS

- Features:**
- Ultra miniature size
  - Standard in-line package
  - Internal diode
  - Internal magnetic shield

- PCB through hole mounting
- Hermetically sealed thermoset

For quantities greater than listed, call for quote.

876-UMS05-1A80-75D	UMS05-1A80-75D	J	Reed Relay, 1 Form A SPST-NO 5V SIL with Diode	5.12	4.61
876-UMS05-1A80-75L	UMS05-1A80-75L	J	Reed Relay, 1 Form A SPST-NO 5V SIL	4.65	4.19

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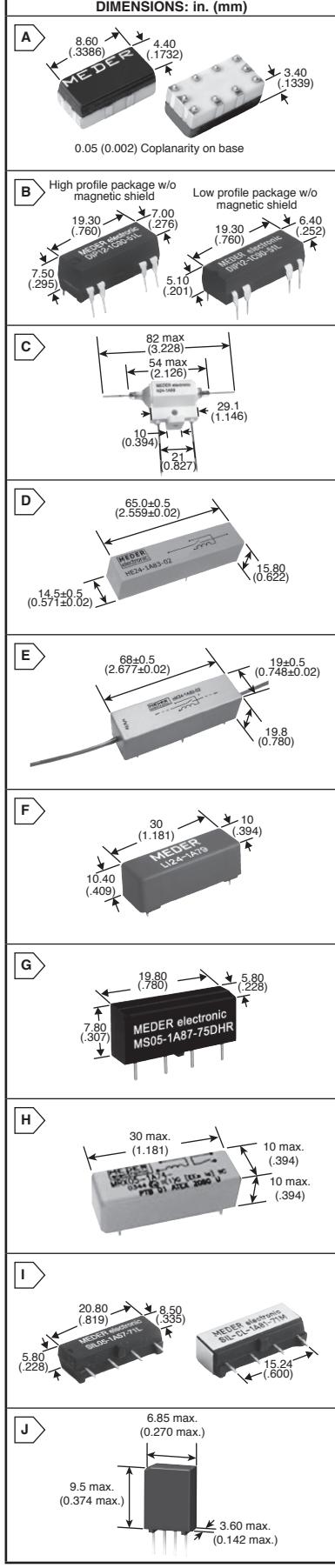


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DIMENSIONS: mm

<b>A</b>		<b>B</b>	
WIRING DIAGRAMS			
<b>1</b>		<b>2</b>	
<b>3</b>		<b>4</b>	
<b>5</b>		<b>6</b>	
<b>7</b>			

## JWD SERIES: DIP DRY REED RELAYS

### Specifications:

- Contact Material: Ruthenium
- Mechanical Life: 100 million operations
- Maximum Switched Current: 500mA
- Operating Time (including bounce): 1.5ms Max.
- Release Time (including bounce): 0.5ms Max.
- 14-pin DIP



MOUSER STOCK NO.	P&B Part No.	Fig.	Contact Form	Max. Switched Power	Suppression Diode	Nominal Voltage	Must Operate Voltage	Must Release Voltage	Max. Voltage	Coil Res. (Ω)	Nominal Current	For quantities greater than listed, call for quote.			
												1	25	50	100
<b>655-JWD-107-1</b>	JWD-107-1	A1	SPST-NO	10W	No	5/6VDC	3.8VDC	0.5VDC	19VDC	500	50/72mW	<b>3.97</b>	<b>3.74</b>	<b>3.63</b>	<b>3.52</b>
<b>655-JWD-107-5</b>	JWD-107-5	A1	SPST-NO	10W	Yes	5/6VDC	3.8VDC	0.5VDC	19VDC	500	50/72mW	<b>5.20</b>	<b>4.89</b>	<b>4.74</b>	<b>6.61</b>
<b>655-JWD-107-3</b>	JWD-107-3	A1	SPST-NO	10W	No	12VDC	9.6VDC	1.0VDC	19VDC	1200	120mW	<b>6.97</b>	<b>6.10</b>	<b>5.52</b>	<b>4.36</b>
<b>655-JWD-107-7</b>	JWD-107-7	A1	SPST-NO	10W	Yes	12VDC	9.6VDC	1.0VDC	19VDC	1200	120mW	<b>6.99</b>	<b>6.12</b>	<b>5.54</b>	<b>4.86</b>
<b>655-JWD-171-5</b>	JWD-171-5	A2	SPST-NO	10W	No	24VDC	19.2VDC	2.0VDC	40VDC	2150	268mW	<b>10.47</b>	<b>9.63</b>	<b>8.72</b>	<b>6.88</b>
<b>655-JWD-171-10</b>	JWD-171-10	A2	SPST-NO	10W	Yes	24VDC	19.2VDC	2.0VDC	40VDC	2150	268mW	<b>7.49</b>	<b>6.72</b>	<b>6.22</b>	<b>4.91</b>
<b>655-JWD-171-25</b>	JWD-171-25	A3	DPST-NO	10W	Yes	5/6VDC	3.8VDC	0.5VDC	14VDC	200	125/180mW	<b>9.82</b>	<b>8.58</b>	<b>7.76</b>	<b>6.80</b>
<b>655-JWD-171-23</b>	JWD-171-23	A3	DPST-NO	10W	No	12VDC	9.6VDC	1.0VDC	19VDC	500	288mW	<b>11.34</b>	<b>9.92</b>	<b>8.98</b>	<b>7.09</b>
<b>655-JWD-171-27</b>	JWD-171-27	A3	DPST-NO	10W	Yes	12VDC	9.6VDC	1.0VDC	19VDC	500	288mW	<b>11.23</b>	<b>9.83</b>	<b>8.87</b>	<b>7.01</b>
<b>655-JWD-171-24</b>	JWD-171-24	A3	DPST-NO	10W	No	24VDC	19.2VDC	2.0VDC	40VDC	2200	262mW	<b>8.62</b>	<b>8.11</b>	<b>8.04</b>	<b>6.61</b>
<b>655-JWD-171-12</b>	JWD-171-12	A4	SPST-NC	10W	No	5/6VDC	3.8VDC	0.5VDC	7VDC	500	50/72mW	<b>10.43</b>	<b>9.11</b>	<b>8.24</b>	<b>6.52</b>
<b>655-JWD-171-17</b>	JWD-171-17	A4	SPST-NC	10W	Yes	5/6VDC	3.8VDC	0.5VDC	7VDC	500	50/72mW	<b>9.14</b>	<b>7.99</b>	<b>7.23</b>	<b>6.73</b>
<b>655-JWD-171-14</b>	JWD-171-14	A4	SPST-NC	10W	No	12VDC	9.6VDC	1.0VDC	16VDC	1200	120mW	<b>8.91</b>	<b>7.80</b>	<b>7.05</b>	<b>6.50</b>
<b>655-JWD-171-19</b>	JWD-171-19	A4	SPST-NC	10W	Yes	12VDC	9.6VDC	1.0VDC	16VDC	1200	120mW	<b>11.74</b>	<b>9.79</b>	<b>9.29</b>	<b>7.33</b>
<b>655-JWD-171-15</b>	JWD-171-15	A4	SPST-NC	10W	No	24VDC	19.2VDC	2.0VDC	40VDC	2200	262mW	<b>12.96</b>	<b>11.43</b>	<b>10.34</b>	<b>9.26</b>
<b>655-JWD-172-5</b>	JWD-172-5	A5	SPDT	3W	Yes	5/6VDC	3.8VDC	0.5VDC	12VDC	200	125/180mW	<b>11.96</b>	<b>10.50</b>	<b>9.50</b>	<b>7.51</b>
<b>655-JWD-172-3</b>	JWD-172-3	A5	SPDT	3W	No	12VDC	9.6VDC	1.0VDC	19VDC	500	288mW	<b>12.76</b>	<b>11.16</b>	<b>10.10</b>	<b>7.97</b>
<b>655-JWD-172-7</b>	JWD-172-7	A5	SPDT	3W	Yes	12VDC	9.6VDC	1.0VDC	19VDC	500	288mW	<b>13.23</b>	<b>11.60</b>	<b>10.42</b>	<b>8.35</b>
<b>655-JWD-172-8</b>	JWD-172-8	A5	SPDT	3W	Yes	24VDC	19.2VDC	2.0VDC	38VDC	2200	262mW	<b>12.15</b>	<b>10.62</b>	<b>9.62</b>	<b>8.46</b>
<b>655-JWD-172-155</b>	JWD-172-155	A6	SPDT	3W	No	5/6VDC	3.8VDC	0.5VDC	12VDC	200	125/180mW	<b>12.98</b>	<b>11.33</b>	<b>10.27</b>	<b>8.10</b>
<b>655-JWD-172-159</b>	JWD-172-159	A6	SPDT	3W	Yes	5/6VDC	3.8VDC	0.5VDC	12VDC	200	125/180mW	<b>14.46</b>	<b>12.61</b>	<b>11.44</b>	<b>8.15</b>
<b>655-JWD-172-161</b>	JWD-172-161	A6	SPDT	3W	Yes	12VDC	9.6VDC	1.0VDC	19VDC	1000	144mW	<b>13.35</b>	<b>11.66</b>	<b>10.56</b>	<b>8.31</b>
<b>655-JWD-172-158</b>	JWD-172-158	A6	SPDT	3W	No	24VDC	19.2VDC	2.0VDC	38VDC	2150	268mW	<b>12.98</b>	<b>11.33</b>	<b>10.27</b>	<b>8.10</b>
<b>655-JWD-172-162</b>	JWD-172-162	A6	SPDT	3W	Yes	24VDC	19.2VDC	2.0VDC	38VDC	2150	268mW	<b>13.35</b>	<b>11.66</b>	<b>10.56</b>	<b>8.32</b>

## JWS SERIES: SIP DRY REED RELAYS

### Specifications:

- Contact Material: Ruthenium
- Mechanical Life: 100 million operations
- Maximum Switched Current: 500mA
- Operating Time (including bounce): 1.5ms Max.
- Release Time (including bounce): 0.5ms Max.



MOUSER STOCK NO.	P&B Part No.	Fig.	Contact Form	Max. Switched Power	Suppression Diode	Nominal Voltage	Must Operate Voltage	Must Release Voltage	Max. Voltage	Coil Res. (Ω)	Nominal Current	For quantities greater than listed, call for quote.			
												1	25	50	100
<b>655-JWS-117-1</b>	JWS-117-1	B7	SPST-NO	10W	No	5VDC	3.8VDC	0.5VDC	16VDC	500	50mW	<b>7.55</b>	<b>6.60</b>	<b>5.97</b>	<b>4.71</b>
<b>655-JWS-117-3</b>	JWS-117-3	B7	SPST-NO	10W	No	12VDC	9.6VDC	1.0VDC	19VDC	530	272mW	<b>10.04</b>	<b>8.78</b>	<b>7.95</b>	<b>6.27</b>
<b>655-JWS-117-5</b>	JWS-117-5	B7	SPST-NO	10W	No	24VDC	19.2VDC	2.0VDC	36VDC	2150	268mW	<b>7.21</b>	<b>6.30</b>	<b>5.71</b>	<b>4.50</b>

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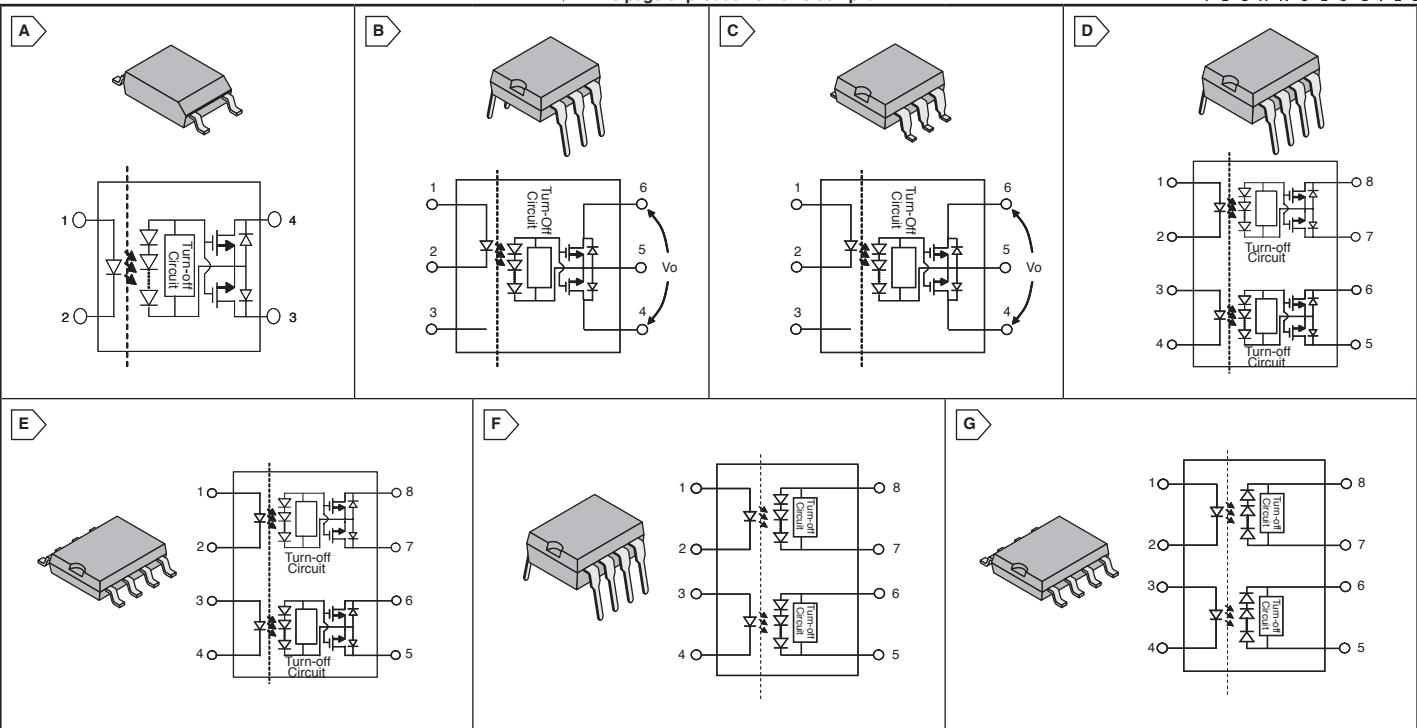


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## SOLID STATE RELAYS - PHOTO MOSFET

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Avago Part No.	Fig.	Package	Configuration	Load Voltage	Load Current	On Resistance	Turn-On Time	Turn-Off Time	Price Each			
										1	10	100	500
630-ASSR-1218-003E	ASSR-1218-003E	A	SO-4	1 Form A	60V	0.2A	10Ω	5ms	5ms	2.02	1.63	1.30	1.14
630-ASSR-1410-003E	ASSR-1410-003E	A	SO-4	1 Form A	60V	0.6A	1Ω	0.5ms	0.2ms	3.55	2.86	2.42	2.11
630-ASSR-1510-003E	ASSR-1510-003E	A	SO-4	1 Form A	60V	1.0A	0.5Ω	1ms	0.2ms	5.77	-	3.93	3.42
630-ASSR-301C-003E	ASSR-301C-003E	A	SO-4	1 Form A	250V	0.05A	15pF	0.2ms	0.2ms	4.06	-	2.77	2.41
630-ASSR-3210-003E	ASSR-3210-003E	A	SO-4	1 Form A	250V	0.2A	10Ω	1ms	0.2ms	4.15	3.34	2.83	2.46
630-ASSR-4118-003E	ASSR-4118-003E	A	SO-4	1 Form A	400V	0.1A	35Ω	5ms	5ms	2.25	1.82	1.45	1.27
630-ASSR-4110-003E	ASSR-4110-003E	A	SO-4	1 Form A	400V	0.12A	25Ω	0.5ms	0.2ms	2.88	2.31	1.96	1.71
630-ASSR-1219-001E	ASSR-1219-001E	B	DIP-6	1 Form A	60V	0.2A	10Ω	5ms	5ms	2.91	2.34	1.98	1.73
630-ASSR-1411-001E	ASSR-1411-001E	B	DIP-6	1 Form A	60V	0.6A	1Ω	0.5ms	0.2ms	3.08	-	2.09	1.82
630-ASSR-1511-001E	ASSR-1511-001E	B	DIP-6	1 Form A	60V	1.0A	0.5Ω	1ms	0.2ms	5.32	-	3.62	3.16
630-ASSR-3211-001E	ASSR-3211-001E	B	DIP-6	1 Form A	250V	0.2A	10Ω	1ms	0.2ms	3.76	3.03	2.56	2.23
630-ASSR-4111-001E	ASSR-4111-001E	B	DIP-6	1 Form A	400V	0.12A	25Ω	0.5ms	0.2ms	3.04	2.46	1.96	1.72
630-ASSR-1411-301E	ASSR-1411-301E	C	6-Pin Gullwing	1 Form A	60V	0.6A	1Ω	0.5ms	0.2ms	3.14	2.52	2.14	1.86
630-ASSR-1511-301E	ASSR-1511-301E	C	6-Pin Gullwing	1 Form A	60V	1.0A	0.5Ω	1ms	0.2ms	5.38	-	3.66	3.19
630-ASSR-3211-301E	ASSR-3211-301E	C	6-Pin Gullwing	1 Form A	250V	0.2A	10Ω	1ms	0.2ms	3.83	3.08	2.61	2.27
630-ASSR-4111-301E	ASSR-4111-301E	C	6-Pin Gullwing	1 Form A	400V	0.12A	25Ω	0.5ms	0.2ms	2.81	2.26	1.91	1.67
630-ASSR-1228-002E	ASSR-1228-002E	D	DIP-8	2 Form A	60V	0.2A	10Ω	5ms	5ms	3.08	-	2.09	1.82
630-ASSR-1420-002E	ASSR-1420-002E	D	DIP-8	2 Form A	60V	0.6A	1Ω	0.5ms	0.2ms	6.19	4.98	4.21	3.67
630-ASSR-1520-002E	ASSR-1520-002E	D	DIP-8	2 Form A	60V	1.0A	0.5Ω	1ms	0.2ms	8.95	8.19	6.70	5.90
630-ASSR-302C-002E	ASSR-302C-002E	D	DIP-8	2 Form A	250V	0.05A	15pF	0.2ms	0.2ms	6.23	5.70	4.67	4.11
630-ASSR-3220-002E	ASSR-3220-002E	D	DIP-8	2 Form A	250V	0.2A	10Ω	1ms	0.2ms	6.33	5.79	4.74	4.17
630-ASSR-322R-002E	ASSR-322R-002E	D	DIP-8	2 Form A	250V	0.2A	50Ω	0.5ms	0.2ms	7.82	7.15	5.85	5.15
630-ASSR-402C-002E	ASSR-402C-002E	D	DIP-8	2 Form A	400V	0.04A	100Ω	0.2ms	0.2ms	6.23	5.70	4.67	4.11
630-ASSR-4128-002E	ASSR-4128-002E	D	DIP-8	2 Form A	400V	0.1A	35Ω	5ms	5ms	3.38	2.72	2.30	2.00
630-ASSR-1228-302E	ASSR-1228-302E	E	8-Pin Gullwing	2 Form A	60V	0.2A	10Ω	5ms	5ms	3.14	2.52	2.14	1.86
630-ASSR-1420-302E	ASSR-1420-302E	E	8-Pin Gullwing	2 Form A	60V	0.6A	1Ω	0.5ms	0.2ms	6.26	5.04	4.26	3.72
630-ASSR-1520-302E	ASSR-1520-302E	E	8-Pin Gullwing	2 Form A	60V	1.0A	0.5Ω	1ms	0.2ms	9.00	8.23	6.74	5.93
630-ASSR-302C-302E	ASSR-302C-302E	E	8-Pin Gullwing	2 Form A	250V	0.05A	15pF	0.2ms	0.2ms	6.28	5.75	4.70	4.14
630-ASSR-3220-302E	ASSR-3220-302E	E	8-Pin Gullwing	2 Form A	250V	0.2A	10Ω	1ms	0.2ms	6.38	5.84	4.78	4.21
630-ASSR-322R-302E	ASSR-322R-302E	E	8-Pin Gullwing	2 Form A	250V	0.2A	50Ω	0.5ms	0.2ms	7.87	7.20	5.89	5.19
630-ASSR-402C-302E	ASSR-402C-302E	E	8-Pin Gullwing	2 Form A	400V	0.04A	100Ω	0.2ms	0.2ms	6.28	5.75	4.70	4.14
630-ASSR-4128-302E	ASSR-4128-302E	E	8-Pin Gullwing	2 Form A	400V	0.1A	35Ω	5ms	5ms	3.43	2.76	2.34	2.04
630-ASSR-4120-302E	ASSR-4120-302E	E	8-Pin Gullwing	2 Form A	400V	0.12A	25Ω	0.5ms	0.2ms	5.60	4.50	3.81	3.32

## SOLID STATE RELAYS - PHOTOVOLTAIC DRIVER

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Avago Part No.	Fig.	Package	Configuration	Channels	Insulation Voltage	Load Voltage	Load Current	Price Each			
									1	10	100	500
630-ASSR-V621-002E	ASSR-V621-002E	F	DIP-8	PV Driver	2	3.75kV	6.5V	15mA	4.48	-	3.05	2.66
630-ASSR-V621-302E	ASSR-V621-302E	G	8-Pin Gullwing	PV Driver	2	3.75kV	6.5V	15mA	4.54	3.65	3.09	2.69
630-ASSR-V622-302E	ASSR-V622-302E	G	8-Pin Gullwing	PV Driver	2	3.75kV	6.5V	15mA	4.54	3.65	3.09	2.69

# Cii Solid State Relays

Invensys®  
Cii Continental

## PANEL MOUNT POWER RELAYS

- Superior Surge Survival™
- 4000V Isolation
- Zero Cross Turn-On
- Direct Copper Bonded SCRs
- Current Limited Inputs
- Rated @ 40°C
- Safety Cover Included
- 800V Peak Blocking V (300V)
- 1200V Peak Blocking V (600V)
- High Surge Capability
- Built in Snubber



CE compliant EN60947

### SVAA Series, 100VAC Input, Current Limited to 19mA Max.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cii Part No.	Fig.	Output Voltage (VAC)	Output Current (Amps)	Control Voltage (min/max)	Control Current (mA) (min/max)	Turn-Off Voltage	Price Each			
								1	10	25	50
<b>AC Control</b>											
518-4410	SVAA/3V10	A	24-330	.05-10A	100-280VAC	2mA/19mA	20V/2mA	26.85	24.88	23.86	19.91
518-4425	SVAA/3V25	A	24-330	.10-25A	100-280VAC	2mA/19mA	20V/2mA	26.56	23.92	21.87	20.45
518-4450	SVAA/3V50	A	24-330	.10-50A	100-280VAC	2mA/19mA	20V/2mA	42.65	40.10	37.24	35.71
518-4475	SVAA/3V75	A	24-330	.10-75A	100-280VAC	2mA/19mA	20V/2mA	65.61	59.03	52.47	50.35
518-4650	SVAA/6V50	A	24-660	.10-50A	100-280VAC	2mA/19mA	20V/2mA	63.71	60.53	57.32	54.14

### SVDA Series, 4-32VDC Input, Current Limited to 10mA Max.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cii Part No.	Fig.	Output Voltage (DC Volts)	Output Current (Amps)	Control Voltage (VDC)	Control Current (mA) (min/max)	Turn On-Off Time μsec.	Price Each			
								1	10	25	50
<b>DC Control</b>											
518-4310	SVDA/3V10	A	24-330	.05-10A	4-32VDC	5.4mA/10mA	1VDC	19.66	18.67	17.69	16.72
518-4325	SVDA/3V25	A	24-330	.10-25A	4-32VDC	5.4mA/10mA	1VDC	22.65	20.38	18.12	17.26
518-4350	SVDA/3V50	A	24-330	.10-50A	4-32VDC	3.5mA/8mA	1VDC	63.09	56.78	50.50	47.94
518-4375	SVDA/3V75	A	24-330	.10-75A	4-32VDC	3.5mA/8mA	1VDC	64.52	58.08	51.59	48.48
518-4550	SVDA/6V50	A	24-660	.10-50A	4-32VDC	3.5mA/8mA	1VDC	45.15	41.41	39.12	37.49
518-4575	SVDA/6V75	A	24-660	.10-75A	4-32VDC	3.5mA/8mA	1VDC	83.10	78.91	74.79	70.60

### SVDD Series, DC-DC Solid State Relay

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cii Part No.	Fig.	Output Voltage (DC Volts)	Output Current (Amps)	Control Voltage	Control Current (mA) (min/max)	Turn On-Off Time μsec.	Price Each			
								1	10	25	50
<b>DC Control</b>											
518-1312	SVDD/1V12	A	100	12	4-32	6	25	40.70	36.63	32.56	28.49
518-1320	SVDD/1V20	A	100	20	4-32	6	25	39.16	37.21	35.24	33.29
518-1340	SVDD/1V40	A	100	40	4-32	6	25	78.60	70.74	62.86	55.00

## SOLID STATE RELAY ACCESSORIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cii Part No.	Fig.	Description				Price Each				
			1	10	25	50					
518-1400	COVER-SAFETY-000	A	Safety Cover for SV Series Hockey Puck Relays		5.80	5.52	5.43	4.93			

## DIN RAIL MOUNT RELAYS, 48-660VAC OUTPUT

• Rugged Snubber Circuit	• DIN Rail or Panel Mount	• No Need for Burden Resistor on AC Circuits
• Current Limited Inputs	• Zero Cross Turn On	• Oversized SCRs (1400 Blocking Volts on 600V units)
• 4000V Isolation	• Wide Input Ranges	• Super Efficient, 1.0W dissipated per Amp switches
• Superior Surge Survival™	• Rated @ 40°C	•



CE compliant EN60947

### RVAA Series, Single Phase AC Control

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cii Part No.	Fig.	Output Voltage (VAC)	Output Current (Amps)	Control Voltage (min/max)	Control Current (mA) (min/max)	Must Release (VAC/IAC)	Price Each			
								1	10	25	50
518-2425	RVAA/6V25	B	24-660	.10-25	100-280VAC	9mA/25mA	20/2mA	70.17	63.16	56.12	54.39
518-2440	RVAA/6V40	C	24-660	.10-40	100-280VAC	9mA/25mA	20/2mA	78.47	70.62	63.25	56.00

### RVDA Series, Single Phase DC Control

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cii Part No.	Fig.	Output Voltage (VAC)	Output Current (Amps)	Control Voltage (min/max)	Control Current (mA) (min/max)	Must Release (VAC/IAC)	Price Each			
								1	10	25	50
518-2325	RVDA/6V25	B	24-660	.10-25	4-32VDC	3.5mA/8mA	1	65.32	61.20	55.28	51.49
518-2340	RVDA/6V40	C	24-660	.10-40	4-32VDC	3.5mA/8mA	1	69.19	65.76	62.28	58.80

### RVMA Series, Single Phase 4-20mA Input, Time Proportioning Output

- All of the RV Series features above
- Output Resolution of 1/2 Sinewave (8.3ms at 60Hz)
- 4-20mA Process Input; High Speed, Time Proportioning AC Output

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cii Part No.	Fig.	Output Voltage (VAC)	Output Current (Amps)	Max Voltage Drop at 20mA (VDC)	Price Each			
						1	10	25	50
518-6625	RVMA/6V25	B	24-660	.10-25	6	99.74	89.76	79.78	69.85

## THREE PHASE SOLID STATE RELAYS

- Superior Surge Survival™
- MOV Option Available
- Rugged Snubber Circuit
- Din Rail or Panel Mount
- Current Limited Inputs
- Rated @ 40°C
- No Need for Burden Resistor on AC Circuits
- Oversized SCRs (1400 Blocking Volts on 600V units)
- 4000V Isolation

These units can be wired for 3 phase 2 leg with a rating of 37.5A per leg. 500V units have internal MOV installed

### RVA3 Series, Three Phase AC Control

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cii Part No.	Fig.	Output Voltage (VAC)	Output Current (Amps)	Control Voltage (min/max)	Control Current (mA) (min/max)	Must Release	Price Each			
								1	10	25	50
518-3475	RVA3/6V75T/H	D	48-660	.10-30/leg	100-280VAC	10-33	20VAC	144.63	130.17	115.70	109.47

### RVD3 Series, Three Phase DC Control

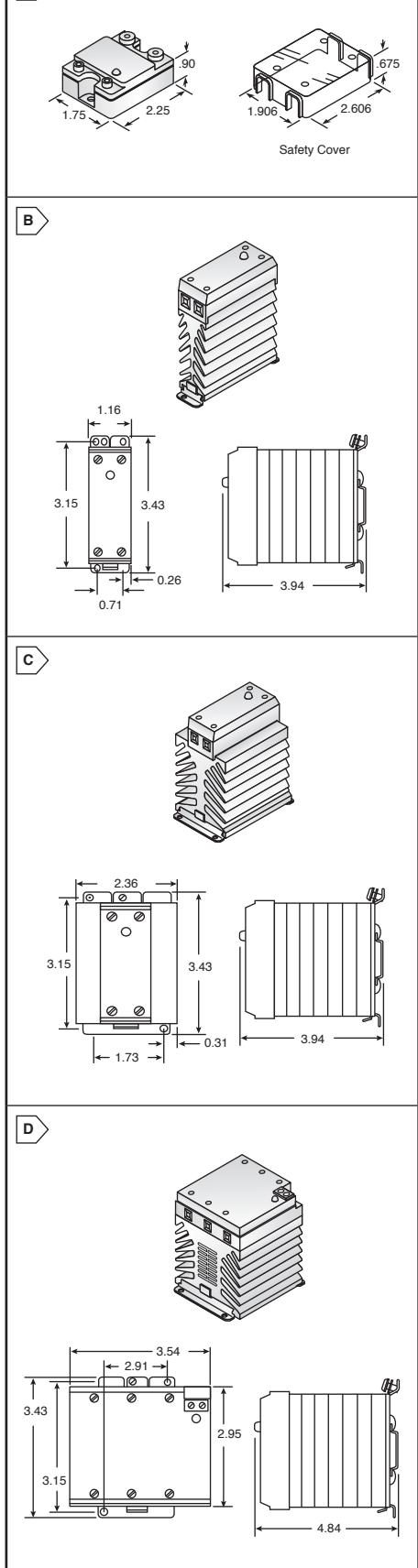
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cii Part No.	Fig.	Output Voltage (VAC)	Output Current (Amps)	Control Voltage (min/max)	Control Current (mA) (min/max)	Must Release	Price Each			
								1	10	25	50
518-3575	RVD3/6V75T/L	D	48-660	.10-30/leg	4-32VDC	10-18	1VDC	140.36	133.33	119.26	105.27

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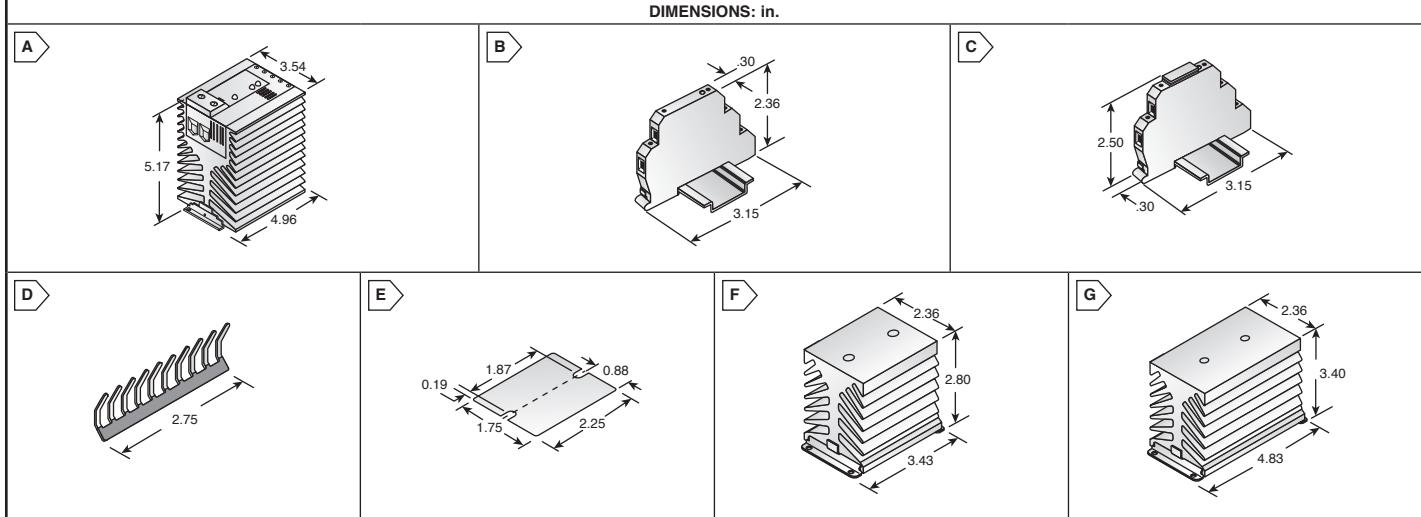
MOUSER ELECTRONICS



# Cii Solid State Relays and I/O Modules

Invensys  
Cii Continental

## DIMENSIONS: in.



## FULLY INTEGRATED "INTELLIGENT" SOLID STATE RELAY

### Features:

- DIN Rail or Panel Mount
- LED Indicator (Function and Alarm)
- 4000V Isolation
- Auto Shutdown on Over Temperature
- Zero Voltage Turn-On
- Touch Safe
- Safety Cover Included
- 1200V Peak Blocking
- Built in, Replaceable Semiconductor Fuse



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For quantities greater than listed, call for quote.

### RSDA Series

MOUSER STOCK NO.	Cii Part No.	Fig.	Line Voltage Range	Load Current Range	Min. Control Voltage and Current Draw	Price Each				
						1	10	25	50	
DC Control	518-6102	RSDA-660-75-100	A	48-660VAC	.10-75A	4VDC/6mA	322.13	306.01	289.91	273.80

## MINI RAIL MOUNT INPUT MODULES

### Features:

- High Density Design
- 0-70°C Operating
- LED Logic Indicator
- Color Coded Cases
- Positive or Negative Logic
- Optically Isolated
- TTL Compatible
- 4000 Volt Isolation
- 100% Tested



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### IAC Series, AC Input (Yellow Case)

MOUSER STOCK NO.	Cii Part No.	Fig.	Logic Output Voltage	Max. Load Current (mA)	Turn On/Off Time Max.	Price Each			
						1	10	25	50
518-3401	I.O.-IAC-R0-280	B	4-28VDC	100	20/20ms	31.82	28.64	25.46	24.19
518-3403	I.O.-IAC+R0-280	B	4-28VDC	100	20/20ms	23.54	21.19	18.83	17.50

### IDC Series, DC Input (White Case)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cii Part No.	Fig.	Logic Output Voltage	Max. Load Current (mA)	Turn On/Off Time Max.	Price Each			
						1	10	25	50
518-3406	I.O.-IDC-R0-028	B	4-28VDC	100	30/60μs	25.05	23.80	22.54	21.28
518-3407	I.O.-IDC+R0-028	B	4-28VDC	100	30/60μs	23.54	21.19	18.83	17.50

## MINI RAIL MOUNT OUTPUT MODULES

### Features:

- High Density Design
- Positive or Negative Logic
- Color Coded Cases
- LED Logic Indicator
- 0-70°C Operating
- Optically Isolated



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### OAC Series, AC Output (Black Case)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cii Part No.	Fig.	Logic Input Voltage	Logic Input Impedance (Ω)	Field (Output) Voltage	Price Each			
						1	10	25	50
518-3404	I.O.-OAC-R0-280	C	4-28VDC	1500	12-280VAC	35.20	31.66	28.15	25.22
518-3405	I.O.-OAC-RA-280	C	90-280VAC	40,000	12-280VAC	29.37	26.42	23.49	22.39

### ODC Series, DC Output (Red Case)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cii Part No.	Fig.	Logic Input Voltage	Logic Input Impedance (Ω)	Field (Output) Voltage	Price Each			
						1	10	25	50
518-3411	I.O.-ODC-R0-060	C	4-28VDC	1500	5-60VDC	25.47	24.20	22.92	21.64
518-3409	I.O.-ODC-RL-060	C	4-28VDC	1500	5-60VDC	28.48	27.04	25.63	24.21

## RELAY ACCESSORIES

### Features:

- Ten position jumper strips used to interconnect logic terminals, eliminating the need for small jumper wires. Plated and insulated. Can be cut to length.
- Thermal Transfer Pads are Die-cut to fit the base of our panel mount relays - an excellent replacement for thermal greases.
- DIN Rail mountable Heat Sinks are Drilled and Tapped to Fit Panel Mount Relays.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cii Part No.	Fig.	Description			Price Each			
			1	10	25	50			
518-1401	I.O.-JUMPER-010	D	Ten position mini I/O jumper strip			7.31	6.94	6.70	6.21
518-1403	THERMAL-PAD-025	E	Set of 25 Thermal transfer pads			40.93	38.78	34.47	32.31
518-1423	HEATSK-DIN-1.6	F	Heat Sink 1.6°C/W (for most 10-40 Amp applications)			50.17	40.13	38.11	34.11
518-1411	HEATSK-DIN-1.0	G	Heat Sink 1.0°C/W (for most 35-60 Amp applications)			41.10	39.01	35.62	33.95

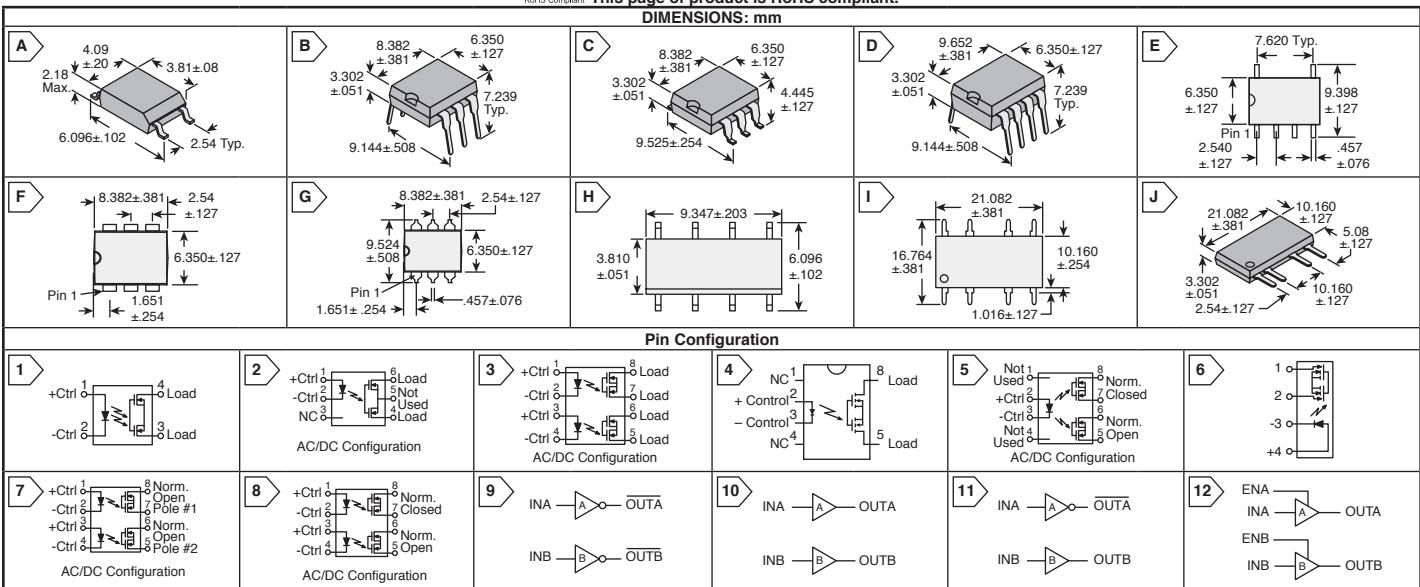
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# CLARE OptoMOS, Power Solid State Relays and MOSFETS

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CLARE  
An IXYS Company



## OPTICALLY ISOLATED SOLID STATE RELAYS

\* Moisture Sensitivity



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Clare Part No.	Fig.	Pin Conf.	Load Voltage	Current Handling	On Resistance	Isolation Voltage	Input Control Current	Turn On/ Turn Off	Standard Package	Price Each		
											1	10	100
<b>Single Pole Normally-Open: 1-Form-A</b>													
849-CPC1008N	CPC1008N	A	1	100	150mA	8Ω	1500Vrms	2mA	2/0.5ms	4 Pin SOP	1.61	1.30	1.04
* 849-CPC1030N	CPC1030N	A	1	350	120mA	30Ω	1500Vrms	2mA	2/1ms	4 Pin SOP	2.14	1.73	1.38
849-CPC1035N	CPC1035N	A	1	350	100mA	35Ω	1500Vrms	2mA	2/1ms	4 Pin SOP	1.86	1.50	1.20
849-CPC1230N	CPC1230N	A	1	350	120mA	30Ω	1500Vrms	2mA	2/1ms	4 Pin SOP	1.83	1.48	1.18
849-LCA110	LCA110	B	2	350	120mA	35Ω	3750Vrms	2mA	3/3ms	6 Pin DIP	2.20	1.78	1.42
849-LCA110S	LCA110S	C	2	350	120mA	35Ω	3750Vrms	2mA	3/3ms	6 Pin SMD	2.20	1.78	1.42
849-LCA120	LCA120	B	2	250	170mA	20Ω	3750Vrms	5mA	5/5ms	6 Pin DIP	2.96	2.39	2.17
849-LAA710	LAA710	D	3	60	1000mA	0.5Ω	3750Vrms	10mA	2.5/0.25ms	8 Pin DIP	8.90	7.30	6.41
849-LCA710	LCA710	B	2	60	1000mA	0.5Ω	3750Vrms	10mA	2.5/0.25ms	6 Pin DIP	4.75	3.83	3.49
849-PLA140	PLA140	B	2	400	250mA	8Ω	3750Vrms	5mA	3/1ms	6 Pin DIP	4.53	3.65	3.32
849-PLA160	PLA160	B	2	300	50mA	100Ω	3750Vrms	10mA	0.05/0.05ms	6 Pin DIP	4.22	3.40	3.10
849-LCA182	LCA182	B	2	350	120mA	35Ω	3750Vrms	0.25mA	3/3ms	6 Pin DIP	2.66	2.15	1.72
849-PLA171P	PLA171P	E	4	800	100mA	50Ω	5000Vrms	2mA	5/5ms	8 Pin Flatpack	3.58	2.88	2.62
849-CPC1593G	CPC1593G	F	5	600	120mA	35Ω	3750Vrms	2mA	2/2ms	6 Pin DIP	3.04	2.45	1.96
849-CPC1593GS	CPC1593GS	G	5	600	120mA	35Ω	3750Vrms	2mA	2/2ms	6 Pin SMT	3.04	2.45	1.96
849-PLA192E	PLA192E	B	5	600	150mA	22Ω	5000Vrms	50mA	5/5ms	6 Pin DIP	3.66	2.95	2.69
849-PLA192ES	PLA192ES	G	5	600	150mA	22Ω	5000Vrms	50mA	5/5ms	6 Pin SMT	3.66	2.95	2.69
849-PLA193E	PLA193E	B	5	600	100mA	50Ω	5000Vrms	50mA	5/5ms	6 Pin DIP	3.33	2.68	2.44
849-PLA193ES	PLA193ES	G	5	600	100mA	50Ω	5000Vrms	50mA	5/5ms	6 Pin SMT	3.33	2.68	2.44
<b>Single Pole Normally Closed: 1-Form-B</b>													
849-CPC1135N	CPC1135N	A	1	350	120mA	35Ω	1500Vrms	1mA	2/2ms	4 Pin SOP	2.48	2.00	1.60
849-LCB110	LCB110	B	2	350	120mA	35Ω	3750Vrms	5mA	3/3ms	6 Pin DIP	2.80	2.25	2.05
<b>Dual Single Pole Normally-Open: 1-Form-A</b>													
849-CPC2030N	CPC2030N	H	6	350	120mA	30Ω	1500Vrms	50mA	2/1ms	8 Pin SOIC	1.98	1.60	1.28
<b>Dual Pole Normally-Open: 2-Form-A</b>													
849-PAA140	PAA140	D	3	400	250mA	8Ω	3750Vrms	5mA	1.5/0.25ms	8 Pin DIP	6.75	5.54	4.86
849-OAA160	OAA160	D	7	25	50mA	100Ω	3750Vrms	3mA	0.125/0.125ms	8 Pin DIP	6.07	4.88	4.45
849-PAA132	PAA132	D	3	50	600mA	1Ω	3750Vrms	5mA	5/2ms	8 Pin DIP	7.25	5.95	5.22
<b>Dual Combination: Form-A &amp; B</b>													
849-LBA110	LBA110	D	8	350	120mA	35Ω	3750Vrms	5mA	3/3ms	8 Pin DIP	4.70	3.78	3.44
<b>Common Input: 1-Form-C</b>													
849-LCC110	LCC110	D	4	350	120mA	35Ω	3750Vrms	8mA	4/4ms	8 Pin DIP	4.42	3.56	3.24
849-LCC110P	LCC110P	-	4	350	120mA	35Ω	3750Vrms	8mA	4/4ms	8 Pin SMD	4.45	3.58	3.26

## AC POWER SOLID STATE RELAYS



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Clare Part No.	Fig.	Pin Conf.	AC Operating Voltage	Load Current	Blocking Voltage	Isolation Voltage	Input Control Current	Turn On/ Turn Off	Standard Package	Price Each		
											1	10	100
849-CPC1966B	CPC1966B	I	6	20-240Vrms	3A	800'p	5000Vrms	50mA	0.5/0.5 Cycles	SOIC-8	4.75	3.83	3.49
849-CPC1976Y	CPC1976Y	J	7	20-240Vrms	2A	600'p	3750Vrms	50mA	0.5/0.5 Cycles	4 Pin SIP	3.53	2.84	2.58

## ISOPLUS™-264 POWER SOLID STATE RELAY



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Clare Part No.	Fig.	Pin Conf.	Blocking Voltage (V)	Current Handling	On Resistance	Isolation Voltage	Input Control Current	Turn On/ Turn Off	Standard Package	Price Each		
											1	10	100
849-CPC1906Y	CPC1906Y	J	7	60	50mA	.3Ω	2500Vrms	50mA	1/5ms	Power SIP	6.77	5.45	4.96

## 1.5/3-4-AMPERE DUAL LOW-SIDE ULTRAFAST MOSFET DRIVERS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Clare Part No.	Pin Configuration	Package Type	Price Each		MOUSER STOCK NO.	Clare Part No.	Pin Configuration	Package Type	Price Each		
				1	100					1	10	100
849-FDA217	FDA217	2	8-Lead DIP	2.64	2.24	849-IXDD604SIA	IXDD604SIA	12	8-Lead SOIC	1.80	1.16	
849-FDA217S	FDA217S	2	8-Lead Surface Mount	2.64	2.24	849-IXDF604PI	IXDF604PI	11	8-Lead DIP	1.80	1.16	
849-IX21844G	IX21844G	2	14-Pin DIP	2.69	1.72	849-IXDF604SI	IXDF604SI	11	8-Lead SOIC with Exposed, Grounded Metal Back	2.97	2.17	
849-IX21844N	IX21844N	2	14-Pin SOIC	2.69	1.72	849-IXDF604SIA	IXDF604SIA	11	8-Lead SOIC with Exposed, Grounded Metal Back	1.80	1.16	
747-X2204NE	X2204NE	2	16-Pin SOIC	3.37	2.18	849-IXDI604PI	IXDI604PI	9	8-Lead DIP	1.80	1.16	
849-IX4223N	IX4223N	9	8-Pin SOIC	1.58	.968	849-IXDI604SI	IXDI604SI	9	8-Lead SOIC with Exposed, Grounded Metal Back	3.89	2.85	
849-IX4224N	IX4224N	10	8-Pin SOIC	1.58	.968	849-IXDI604SIA	IXDI604SIA	9	8-Lead SOIC with Exposed, Grounded Metal Back	1.80	1.16	
849-IX4225N	IX4225N	11	8-Pin SOIC	1.58	.968	849-IXDN604PI	IXDN604PI	10	8-Lead DIP	1.80	1.16	
849-IX4226N	IX4226N	9	8-Pin SOIC	1.02	.624	849-IXDN604SI	IXDN604SI	10	8-Lead SOIC with Exposed, Grounded Metal Back	2.97	2.17	
849-IX4227N	IX4227N	10	8-Pin SOIC	1.02	.624	849-IXDN604SIA	IXDN604SIA	10	8-Lead SOIC	1.80	1.16	
849-IXDD604D2TR	IXDD604D2TR	12	8-Lead DFN	1.80	1.16							
849-IXDD604PI	IXDD604PI	12	8-Lead DIP	1.80	1.16							
849-IXDD604SI	IXDD604SI	12	8-Lead SOIC with Exposed, Grounded Metal Back	2.97	2.17							

# CROUZET Input/Output Modules



## C4 SERIES I/O MODULES

- New Industry Standard Package
- Replaceable Fuse in Output Modules
- Color Coded Housing for AC or DC Input

### Input Modules

MOUSER STOCK NO.	Input Voltage	Max. Input Current	Logic Supply Voltage	Max. Logic Supply Current	Price Each	
					1	5
874-C4IAC	90-140VAC	14mA	4.5-30VDC	50mA	21.42	20.92
874-C4IACA	140-280VAC	50mA	4.5-30VDC	50mA	22.62	22.09
874-C4IDC	10-32VDC	20mA	4.5-30VDC	50mA	21.42	20.92

### Output Modules

MOUSER STOCK NO.	Input Voltage	Max. Input Current	Logic Supply Voltage	Max. Logic Supply Current	Price Each	
					1	5
874-C4OAC	12-140VAC	3.0 Amps	4-32VDC	22mA	24.67	24.09
874-C4OACA	12-280VAC	3.0 Amps	4-32VDC	22mA	25.40	24.81
874-C4ODC	5-60VDC	3.0 Amps	4-32VDC	16mA	24.67	24.09
874-C4ODCA	1-250VDC	1.0 Amps	4-32VDC	16mA	29.60	28.91

## SM SERIES 0.6" I/O MODULES

- New Industry Standard Package
- Output Ratings up to 5A
- Color Coded Housing for AC or DC Input

### Input Modules

MOUSER STOCK NO.	Input Voltage	Max. Input Current	Logic Supply Voltage	Max. Logic Supply Current	Price Each	
					1	5
874-SMIAC5	90-140VAC/DC	5mAmps	5VDC	50mA	19.80	19.34
874-SMIAC5A	180-280VAC	5mAmps	5VDC	50mA	20.27	19.80
874-SMIDC5	3.3-32VDC	35mA	5VDC	50mA	19.78	19.32

### Output Modules

MOUSER STOCK NO.	Output Voltage	Max. Output Current	Logic Supply Voltage	Max. Logic Supply Current	Price Each	
					1	5
874-SMOAC5	12-140VAC	3.5Amps	5VDC	20mA	19.78	19.32
874-SMOAC5A	24-280VAC	3.5Amps	5VDC	20mA	20.48	20.00
874-SMOAC5AH	24-280VAC	5Amps	5VDC	20mA	23.30	22.75
874-SMODC5	3-60VDC	3.0A	5VDC	18mA	19.78	19.32

## QUAD SERIES I/O MODULES

- Industry Standard Package
- Color Coded Housing for AC or DC Input
- Built in LED Status Indicator
- 4 Modules in one package

### Input Modules

MOUSER STOCK NO.	Input Voltage	Max. Input Current	Logic Supply Voltage	Max. Logic Supply Current	Price Each	
					1	5
874-IAC5Q	90-140VAC	6mA	5VDC	50mA	98.28	95.97
874-IAC5AQ	140-280VAC	5mA	5VDC	50mA	103.65	101.22
874-IDC5Q	10-60VDC	34mA	5VDC	50mA	98.28	95.97
874-IDC5BQ	4-32VDC	68mA	5VDC	50mA	106.70	104.20

### Output Modules

MOUSER STOCK NO.	Output Voltage	Maximum Output Current	Nominal Input Voltage	Maximum Input Current	Price Each	
					1	5
874-OAC5Q	12-140VAC	3.5Amps	5VDC	20mA	96.18	93.92
874-OAC5AQ	24-280VAC	3.5Amps	5VDC	20mA	101.28	98.90
874-ODC5Q	3-60VDC	3.0Amps	5VDC	18mA	101.28	98.90
874-ODC5Q.11	3-60VDC	3.0Amps	5VDC	18mA	65.26	63.68

## EPOXY ENCAPSULATED DIN RAIL INPUT MODULES

- DIN Rail Mountable I/O Modules
- Color Coded Housing for AC or DC Input
- Built in LED Status Indicator



### Input Modules

MOUSER STOCK NO.	Input Voltage	Maximum Input Current	Logic Supply Voltage	Max. Logic Supply Current	Price Each	
					1	5
874-DRIAC5	90-140VAC/DC	5mAmps	5VDC	50mA	33.58	32.79
874-DRIDC5	4-32VDC	34mA	5VDC	50mA	33.58	32.79

### Output Modules

MOUSER STOCK NO.	Output Voltage	Maximum Output Current	Nominal Input Voltage	Maximum Input Current	Price Each	
					1	5
874-DRODC5	3-60VDC	3A	5VDC	18mA	36.68	35.82

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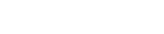
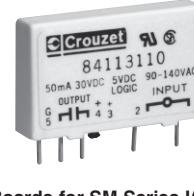
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## Mounting Boards for C4 Series I/O Modules

\* Including I/O modules and standoffs

MOUSER STOCK NO.	Max. No. of I/O	Dimensions (LxWxH)*	Logic Connection	Load Connection	Price Each	
					1	5
874-PB4C4	4	6.4 x 3.5 x 2.57	Screw Term.	Screw Term.	81.07	75.02
874-PB16C4	16	10 x 3.25 x 2.57	50-Pin Header	Screw Term.	181.03	176.78
874-PB16C4T	16	9.5 x 3.25 x 2.57	Screw Term.	Screw Term.	177.30	173.02



## Mounting Boards for SM Series I/O Modules

\* Including I/O modules and standoffs

MOUSER STOCK NO.	Max. No. of I/O	Dimensions (LxWxH)*	Logic Connection	Load Connection	Price Each	
					1	5
874-PB8SM	8	6.4 x 3.5 x 1.9	Card-Edge	Screw Term.	101.87	99.48
874-PB16SM	16	10.4 x 3.5 x 1.9	Card-Edge	Screw Term.	181.03	176.78
874-PB24SM	24	13 x 3.75 x 1.9	Card-Edge	Screw Term.	266.40	260.14



## 17.5MM DIN RAIL INPUT MODULES

- DIN Rail Mountable I/O Modules
- Color Coded Housing for AC or DC Input
- Built in LED Status Indicator



### Input Modules

MOUSER STOCK NO.	Input Voltage	Maximum Input Current	Logic Supply Voltage	Max. Logic Supply Current	Price Each	
					1	5
874-B4115501	90-140VAC/DC	14mA	4.5-30VDC	50mA	38.02	37.13
874-B4115503	4-32VDC	35mA	4.5-30VDC	50mA	42.22	41.23

### Output Modules

MOUSER STOCK NO.	Output Voltage	Maximum Output Current	Nominal Input Voltage	Maximum Input Current	Price Each	
					1	5
874-84130104	5-48V	5Arms	4-32VDC	22mA	34.02	33.22
874-84130105	3-60VDC	3A	4-32VDC	22mA	41.50	40.53



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# CRYDOM Solid State Relays

**crydom®**

## CN SERIES, SINGLE IN-LINE PLUGGABLE, DIN RAIL MOUNTED SOCKETS AND ASSEMBLIES

### CN Series SSRs Features and Benefits:

- Ratings 24VDC @ 3.5A, 48VDC @ 100mA and 240VAC @ 2A
- IP67-protected fully encapsulated

### DRACN Series Assemblies Features and Benefits:

- 24VDC @ 3.5A, 48VDC @ 100mA and 240VAC @ 2A Operating Voltage Rating

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig.	Operational Voltage	Control Voltage	Price Each		
					1	10	25
<b>CN Series</b>							
558-CN024D05	CN024D05	A	24VDC	3-12VDC	17.94	17.10	16.71
558-CN024D24	CN024D24	A	24VDC	15-30VDC	17.94	17.10	16.71
558-CN240A05	CN240A05	A	240VAC	3-12VDC	13.48	12.85	12.56
558-CN240A24	CN240A24	A	240VAC	15-30VDC	13.48	12.85	12.56

### DRACN Series Assemblies

558-DRA-CN024D05	DRA-CN024D05	B	24VDC	3-12VDC	41.44	39.49	38.58
558-DRA-CN024D24	DRA-CN024D24	B	24VDC	15-30VDC	40.90	38.98	38.09
558-DRA-CN240A05	DRA-CN240A05	B	240VAC	3-12VDC	36.97	35.23	34.42

## SeriesOne DR, DIN RAIL MOUNTED AC AND DC OUTPUT

• Fits standard 35mm DIN-RAIL

For quantities greater than listed, call for quote.

### Ratings: 3A

558-DR06D03	DR06D03	C	1-60VDC	4-32VDC	35.98	34.29	33.50
558-DR10D03	DR10D03	C	1-100VDC	5-32VDC	36.28	34.86	34.06
558-DR24A03	DR24A03	C	24-280VAC	200-265VAC	33.35	32.05	31.31
558-DR24B03	DR24B03	C	25-280VAC	90-140VAC	33.35	32.05	31.31
558-DR24D03	DR24D03	C	26-280VAC	4-32VDC	31.18	29.71	29.03
558-DR24E03	DR24E03	C	27-280VAC	18-36VAC	34.76	33.41	32.64
558-DR48D03	DR48D03	C	48-600VAC	4-32VDC	32.47	31.21	30.49

### Ratings: 6A

558-DR06D06	DR06D06	C	1-60VDC	4-32VDC	49.18	46.87	44.71
558-DR06D12	DR06D12	C	1-60VDC	4-32VDC	59.01	56.24	53.65
558-DR10D06	DR10D06	C	1-100VDC	4-32VDC	50.82	48.43	46.20
558-DR10D12	DR10D12	C	1-100VDC	4-32VDC	60.66	57.81	55.15
558-DR24D06	DR24D06	C	24-280VAC	4-32VDC	42.62	40.62	38.75
558-DR24D12	DR24D12	C	24-280VAC	4-32VDC	52.46	49.99	47.69
558-DR48D06	DR48D06	C	48-600VAC	4-32VDC	45.49	43.35	41.36
558-DR48D12	DR48D12	C	48-600VAC	4-32VDC	55.33	52.73	50.30

## SeriesOne DR, DIN RAIL MOUNTED AC AND DC OUTPUT TIMERS

• 6A AC and DC Rated output

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig.	Timing Function	Operational Voltage	Control Voltage	Price Each	
						1	10
<b>558-DRTA06D06</b>							
558-DRTA24A06	DRTA24A06	D	Delay On Make	60VDC	12-24VAC/DC	49.75	47.35
558-DRTA24A06	DRTA24A06	D	Delay On Make	280VAC	180-240VAC/DC	47.25	44.97
558-DRTB06D06	DRTB06D06	D	Single Shot	60VDC	180-240VAC/DC	49.75	47.35
558-DRTB24A06	DRTB24A06	D	Single Shot	280VAC	12-24VAC/DC	47.25	44.97
558-DRTB24D06	DRTB24D06	D	Single Shot	280VAC	180-240VAC/DC	48.23	45.90
558-DRTC06D06	DRTC06D06	D	Delay On Break	60VDC	180-240VAC/DC	49.75	47.35
558-DRTC24A06	DRTC24A06	D	Delay On Break	280VAC	12-24VAC/DC	47.25	44.97
558-DRTC24D06	DRTC24D06	D	Delay On Break	280VAC	180-240VAC/DC	48.23	45.90
558-DRTH06D06	DRTH06D06	D	Interval	60VDC	180-240VAC/DC	57.22	54.53
558-DRTH24A06	DRTH24A06	D	Interval	280VAC	12-24VAC/DC	47.25	44.97
558-DRTH24D06	DRTH24D06	D	Interval	280VAC	180-240VAC/DC	48.23	45.90
558-DRTL24A06	DRTL24A06	D	Repeat Cycle	280VAC	12-24VAC/DC	61.43	58.54
558-DRTL24D06	DRTL24D06	D	Repeat Cycle	280VAC	180-240VAC/DC	62.52	59.58
558-DRTU06D06	DRTU06D06	D	Multifunction	60VDC	180-240VAC/DC	54.20	51.59

## CKM SERIES, DIN RAIL AND PANEL MOUNT

• Ratings from 10A to 30A @ 60VDC

• Slim 22.5mm (width) package

• DC control

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig.	Max Load Current	Price Each		
				1	10	25
558-CKM0610	CKM0610	E	10A	79.04	75.33	73.60
558-CKM0620	CKM0620	E	20A	87.21	83.11	81.20
558-CKM0630	CKM0630	E	30A	103.47	98.61	96.34

## CMX SERIES PCB MOUNT

• Ratings to 20A @ 60VDC, 10A @ 100VDC, 10A @ 60VDC and 3A @ 200VDC

For quantities greater than listed, call for quote.

558-CMX100D10	CMX100D10	F	10A	42.54	40.54	39.61
558-CMX60D10	CMX60D10	F	10A	37.28	35.53	34.72
558-CMX60D5	CMX60D5	F	5A	30.22	28.80	28.14
558-CMXE100D6	CMXE100D6	F	6A	37.28	35.53	34.72
558-CMXE60D10	CMXE60D10	F	10A	37.28	35.53	34.72

## CTR SERIES, DIN RAIL OR PANEL MOUNT

• Ratings 25A per phase @ 600VAC

• 100K-cycle UL 508 Endurance Rating for Enhanced Reliability

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig.	Operational Voltage	Control Voltage	Price Each		
					1	10	25
558-CTR06025	CTR06025	G	48-600VAC	4-32VDC	190.43	181.48	177.31
558-UPD2415DF	UPD2415DF	H			57.93	55.21	53.94
558-UPD2415TP-10	UPD2415TP-10	H			78.00	74.33	72.62
558-UPD2425	UPD2425	H			44.13	42.06	41.10
558-UPD2425F	UPD2425F	H			44.98	42.87	41.89
558-UPD2425F-10	UPD2425F-10	H			45.83	43.68	42.68

## EMI NOISE FILTER

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Connection	Operating Voltage (Max)	Attenuation (Typ)	Current Drain @ Vrms (Max)	Price Each		
						1	10	25
558-3F20	3F20	3	475Vrms	25dBp/V	35mA	37.52	35.76	34.94

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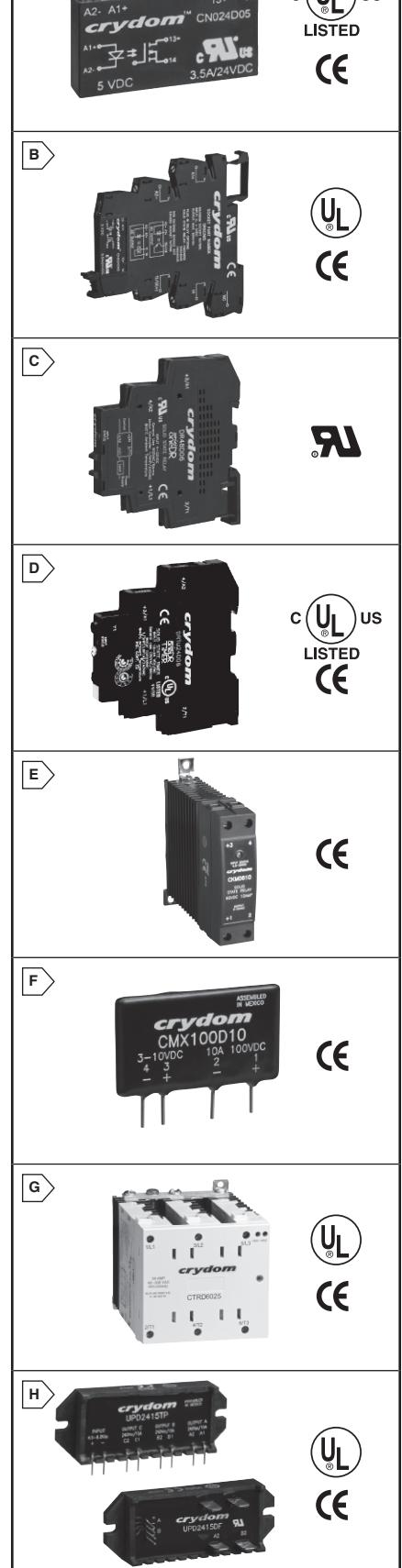
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Crydom  
Solid State Relays

# CRYDOM PC Mount Solid State Relays

RoHS Compliant

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**crydom**

## CX SERIES SIP DC INPUT AC OUTPUT RELAYS

PCB Mount Single-In-Line-AC Output

**Features/Specifications:**

- SPST-NO • DC Control, AC Output
- SCR Output • Operating temperature: -30°C to 80°C
- Ultra high surge rating

\* R suffix indicates random turn-on

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
558-CXE240D5	CXE240D5	A	3-15VDC	.06-5.0Arms	12-280Vrms	14.42	13.74	13.43
* 558-CXE240D5R	CXE240D5R	A	3-15VDC	.06-5.0Arms	12-280Vrms	15.27	14.55	14.22
558-CXE240D5	CXE240D5	A	15-32VDC	.06-5.0Arms	12-280Vrms	14.42	13.74	13.43
558-CX380D5	CX380D5	A	4-15VDC	.06-5.0Arms	48-530Vrms	18.38	17.52	17.12
558-CXE380D5	CXE380D5	A	15-32VDC	.06-5.0Arms	48-530Vrms	18.38	17.52	17.12
* 558-CX480D5	CX480D5	A	4-15VDC	.06-5.0Arms	48-660Vrms	20.23	19.28	18.84

## D2W SERIES SIP AC OUTPUT RELAYS

**Features/Specifications:**

- Triac output • Circuit: SPST-NO
- Zero voltage switching • Internal snubber

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
558-D2W202F	D2W202F	B	3-32VDC	.06-2.0Arms	24-280Vrms	18.23	17.37	16.97
558-D2W203F-11	D2W203F-11	B	3-32VDC	.06-3.5Arms	24-240Vrms	20.40	19.43	18.99

## LR SERIES DIP AC OUTPUT RELAYS

**Features/Specifications:**

- DC Control, AC Output
- Zero cross switching
- Up to 1200V transient capability
- SCR Output
- Switching voltage mode: AC
- Min. load current: 15mA
- Min. turn off voltage: 1VDC
- Optional Mounting Clip Available (LMC-1)
- Circuit: SPST-NO

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
558-LR600240D25	LR600240D25	C	4-32VDC	.015-25Arms	24-280Vrms	34.00	32.40	31.66
558-LR600240D40	LR600240D40	C	4-32VDC	.015-40Arms	24-280Vrms	37.26	35.51	34.70

## LS SERIES SIP AC OUTPUT RELAYS

**Features/Specifications:**

- High surge rated SCR output
- No moving parts
- Circuit: SPST-NO
- Zero cross turn on

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
558-LS240D8	LS240D8	D	4-10VDC	.15-8Arms	24-280Vrms	21.37	20.37	19.90
558-LS240D12	LS240D12	D	4-10VDC	.15-12Arms	24-280Vrms	23.75	22.63	22.11
558-LSE240D8	LSE240D8	D	20-28VDC	.15-8Arms	24-280Vrms	21.37	20.37	19.90
558-LSE240D12	LSE240D12	D	20-28VDC	.15-12Arms	24-280Vrms	23.75	22.63	22.11

## MCX SERIES SIP AC OUTPUT RELAYS

**Features/Specifications:**

- Plastic encapsulated
- Circuit: SPST-NO

\* R suffix indicates random turn-on

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
558-MCX240D5	MCX240D5	E	4-15VDC	0.06-5.0Arms	12-280Vrms	16.57	15.79	15.43
* 558-MCX240D5R	MCX240D5R	E	4-15VDC	0.06-5.0Arms	12-280Vrms	17.43	16.61	16.23
558-MCX240D5	MCX240D5	E	15-32VDC	0.06-5.0Arms	12-280Vrms	16.14	15.53	15.18

## MP SERIES TRIAC SIP AC OUTPUT RELAYS

**Features/Specifications:**

- Triac AC Output SIP
- Operating temperature: -40°C to 80°C
- Circuit: SPST-NO
- DC Control, AC Output

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
558-MP120D3	MP120D3	F	3-32VDC	.02-3.0Arms	12-140Vrms	22.09	21.05	20.57
558-MP240D3	MP240D3	F	3-32VDC	.02-3.0Arms	24-280Vrms	22.48	21.42	20.93
558-MP240D4	MP240D4	F	3-32VDC	.02-4.0Arms	24-280Vrms	23.08	22.00	21.50

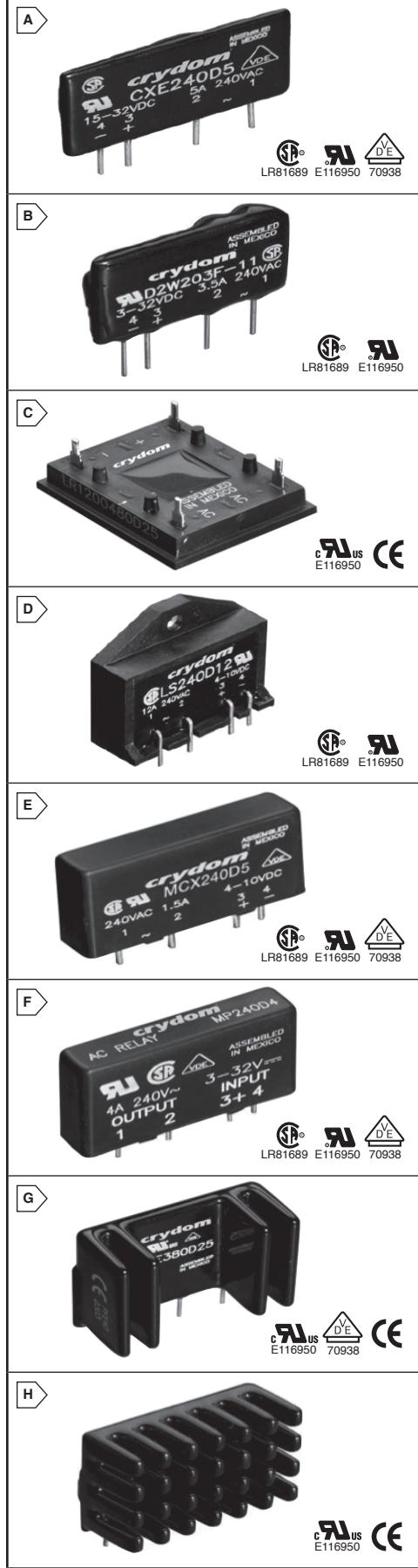
## PF SERIES POWERFIN™ MINI-SIP AC OUTPUT RELAYS

**Features/Specifications:**

- SCR Output • Circuit: SPST-NO
- Isolation voltage: 4000Vrms
- \* R suffix indicates random turn-on

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
558-PF240D25	PF240D25	G	3-15VDC	0.06-25Arms	12-280Vrms	26.31	25.07	24.50
* 558-PF240D25R	PF240D25R	G	3-15VDC	0.06-25Arms	12-280Vrms	27.16	25.88	25.29



# CRYDOM PC Mount Solid State Relays

**crydom®**

 This page of product is RoHS compliant.

## MP SERIES SIP DC CONTROL RELAY

PCB Mount Single - In - Line DC Output

### Features/Specifications:

- Bipolar transistor output
- DC Switching- SPST-NO

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Control Voltage	Load Current	Line Voltage	Price Each		
					1	10	25
558-MPDCD3-B	MPDCD3-B	3-32VDC	.02-3Arms	3-60VDC	32.19	30.68	29.98



E116949 LR81689 70938

## DPA/SDV SERIES SCR OUTPUT RELAYS

PCB Mount 16 Pin DIP AC Output

### Features/Specifications:

- 16 Pin DIP package
- Voltage or current operated versions
- High packaging density
- Operating temperature: -30°C to 80°C
- Isolation voltage: 3750Vrms
- Circuit: SPST-NO

\* Control Current Range

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Control Voltage	Load Current	Line Voltage	Price Each		
					1	10	25
<b>DPA Series</b>							
* 558-DPA4111	DPA4111	10-50mA	.025-1.0Arms	20-140Vrms	11.41	10.87	10.62
* 558-DPA4119	DPA4119	3.5-10VDC	.025-1.0Arms	20-140Vrms	11.41	10.87	10.62
* 558-DPA6111	DPA6111	10-50mA	.025-1.0Arms	20-280Vrms	11.77	11.22	10.96
* 558-DPA6119	DPA6119	3.5-10VDC	.025-1.0Arms	20-280Vrms	11.77	11.22	10.96
<b>SDV Series</b>							
558-SDV2415	SDV2415	3.5-10VDC	.025-1.5Arms	12-280Vrms	14.23	13.56	13.25



E116949 LR81689

## ASO SERIES MINI-SIP AC OUTPUT RELAYS

PCB Mount Mini-SIP

### Features/Specifications:

- SCR (ASO) output
- DC Control, AC Output
- Operating temperature: -30°C to 80°C
- Circuit: SPST-NO
- Isolation voltage: 2500Vrms
- Must release voltage: 1VDC
- R suffix indicates random turn-on

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Control Voltage	Load Current	Line Voltage	Price Each		
					1	10	25
558-ASO241	ASO241	4-10VDC	.025-1.0Arms	24-280Vrms	11.86	11.30	11.04
* 558-ASO241R	ASO241R	4-10VDC	.025-1.0Arms	24-280Vrms	12.71	12.11	11.83
* 558-ASO242	ASO242	4-10VDC	0.6-2.0Arms	12-280Vrms	14.33	13.66	13.35
* 558-ASO242R	ASO242R	4-10VDC	0.6-2.0Arms	12-280Vrms	15.19	14.48	14.15



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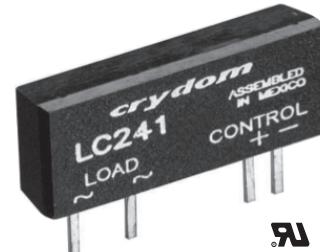
## LC SERIES MINI-SIP AC OUTPUT RELAYS

### Features/Specifications:

- Circuit: SPST-NO
- Compact for high density PCB mount
- Cost effective solution
- DC Control, AC Output

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Control Voltage	Load Current	Line Voltage	Price Each		
					1	10	25
558-LC241	LC241	4-10VDC	0.025-1.5Arms	12-280Vrms	10.06	9.59	9.37
558-LC241R	LC241R	4-10VDC	0.025-1.5Arms	12-280Vrms	10.92	10.41	10.17



E116949 LR81689

## DMO SERIES MOSFET MINI-SIP RELAY

### DC Output Relay

### Features/Specifications:

- Circuit: SPST-NO
- Isolation voltage: 2500Vrms, 4000Vrms
- DC Control, DC Output
- Operating temperature: -30°C to 80°C

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Control Voltage	Load Current	Line Voltage	Price Each		
					1	10	25
558-DMO063	DMO063	3-10VDC	0-3.0ADC	0-60VDC	21.87	20.84	20.36



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1989

# CRYDOM Panel Mount Solid State Relays

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## 53 SERIES 3 PHASE, IP20 OR IPOO MOTOR REVERSING AC OUTPUT CONTACTORS

### Features/Specifications:

- SCR output for heavy industrial loads
- AC or DC Control
- Zero-crossing (resistive loads) or random-fire (inductive loads) output
- Transient protection built in
- Operating temperature: -40°C to 80°C
- Isolation voltage: 4000Vrms
- Random Turn-on  Thermal pad installed  Thermal pad installed and Random Turn-on

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig.	Control Voltage	Load Current	Line Voltage	Price Each	
						1	10
<b>Three-Phase SSR</b>							
558-D53TP25D	D53TP25D	A	4-32VDC	.05-25Arms	48-530Vrms	159.80	152.29
558-D53TP50D	D53TP50D	A	4-32VDC	.05-50Arms	48-530Vrms	174.87	166.65
558-A53TP25D	A53TP25D	A	90-280VAC	.05-25Arms	48-530Vrms	166.65	158.82
<b>Three-Phase SSR with IP20 Cover</b>							
558-B53TP25C	B53TP25C	B	90-140VAC	.05-25Arms	48-530Vrrms	181.44	172.91
558-B53TP50CH	B53TP50CH	B	90-140VAC	.05-50Arms	48-530Vrrms	201.28	191.82
† 558-C53TP25CH-10	C53TP25CH-10	B	180-240VAC	.05-25Arms	48-530Vrrms	191.69	182.68
** 558-D53TP50CH	D53TP50CH	B	4-32VDC	.05-50Arms	48-530Vrrms	194.58	185.43
* 558-E53TP25C-10	E53TP25C-10	B	18-32VAC	.05-25Arms	48-530Vrrms	186.57	177.80
558-E53TP50C	E53TP50C	B	18-32VAC	.05-50Arms	48-530Vrrms	196.15	186.93

## CSW SERIES LOW LEAKAGE AC OUTPUT RELAYS

### Features/Specifications:

- Isolation voltage: 4000Vrms
- Low leakage
- SCR AC switch output
- Operating temperature: -40°C to 80°C
- Switching Type: Zero Voltage Turn-On
- Control current: 13mA
- Must release voltage: 1.0
- Termination: Screw

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig.	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
558-CSW2410	CSW2410	C	3-32VDC	150-10Arms	24-280Vrms	33.45	31.88	31.15
558-CSW2425	CSW2425	C	3-32VDC	150-25Arms	24-280Vrms	41.00	39.07	38.17
558-CSW2450	CSW2450	C	3-32VDC	150-50Arms	24-280Vrms	48.19	45.93	44.88
558-CSW2475	CSW2475	C	3-32VDC	150-75Arms	24-280Vrms	78.00	74.33	72.62
558-CSW2490	CSW2490	C	3-32VDC	150-90Arms	24-280Vrms	85.90	81.86	79.98

## CW24 SERIES AC/DC CONTROL RELAYS

### Features/Specifications:

- SCR AC switch output
- Integrated finger proof cover
- Operating temperature: -40°C to 80°C
- Isolation voltage: 4000Vrms
- AC or DC input, and Universal AC/DC input

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig.	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
558-CWA2410	CWA2410	D	90-280VAC	.15-10Arms	24-280Vrms	47.30	45.08	44.05
558-CWA2425	CWA2425	D	90-280VAC	.15-25Arms	24-280Vrms	48.26	45.99	44.93
558-CWA2450	CWA2450	D	90-280VAC	.15-50Arms	24-280Vrms	57.09	54.41	53.16
558-CWA24125	CWA24125	D	90-280VAC	.25-125Arms	24-280Vrms	110.82	105.61	103.18
558-CWD2410	CWD2410	D	3-32VDC	.15-10Arms	24-280Vrms	44.72	42.62	41.64
558-CWD2425	CWD2425	D	3-32VDC	.15-25Arms	24-280Vrms	45.19	43.07	42.08
558-CWD2450	CWD2450	D	3-32VDC	.15-50Arms	24-280Vrms	52.75	50.27	49.12
558-CWD2490	CWD2490	D	3-32VDC	.25-90Arms	24-280Vrms	92.76	88.40	86.37
558-CWD4850	CWD4850	D	4-32VDC	.15-50Arms	24-280Vrms	63.99	60.98	59.58
558-CWD48125	CWD48125	D	4-32VDC	.25-125Arms	24-280Vrms	127.99	121.97	119.17

## CWU24/CWU48 SERIES UNIVERSAL AC/DC INPUT RELAYS

### Features/Specifications:

- EMC Compliant for reliable operation in harsh environments
- Removable IP 20 touch-safe cover
- AC or DC input, and Universal AC/DC input
- DBC substrate for superior thermal performance
- Overvoltage Protection

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig.	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
558-CWU2410	CWU2410	D	20-48 VDC/ 20-280 VAC	.15-10Arms	24-280Vrms	46.15	43.98	42.97
558-CWU2425	CWU2425	D	20-48 VDC/ 20-280 VAC	.15-25Arms	24-280Vrms	47.08	44.87	43.84
* 558-CWU2450P	CWU2450P	D	20-48 VDC/ 20-280 VAC	.15-50Arms	24-280Vrms	56.53	53.87	52.63
558-CWU4850	CWU4850	D	20-48 VDC/ 20-280 VAC	.15-50Arms	24-280Vrms	58.87	56.10	54.82
* 558-CWU4850P	CWU4850P	D	20-48 VDC/ 20-280 VAC	.15-50Arms	24-280Vrms	68.11	65.45	63.95

### Switching Type: Random Turn-On

558-CWU2425-10	CWU2425-10	D	20-48 VDC/ 20-280 VAC	.15-25Arms	24-280Vrms	46.75	44.92	43.89
558-CWU2450-10	CWU2450-10	D	20-48 VDC/ 20-280 VAC	.15-50Arms	24-280Vrms	55.15	53.00	51.79
558-CWU4825-10	CWU4825-10	D	20-48 VDC/ 20-280 VAC	.15-25Arms	24-280Vrms	61.11	58.72	57.37
558-CWU4850-10	CWU4850-10	D	20-48 VDC/ 20-280 VAC	.15-50Arms	24-280Vrms	68.11	65.45	63.95

## DUAL SERIES AC OUTPUT RELAYS

### Features/Specifications:

- Industry standard package
- Zero voltage switching
- DC Control
- Operating temperature: -40°C to 80°C
- Random turn-on, phase controllable
- Isolation voltage: 4000Vrms
- Control current: 15mA @ 5VDC
- Must release voltage: 1VDC
- Random turn-on, phase controllable

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig.	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
558-D2425D	D2425D	E	4-15VDC	.15-25Arms	24-280Vrms	77.58	73.93	72.23
558-D2440D	D2440D	E	4-15VDC	.15-40Arms	24-280Vrms	87.84	83.71	81.79
* 558-D2440D-10	D2440D-10	E	4-15VDC	.15-40Arms	24-280Vrms	89.55	85.34	83.38

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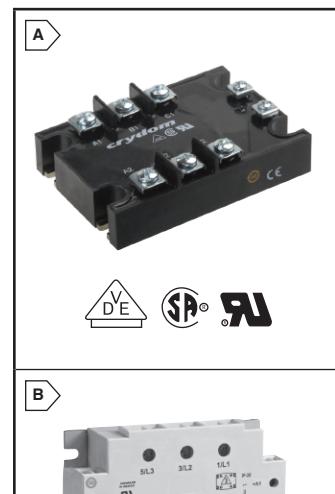
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# CRYDOM Panel Mount Solid State Relays

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## EZ SERIES PC MOUNT AC OUTPUT RELAYS

### Features/Specifications:

- Low leakage
- Quick connect terminals
- Line voltage: 24-280Vrms
- Must release voltage: 1VDC
- SCR Output
- Isolation voltage: 4000Vrms
- Operating temperature: -30°C to 80°C
- AC or DC control

\*\* Included (EZ240 Only)

MOUSER STOCK NO.	Crydom Part No.	Fig.	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
558-EZ240D12	EZ240D12	A	3-15VDC	150-12Arms	24-280Vrms	37.12	35.38	34.57
558-EZ240D18	EZ240D18	A	3-15VDC	150-18Arms	24-280Vrms	37.48	35.72	34.90
558-EZ240A18S	EZ240A18S	A	90-140Vrms	150-18Arms	24-280Vrms	40.91	38.99	38.10

## H12/H16 SERIES AC OUTPUT RELAYS

### Features/Specifications:

- Control voltage: 4VDC-32VDC
- SCR output for heavy industrial loads
- Optional LED Status Indicator

\* Input Status LED Included

MOUSER STOCK NO.	Crydom Part No.	Fig.	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
<b>1200 Volts Blocking</b>								
558-H12D4850	H12D4850	B	4-32VDC	150-50Arms	48-530Vrms	60.94	58.08	56.75
558-H12D4890	H12D4890	B	4-32VDC	150-90Arms	48-530Vrms	96.30	91.77	89.66
558-H12WD4850	H12WD4850	B	4-32VDC	150-50Arms	48-660Vrms	60.94	58.08	56.75
558-H12WD4890	H12WD4890	B	4-32VDC	150-90Arms	48-660Vrms	100.88	96.14	93.93
<b>1600 Volts Blocking</b>								
558-H16WD6050	H16WD6050	C	4-32VDC	20-50Arms	48-690Vrms	71.78	68.41	66.84
* 558-H16WD6050G	H16WD6050G	C	4-32VDC	20-50Arms	48-690Vrms	72.62	69.21	67.62
* 558-H16WD6090	H16WD6090	C	4-32VDC	45-90Arms	48-690Vrms	118.87	113.28	110.68
* 558-H16WD6090G	H16WD6090G	C	4-32VDC	45-90Arms	48-690Vrms	119.70	114.07	111.45

## HD/HA SERIES AC OUTPUT RELAYS

### Features/Specifications:

- Output - SCR AC Switch
- 1200 Volt blocking
- Zero voltage switching
- Operating temperature: -40°C to 80°C
- Isolation voltage: 4000Vrms
- Control current: DC - 2mA @ 5VDC; AC - 2mA @ 120VAC
- AC or DC control

\* Instantaneous Turn-On

MOUSER STOCK NO.	Crydom Part No.	Fig.	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
<b>AC Control</b>								
558-HA4825	HA4825	D	90-280Vrms	150-25Arms	48-530Vrms	58.24	55.50	54.23
558-HA4890	HA4890	D	90-280Vrms	150-90Arms	48-530Vrms	101.17	96.42	94.20
<b>DC Control</b>								
558-HA4825	HA4825	D	90-280Vrms	150-25Arms	48-530Vrms	58.24	55.50	54.23
558-HA4890	HA4890	D	90-280Vrms	150-90Arms	48-530Vrms	101.17	96.42	94.20
558-HD48125	HD48125	D	4-32VDC	150-125Arms	48-530Vrms	119.22	113.62	111.01
* 558-HD4890-10	HD4890-10	D	4-32VDC	150-90Arms	48-530Vrms	100.42	95.70	93.50
558-HD4890	HD4890	D	4-32VDC	150-90Arms	48-530Vrms	98.71	94.07	91.91
558-HD6050	HD6050	D	4-32VDC	150-50Arms	48-530Vrms	61.07	58.20	56.86
* 558-HD6050-10	HD6050-10	D	4-32VDC	150-50Arms	48-530Vrms	62.78	59.83	58.46

## SERIES 1 SCR AC OUTPUT RELAYS

### Features/Specifications:

- Output - SCR AC switch
- Operating temperature: -40°C to 80°C
- Zero voltage and random
- Isolation Voltage: 4000Vrms
- Internal snubber

\* Non-zero cross, phase controllable

MOUSER STOCK NO.	Crydom Part No.	Fig.	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
<b>DC Control</b>								
558-D1210	D1210	E	3-32VDC	150-10Arms	24-140Vrms	39.68	37.82	36.95
558-D1225	D1225	E	3-32VDC	150-25Arms	24-140Vrms	40.27	38.38	37.50
558-D1240	D1240	E	3-32VDC	150-40Arms	24-140Vrms	43.84	41.78	40.82
558-D1240-B	D1240-B	E	3-32VDC	150-40Arms	24-280Vrms	52.38	49.92	48.77
558-D2450-B	D2450-B	E	3-32VDC	150-50Arms	24-280Vrms	56.49	53.83	52.59
* 558-D2475-10	D2475-10	E	3-32VDC	150-75Arms	24-280Vrms	77.47	73.83	72.13
* 558-D2490-10	D2490-10	E	3-32VDC	150-90Arms	24-280Vrms	85.21	81.21	79.34
558-D2410	D2410	E	3-32VDC	150-10Arms	24-280Vrms	40.64	38.73	37.84
558-D2425	D2425	E	3-32VDC	150-25Arms	24-280Vrms	41.05	39.12	38.22
* 558-D2425-10	D2425-10	E	3-32VDC	150-25Arms	24-280Vrms	41.91	39.94	39.02
558-D2440	D2440	E	3-32VDC	150-40Arms	24-280Vrms	46.47	44.29	43.27
* 558-D2440-10	D2440-10	E	3-32VDC	150-40Arms	24-280Vrms	47.32	45.10	44.07
558-D2450	D2450	E	3-32VDC	150-50Arms	24-280Vrms	47.95	45.70	44.65
* 558-D2450-10	D2450-10	E	3-32VDC	150-50Arms	24-280Vrms	48.81	46.52	45.45
558-D2475	D2475	E	3-32VDC	150-75Arms	24-280Vrms	76.62	73.02	71.34
558-D2490	D2490	E	3-32VDC	150-90Arms	24-280Vrms	84.36	80.40	78.55
558-D4825	D4825	E	4-32VDC	150-25Arms	48-530Vrms	52.38	49.92	48.77
558-D4840	D4840	E	4-32VDC	150-40Arms	48-530Vrms	58.17	55.44	54.17
558-D4850	D4850	E	4-32VDC	150-50Arms	48-530Vrms	58.17	55.44	54.17
558-D4875	D4875	E	4-32VDC	150-75Arms	48-530Vrms	92.87	88.51	86.48
<b>AC Control</b>								
558-A1225	A1225	E	90-280VAC	150-25Arms	24-140Vrms	41.73	39.77	38.86
558-A1240	A1240	E	90-280VAC	150-40Arms	24-140Vrms	46.18	44.01	43.00
* 558-A2450-10	A2450-10	E	90-280VAC	150-50Arms	24-280Vrms	50.48	48.11	47.01
558-A2410	A2410	E	90-280VAC	150-10Arms	24-280Vrms	43.02	41.00	40.06
558-A2425	A2425	E	90-280VAC	150-25Arms	24-280Vrms	43.84	41.78	40.82
558-A2440	A2440	E	90-280VAC	150-40Arms	24-280Vrms	48.41	46.13	45.07
558-A2450	A2450	E	90-280VAC	150-50Arms	24-280Vrms	49.63	47.30	46.21
558-A2475	A2475	E	90-280VAC	150-75Arms	24-280Vrms	79.93	76.17	74.42
558-A4850	A4850	E	90-280VAC	150-50Arms	48-530Vrms	63.50	60.52	59.13
558-A4875	A4875	E	90-280VAC	150-75Arms	48-530Vrms	94.57	90.13	88.06

## ACCESSORY

MOUSER STOCK NO.	Crydom Part No.	Description	Price Each		
			1	10	25
558-KS-100	KS-100	Series 1 Protective Cover	4.45	4.24	4.14

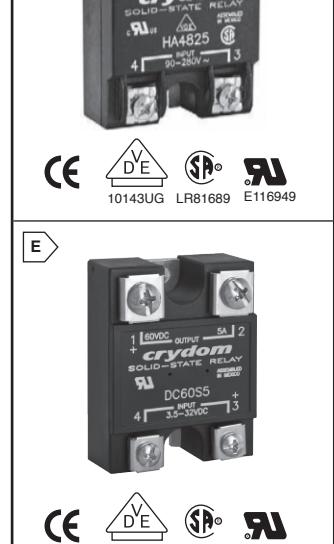
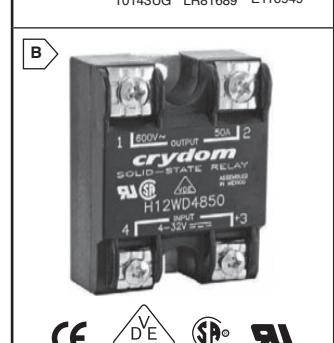
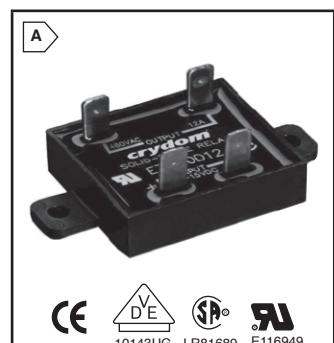
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1991



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# CRYDOM Panel Mount Solid State Relays

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## 1-DC SERIES MOSFET DC OUTPUT RELAYS

### Features/Specifications:

- Input - DC control
- Low on-state resistance
- Control current: 1.6mA
- Must release voltage: 1VDC
- Operating temperature: -30°C to 80°C
- Paralleling capability
- Isolation voltage: 2500Vrms

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig.	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
558-D1D07	D1D07	A	3.5-32VDC	7Adc	100VDC	53.73	51.20	50.02
558-D1D12	D1D12	A	3.5-32VDC	12Adc	100VDC	59.38	56.59	55.29
558-D1D40	D1D40	A	3.5-32VDC	40Adc	100VDC	80.84	77.04	75.27
558-D2D07	D2D07	A	3.5-32VDC	7Adc	200VDC	62.05	59.13	57.77
558-D2D12	D2D12	A	3.5-32VDC	12Adc	200VDC	71.51	68.15	66.59
558-D4D07	D4D07	A	3.5-32VDC	7Adc	400VDC	72.91	69.48	67.88

## D06D SERIES MOSFET DC OUTPUT RELAYS

### Features/Specifications:

- Low on-state resistance
- High current ratings
- Switching voltage mode: DC
- Min. load current: 5mA

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig.	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
558-D06D60	D06D60	B	3.5-32VDC	60Adc	0-60VDC	98.37	93.75	91.60
558-D06D80	D06D80	B	3.5-32VDC	80Adc	0-60VDC	112.94	107.63	105.16
558-D06D100	D06D100	B	3.5-32VDC	100Adc	0-60VDC	128.69	122.64	119.82

## DC60 SERIES BI-POLAR DC OUTPUT RELAYS

### Features/Specifications:

- Input - DC or AC control
- Isolation voltage: 4000Vrms

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig.	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
558-DC60S3	DC60S3	C	3.5-32VDC	3ADC	3-60VDC	19.59	18.67	18.24
558-DC60S5	DC60S5	C	3.5-32VDC	5ADC	3-60VDC	29.69	28.29	27.64
558-DC60S7	DC60S7	C	3.5-32VDC	7ADC	3-60VDC	36.63	34.91	34.11
558-DC60SA3	DC60SA3	C	90-280Vrms/VDC	3ADC	3-60VDC	22.35	21.30	20.81

### Output Type: N.C.

558-DC60S3-B	DC60S3-B	C	3.5-32VDC	3ADC	3-60VDC	28.14	26.82	26.21
558-DC60S5-B	DC60S5-B	C	3.5-32VDC	5ADC	3-60VDC	38.23	36.43	35.59
558-DC60S7-B	DC60S7-B	C	3.5-32VDC	7ADC	3-60VDC	45.17	43.05	42.06
558-DC60SA3-B	DC60SA3-B	C	90-280Vrms/VDC	3ADC	3-60VDC	30.89	29.44	28.77
558-DC60SA7-B	DC60SA7-B	C	90-280Vrms/VDC	7ADC	3-60VDC	47.95	45.70	44.65

## POWERPLUS SERIES MOSFET DC OUTPUT RELAYS

### Features/Specifications:

- Operating Temperature Range -30 to 80°C
- IP20

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig.	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
558-DC100D10	DC100D10	D	4-32 VDC	66Adc-2.5mA	7-72VDC	79.95	76.19	74.44
* 558-DC100D10C	DC100D10C	D	4-32 VDC	66Adc-2.5mA	7-72VDC	83.37	79.45	77.63
558-DC200D10	DC200D10	D	4-32 VDC	91Adc-2.5mA	1-150VDC	86.01	81.97	80.09
558-DC400A10	DC400A10	D	90-140 VAC	136Adc-2.5mA	1-300VDC	103.54	98.67	96.40
558-DC400D10	DC400D10	D	4-32 VDC	136Adc-2.5mA	1-300VDC	94.92	90.46	88.38
* 558-DC400D10C	DC400D10C	D	4-32 VDC	136Adc-2.5mA	1-300VDC	98.33	93.71	91.56

## SSC SERIES DC OUTPUT RELAY

### Features/Specifications:

- Control voltage: 12VDC, 24VDC, 36VDC
- Switching voltage mode: DC
- High voltage
- Load Current Max. (ADC): 25
- IGBT Output

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig.	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
558-SSC1000-25-24	SSC1000-25-24	E	20-28VDC	20mA-25Adc	0-1000VDC	203.33	193.77	189.32

## PC SERIES MICROCONTROLLER BASED PROPORTIONAL RELAYS

### Features/Specifications:

- Angle firing load control
- 0-100% Control range
- Output SCR AC switching
- Loads up to 90A

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig.	Control Voltage	Load Current	Line Voltage	Price Each			
						1	10	25	
558-MCPC1250E	MCPC1250E	F	40-140VAC	150-50Arms	48-140Vrms	Internal Potentiometer	98.40	93.78	86.87
558-MCPC1250C	MCPC1250C	F	40-140VAC	150-50Arms	48-140Vrms	0-10VDC	98.40	93.78	86.87
558-MCPC2425A	MCPC2425A	F	180-280VAC	150-25Arms	180-280Vrms	0-5VDC	91.45	87.15	80.72
558-MCPC2425E	MCPC2425E	F	180-280VAC	150-25Arms	180-280Vrms	Internal Potentiometer	91.45	87.15	80.72
558-MCPC2425C	MCPC2425C	F	180-280VAC	150-25Arms	180-280Vrms	0-10VDC	91.45	87.15	80.72
558-MCPC4825E	MCPC4825E	F	330-530VAC	150-25Arms	300-530Vrms	Internal Potentiometer	104.17	99.27	91.94
558-MCPC4825C	MCPC4825C	F	330-530VAC	150-25Arms	300-530Vrms	0-10VDC	104.17	99.27	91.94

## PCV SERIES ANALOG INPUT POWER CONTROLLERS

### Features/Specifications:

- Internal snubber
- Control circuit requires no adjustment or calibration
- Operates at 60Hz and 50Hz
- Must release voltage: 1VDC
- Operating temperature: -30°C to 80°C
- Isolation voltage: 2500Vrms

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crydom Part No.	Fig.	Control Voltage	Load Current	Line Voltage	Price Each		
						1	10	25
558-10PCV2415	10PCV2415	G	2-10VDC	0.15-15Arms	100-240Vrms	101.34	96.58	94.36
558-10PCV2425	10PCV2425	G	2-10VDC	0.15-25Arms	100-240Vrms	112.24	106.96	104.50

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# CRYDOM Solid State I/O Modules



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## 17.5MM SERIES DIN RAIL MOUNTED I/O MODULES

For quantities greater than listed, call for quote.							
MOUSER STOCK NO.	Crydom Part No.	Fig.	Voltage	Max. Current (mA)	AWG Wire	Price Each	
1 10 25 50							
<b>Input</b>							
558-84115501	84115501	A	140VDC	7	14-28	38.02	36.18
558-84115502	84115502	A	280VDC	2	14-28	38.02	36.18
558-84115503	84115503	A	32VDC	27	14-28	42.20	40.16
<b>Output</b>							
558-84130104	84130104	A	60VDC	3	14-28	34.02	32.37
558-84130105	84130105	A	280VAC	5	14-28	41.50	39.50
558-84130108	84130108	A	280VAC	5	14-28	45.50	43.30

## DRA SERIES (DIN RAIL MOUNTED AC AND DC OUTPUT SSR ASSEMBLIES)

### Features/Benefits:

- 10mm Single Channel DIN Rail Mount SSR Assembly
- 54mm Four Channel DIN Rail Mount SSR Assembly
- 90-140VAC control
- AC Ratings up to 280VAC and 5 Amps
- 3-15 and 15-32VDC control
- Cage style screw terminals for easy connection
- Fits standard 35mm DIN rail
- Includes LED Status indicator

For quantities greater than listed, call for quote.											
MOUSER STOCK NO.	Crydom Part No.	Fig.	Voltage	Price Each							
1 10 25 50											
<b>1 Channel DC Output</b>											
558-DRA1-CMX100D6	DRA1-CMX100D6	B	3-10VDC	62.78	59.83	58.46	57.08				
558-DRA1-CMX200D3	DRA1-CMX200D3	B	3-10VDC	64.64	61.60	60.19	58.77				
558-DRA1-CMX60D10	DRA1-CMX60D10	B	3-10VDC	62.78	59.83	58.46	57.08				
558-DRA1-CX240D5	DRA1-CX240D5	B	3-15VDC	40.44	38.54	37.66	36.77				
558-DRA1-CX240D5R	DRA1-CX240D5R	B	3-15VDC	41.29	39.35	38.45	37.54				
558-DRA1-CXE240D5	DRA1-CXE240D5	B	15-32VDC	40.44	38.54	37.66	36.77				
558-DRA1-CXE240D5R	DRA1-CXE240D5R	B	15-32VDC	41.29	39.35	38.45	37.54				
558-DRA1-CXE380D5	DRA1-CXE380D5	B	15-32VDC	44.31	42.23	41.26	40.29				
558-DRA1-MCX240D5	DRA1-MCX240D5	B	3-15VDC	40.44	38.54	37.66	36.77				
558-DRA1-MP240D4	DRA1-MP240D4	B	3-32VDC	48.91	46.61	45.54	44.47				
<b>4 Channel AC Output</b>											
558-DRA4-CX240D5	DRA4-CX240D5	C	3-15VDC	135.35	128.99	126.03	123.06				
558-DRA4-CXE240D5	DRA4-CXE240D5	C	15-32VDC	135.35	128.99	126.03	123.06				
558-DRA4-MCX240D5	DRA4-MCX240D5	C	3-15VDC	135.35	128.99	126.03	123.06				

## DRA4 CX SERIES/DRA1 CX SERIES SOCKETS, DIN RAIL MOUNTABLE KIT

For quantities greater than listed, call for quote.							
MOUSER STOCK NO.	Crydom Part No.	Fig.	Description	Price Each			
1 10 25 50							
558-DRS1	DRS1	D	Single Point	26.79	25.53	24.95	24.36
558-DRS4	DRS4	D	Four Position	79.35	75.62	73.88	72.14

## DRA SERIES SOLID STATE CONTACTORS

### Features:

- Fits standard 35mm DIN - RAIL
- AC or DC control
- LED inputs status indicator
- Horsepower Rated

For quantities greater than listed, call for quote.										
MOUSER STOCK NO.	Crydom Part No.	Fig.	Control Voltage	Operational Current	Price Each					
1 10 50 100										
<b>DRA3P Series: 3 Phase AC Contactor</b>										
558-DRA3P48B4	DRA3P48B4	E	90-140VAC	4.2A	71.29	67.94	64.81			
558-DRA3P48D4	DRA3P48D4	E	4-6VDC	4.2A	67.73	64.55	61.58			
558-DRA3P48E2R	DRA3P48E2R	E	18-28VDC	2.4A	58.56	55.81	53.24			
558-DRA3P48E4R	DRA3P48E4R	E	18-28VDC	4.2A	67.05	63.90	60.96			
<b>DRA3R Series: 3 Phase Motor Reversing Contactor</b>										
558-DRA3R48E2	DRA3R48E2	F	18-28VDC	2.4A	125.47	119.57	114.07			
<b>DRA4D Series: DC Motor Reversing Contactor</b>										
558-DRA4D100D12	DRA4D100D12	G	5-15VDC	12A	247.79	236.14	225.28			
558-DRA4D250D6	DRA4D250D6	G	5-15VDC	6A	236.54	225.42	215.05			

## SOLID STATE OPTO-ISOLATED BOARD MOUNT I/O MODULES

Solid State I/O switching modules deliver an electrically clean, photo-isolated noise-free 'output' interface from logic level control systems to external loads such as motors, valves, solenoids, etc. - or an 'input' interface from the load or sensors to microprocessor or computer-based logic level systems. Designed for long, reliable service in demanding industrial environments.

### Features:

- Maximum turn-on/turn off time: 20/30 msec
- Zero-Cross switching on AC only output

For quantities greater than listed, call for quote.										
MOUSER STOCK NO.	Crydom Part No.	Voltage Input Type	Color	Input Specifications		Output	Price Each			
1 10 25 50										
<b>Standard Pack</b>										
558-IAC-24	IAC24	AC or DC	Yellow	90-142		10	.1-50mA@.4-30VDC		23.30	22.18
558-OAC5	OAC5	AC only	Black	3-8		27	.05-3A@.12-140Vrms		19.78	18.83
<b>Mini-Pack</b>										
558-MIDC5	MIDC5	DC only	White	10-36		16	.1-50mA@.4-30VDC		14.24	13.55
558-MOAC5A	MOAC5A	AC only	Black	3-8		27	.05-3A@.24-280Vrms		20.48	19.49

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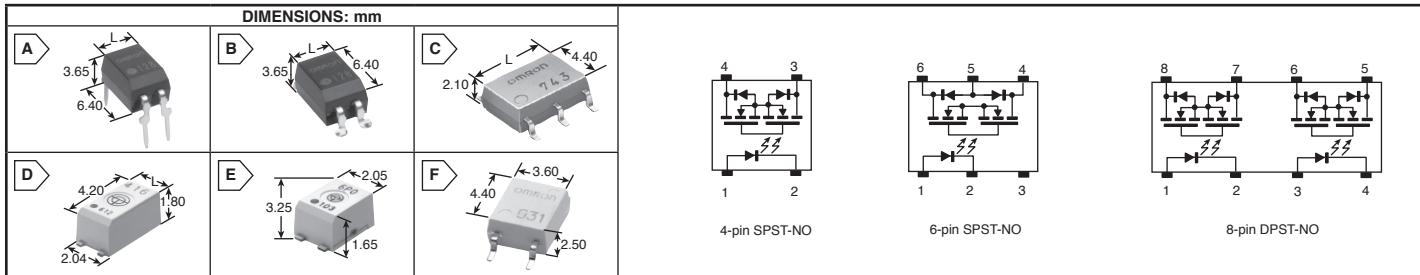
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Crydom Solid State Relays



# OMRON MOSFET Relays

OMRON



## G3VM SERIES: MOSFET RELAYS WITH LOAD VOLTAGE 20-80V

Perfectly suited for Automated Meter Reading, Automotive Diagnostic Equipment, and Communications. Available in 1- and 2-Pole configurations in PCB, SMT, DIP, SOP, SSOP, and USOP packaging. Other options include current limiting, high dielectric voltage withstand, normally open and normally closed contact forms, and high voltage.

### Features:

- Solid State performance and accuracy
- Smallest USOP and SSOP footprints in the industry (USOP/SSOP Models)
- Low ON resistance (as low as 20mΩ)
- Low OFF state capacitance (as low as .45pF)
- Low LED trigger current models (1mA)
- High speed switching
- 100,000 hours of continuous operation

\*Fast On/Off .1ms/.15ms (typical)

\*\*Full reel is 500

† Low LED trigger 1mA (maximum)

†† Ultrasensitive with driving current 0.2mA

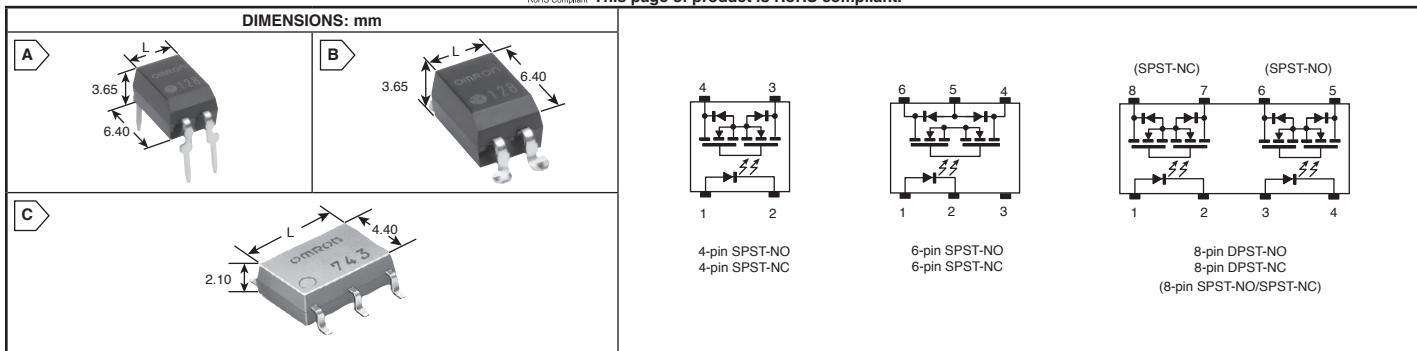
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Dimension L (mm)	Package/ Pin Count	Terminals	Load Current	Voltage Withstand 1 Minute (VAC)	ON Resistance (Typ.)	Output OFF State Capacitance (Typ.)	Leakage Current (Typ.)	Price Each			
											1	25	50	100
<b>20V Load Voltage, SPST-NO Contact Form</b>														
653-G3VM-21AR	G3VM-21AR	A	4.58	DIP4	PCB	3000mA	2500	40mΩ	300pF	1µA (Max.)	11.42	9.49	9.02	8.56
653-G3VM-21DR	G3VM-21DR	B	4.58	DIP4	SMT	3000mA	2500	40mΩ	300pF	1µA (Max.)	11.51	9.56	9.10	8.63
653-G3VM-21BR	G3VM-21BR	A	7.12	DIP6	PCB	4000mA	2500	20mΩ	1000pF	1µA (Max.)	12.09	10.04	9.55	9.07
653-G3VM-21ER	G3VM-21ER	B	7.12	DIP6	SMT	4000mA	2500	20mΩ	1000pF	1µA (Max.)	12.15	10.10	9.61	9.12
653-G3VM-21GR	G3VM-21GR	C	3.90	SOP4	SMT	160mA	1500	5Ω	1pF	0.2nA	3.50	2.91	2.77	2.63
653-G3VM-21GR1	G3VM-21GR1	C	3.90	SOP4	SMT	300mA	1500	1Ω	5pF	0.2nA	4.28	3.55	3.38	3.21
653-G3VM-21HR	G3VM-21HR	C	6.30	SOP6	SMT	2500mA	1500	0.02Ω	1000pF	2nA	12.99	10.79	10.26	9.74
* 653-G3VM-21LR10	G3VM-21LR10	D	1.90	SSOP4	SMT	200mA	1500	3Ω	0.8pF	0.01nA	10.83	9.00	8.56	8.12
** 653-G3VM-21LR1TR05	G3VM-21LR1(TR05)	D	1.70	SSOP4	SMT	450mA	1500	0.8Ω	5pF	0.2nA	10.35	8.60	8.18	7.76
653-G3VM-21LR11	G3VM-21LR11	D	1.90	SSOP4	SMT	900mA	1500	0.18Ω	40pF	0.2nA	10.29	9.94	9.54	9.30
653-G3VM-21PR10	G3VM-21PR10	E	-	USOP4	SMT	200mA	500	3Ω	0.8pF	1nA	11.05	9.18	8.74	8.29
653-G3VM-21PR11	G3VM-21PR11	E	-	USOP4	SMT	900mA	500	0.18Ω	40pF	1nA	15.63	12.99	12.35	11.73
<b>40V Load Voltage, SPST-NO Contact Form</b>														
653-G3VM-41AR	G3VM-41AR	A	4.58	DIP4	PCB	2500mA	2500	50mΩ	300pF	1µA (Max.)	11.75	9.76	9.29	8.82
653-G3VM-41AY	G3VM-41AY	A	4.58	DIP4	PCB	2000mA	5000	60mΩ	130pF	1µA (Max.)	5.37	4.46	4.24	4.03
653-G3VM-41DR	G3VM-41DR	B	4.58	DIP4	SMT	2500mA	2500	50mΩ	300pF	1µA (Max.)	12.61	10.48	9.96	9.46
653-G3VM-41DY	G3VM-41DY	B	4.58	DIP4	SMT	2000mA	5000	60mΩ	130pF	1µA (Max.)	5.41	4.50	4.28	4.06
653-G3VM-41BR	G3VM-41BR	A	7.12	DIP6	PCB	3500mA	2500	30mΩ	1000pF	1µA (Max.)	12.42	10.32	9.82	9.32
653-G3VM-41ER	G3VM-41ER	B	7.12	DIP6	SMT	3500mA	2500	30mΩ	1000pF	1µA (Max.)	12.49	10.38	9.87	9.37
653-G3VM-41GR6	G3VM-41GR6	C	3.90	SOP4	SMT	120mA	1500	10Ω	1pF	0.2nA	3.50	2.91	2.77	2.63
653-G3VM-41GR5	G3VM-41GR5	C	3.90	SOP4	SMT	300mA	1500	1Ω	10pF	0.2nA	3.50	2.91	2.77	2.63
653-G3VM-41GR8	G3VM-41GR8	C	3.90	SOP4	SMT	1000mA	1500	0.1Ω	300pF	0.2nA	6.69	5.56	5.29	5.02
653-G3VM-41HR	G3VM-41HR	C	6.30	SOP6	SMT	2500mA	1500	0.03Ω	70pF	10nA (Max.)	13.25	11.01	10.47	9.94
* 653-G3VM-41LR10	G3VM-41LR10	D	1.90	SSOP4	SMT	120mA	1500	12Ω	0.45pF	0.01nA	8.60	7.64	7.29	7.10
** 653-G3VM-41LR5-TR05	G3VM-41LR5(TR05)	D	1.70	SSOP4	SMT	300mA	1500	1Ω	10pF	0.2nA	10.38	8.63	8.20	7.79
653-G3VM-41PR10	G3VM-41PR10	E	-	USOP4	SMT	120mA	500	12Ω	0.45pF	1nA	8.28	6.88	6.55	6.21
653-G3VM-41PR11	G3VM-41PR11	E	-	USOP4	SMT	140mA	500	7Ω	0.7pF	1nA	11.05	9.18	8.74	8.29
653-G3VM-41PR12	G3VM-41PR12	E	-	USOP4	SMT	100mA	500	12Ω	0.3pF	1nA	8.44	7.01	6.67	6.33
<b>50V Load Voltage, SPST-NO Contact Form</b>														
653-G3VM-51PR	G3VM-51PR	E	-	USOP4	SMT	300mA	500	1Ω	12pF	1nA	15.63	12.99	12.35	11.73
<b>60V Load Voltage, SPST-NO Contact Form</b>														
653-G3VM-61A1	G3VM-61A1	A	4.58	DIP4	PCB	500mA	2500	1Ω	130pF	1nA	2.57	2.14	2.03	1.93
653-G3VM-61AY	G3VM-61AY	A	4.58	DIP4	PCB	500mA	5000	0.6Ω	130pF	1µA (Max.)	5.22	4.34	4.13	3.92
653-G3VM-61AR	G3VM-61AR	A	4.58	DIP4	PCB	2000mA	2500	80mΩ	250pF	1µA (Max.)	12.09	10.04	9.55	9.07
653-G3VM-61DR	G3VM-61DR	B	4.58	DIP4	SMT	2000mA	2500	80mΩ	250pF	1µA (Max.)	12.15	10.10	9.61	9.12
653-G3VM-61B1	G3VM-61B1	A	7.12	DIP6	PCB	500mA	2500	1Ω	130pF	1nA	2.57	2.14	2.03	1.93
653-G3VM-61BR1	G3VM-61BR1	A	7.12	DIP6	PCB	3000mA	2500	40mΩ	1000pF	1µA (Max.)	12.76	10.60	10.08	9.57
653-G3VM-61ER1	G3VM-61ER1	B	7.12	DIP6	SMT	3000mA	2500	40mΩ	1000pF	1µA (Max.)	12.83	10.66	10.14	9.62
653-G3VM-61D1	G3VM-61D1	B	4.58	SMD4	SMT	500mA	2500	1Ω	130pF	1nA	2.57	2.14	2.03	1.93
653-G3VM-61DY	G3VM-61DY	B	4.58	SMD4	SMT	500mA	5000	0.6Ω	130pF	1µA (Max.)	5.22	4.34	4.13	3.92
653-G3VM-61E1	G3VM-61E1	B	7.12	SMD6	SMT	500mA	2500	1Ω	130pF	1nA	2.67	2.22	2.11	2.01
653-G3VM-61ER	G3VM-61ER	B	7.12	SMD6	SMT	2500mA	2500	0.065Ω	400pF	1nA	10.16	8.44	8.03	7.62
653-G3VM-61VY	G3VM-61VY	F	-	Special SOP4	SMT	70mA	3750	25Ω	30pF	1nA	6.16	5.54	4.92	4.43
653-G3VM-61G1	G3VM-61G1	C	3.90	SOP4	SMT	400mA	1500	1Ω	130pF	1nA	2.82	2.34	2.23	2.12
653-G3VM-61G2	G3VM-61G2	C	3.90	SOP4	SMT	400mA	1500	1Ω	130pF	1nA	2.98	2.48	2.36	2.24
† 653-G3VM-61G3	G3VM-61G3	C	3.90	SOP4	SMT	400mA	1500	1Ω	130pF	1nA	3.44	2.86	2.72	2.58
†† 653-G3VM61GR1	G3VM-61GR1	C	3.90	SOP4	SMT	1000mA	1500	0.25Ω	90pF	0.2nA	5.19	4.32	4.11	3.89
653-G3VM-61H1	G3VM-61H1	C	6.30	SOP6	SMT	400mA	1500	1Ω	130pF	1nA	2.57	2.14	2.03	1.93
653-G3VM-61HR	G3VM-61HR	C	6.30	SOP6	SMT	2300mA	1500	0.04Ω	70pF	10nA (Max.)	12.43	10.49	9.94	9.39
653-G3VM-61PR1	G3VM-61PR1	E	-	USOP4	SMT	120mA	500	10Ω	0.7pF	1nA	13.90	11.55	10.98	10.42
<b>80V Load Voltage, SPST-NO Contact Form</b>														
653-G3VM-62C1	G3VM-62C1	A	9.66	DIP8	PCB	500mA	2500	1Ω	130pF	1nA	4.15	3.45	3.28	3.11
653-G3VM-62F1	G3VM-62F1	B	9.66	SMD8	SMT	500mA	2500	1Ω	130pF	1nA	4.15	3.45	3.28	3.11
653-G3VM-62J1	G3VM-62J1	C	9.40	SOP8	SMT	400mA	1500	1Ω	130pF	1nA	5.74	4.77	4.53	4.30
<b>80V Load Voltage, SPST-NO Contact Form</b>														
653-G3VM-81GR	G3VM-81GR	C	3.90	SOP4	SMT	40mA	1500	16Ω	2.5pF	0.5nA	7.38	6.13	5.84	5.54
653-G3VM-81GR1	G3VM-81GR1	C	3.90	SOP4	SMT	200mA	1500	5Ω	6.5pF	0.5nA	7.38	6.13	5.84	5.54
653-G3VM-81G1	G3VM-81G1	C	3.90	SOP4	SMT	350mA	1500	1Ω	30pF	0.2nA	6.09	5.06	4.81	4.57
653-G3VM-81HR	G3VM-81HR	C	6.30	SOP6	SMT	1250mA	1500	0.11Ω	460pF	1.2nA	12.18	10.28	9.74	9.20

# OMRON MOSFET Relays

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## G3VM SERIES: MOSFET RELAYS WITH LOAD VOLTAGE 100-600V

Perfectly suited for Automated Test Equipment, Medical Equipment, Instrumentation, Security Equipment, Automated Meter Reading, Automotive Diagnostic Equipment, and Communications. Available in 1 and 2-Pole configurations in PCB, SMT, DIP, SOP, and SSOP packaging. Other options include current limiting, high dielectric voltage withstand, normally open and normally closed contact forms, high voltage and current load handling, and high-speed switching.

### Features:

- Solid State performance and accuracy
- Low LED trigger current models (1mA)
- Smallest SSOP footprint in the industry (SSOP models)
- High speed switching
- Low ON resistance (as low as 100mΩ)
- 100,000 hours of continuous operation

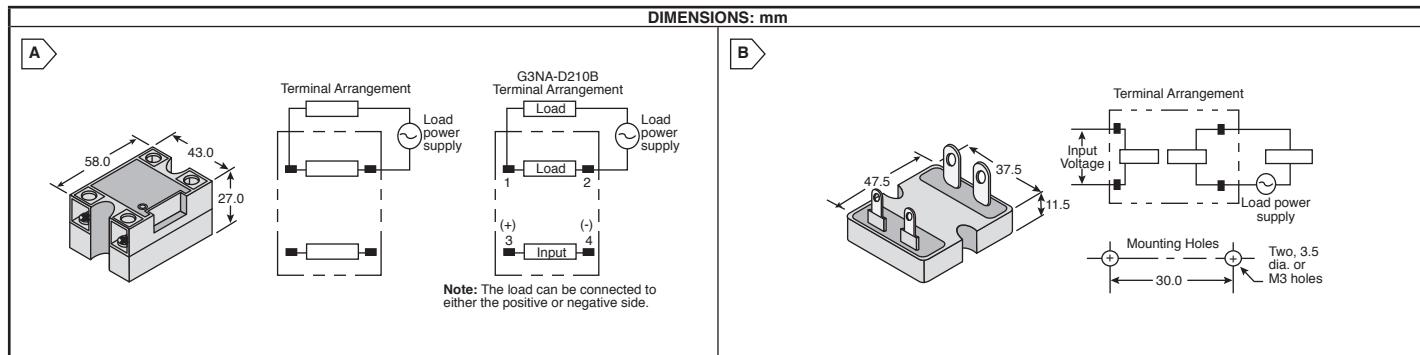
\* Low LED trigger 1mA (maximum)    \*\* Current limiting (range 150-300mA)    † Ultrasensitive with driving current 0.2mA

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Dimension L (mm)	Package/ Pin Count	Terminals	Load Current	Voltage Withstand 1 Minute (VAC)	ON Resistance (typical)	Output OFF State Capacitance (typical)	Leakage Current (typical)	Price Each			
											1	25	50	100
<b>100V Load Voltage, SPST-NO Contact Form</b>														
653-G3VM-101BR	G3VM-101BR	A	7.12	DIP6	PCB	2000mA	2500	100mΩ	1000pF	1µA (Max.)	14.10	11.72	11.14	10.58
653-G3VM-101ER	G3VM-101ER	B	7.12	DIP6	SMT	2000mA	2500	100mΩ	1000pF	1µA (Max.)	14.17	11.77	11.20	10.63
653-G3VM-101HR	G3VM-101HR	C	6.30	SOP6	SMT	1400mA	1500	0.1Ω	70pF	10nA (Max.)	13.25	11.01	10.47	9.94
<b>200V Load Voltage, SPST-NO Contact Form</b>														
653-G3VM-201AY	G3VM-201AY	A	4.58	DIP4	PCB	250mA	5000	5Ω	90pF	1µA (Max.)	5.58	4.64	4.41	4.19
653-G3VM-201DY	G3VM-201DY	B	4.58	SMD4	SMT	250mA	5000	5Ω	90pF	1µA (Max.)	5.51	4.58	4.35	4.13
653-G3VM-201G	G3VM-201G	C	3.90	SOP4	SMT	50mA	1500	40Ω	15pF	0.07nA	4.77	3.96	3.77	3.58
653-G3VM-S5	G3VM-S5	C	3.90	SOP4	SMT	150mA	1500	5Ω	100pF	0.45nA	2.86	2.38	2.26	2.15
* 653-G3VM-201G1	G3VM-201G1	C	3.90	SOP4	SMT	200mA	1500	5Ω	90pF	1nA	3.49	2.90	2.76	2.62
† 653-G3VM-201G2	G3VM-201G2	C	3.90	SOP4	SMT	200mA	1500	5Ω	90pF	1nA	3.92	3.26	3.10	2.94
<b>200V Load Voltage, DPST-NO Contact Form</b>														
653-G3VM-202J1	G3VM-202J1	C	9.40	SOP8	SMT	200mA	1500	5Ω	100pF	3.1nA	4.67	3.88	3.69	3.51
<b>350V Load Voltage, SPST-NO Contact Form</b>														
** 653-G3VM-2L	G3VM-2L	A	4.58	DIP4	PCB	120mA	2500	22Ω	40pF	0.5nA	2.61	2.17	2.06	1.96
653-G3VM-351A	G3VM-351A	A	4.58	DIP4	PCB	120mA	2500	35Ω	30pF	1.5nA	2.23	1.86	1.77	1.68
653-G3VM-351B	G3VM-351B	A	7.12	DIP6	PCB	120mA	2500	35Ω	30pF	1.5nA	2.19	1.82	1.73	1.65
** 653-G3VM-2FL	G3VM-2FL	B	4.58	SMD4	SMT	120mA	2500	22Ω	40pF	0.5nA	2.61	2.17	2.06	1.96
653-G3VM-351D	G3VM-351D	B	4.58	SMD4	SMT	120mA	2500	35Ω	30pF	1.5nA	2.27	1.89	1.80	1.71
653-G3VM-351E	G3VM-351E	B	7.12	SMD6	SMT	120mA	2500	35Ω	30pF	1.5nA	2.23	1.86	1.77	1.68
653-G3VM-351G	G3VM-351G	C	3.90	SOP4	SMT	110mA	1500	35Ω	30pF	1.5nA	2.82	2.34	2.23	2.11
<b>350V Load Voltage, DPST-NO Contact Form</b>														
653-G3VM-352C	G3VM-352C	A	9.66	DIP8	PCB	120mA	2500	35Ω	30pF	1.5nA	3.21	2.67	2.54	2.41
653-G3VM-352F	G3VM-352F	B	9.66	SMD8	SMT	120mA	2500	35Ω	30pF	1.5nA	3.21	2.67	2.54	2.41
653-G3VM-352J	G3VM-352J	C	9.40	SOP8	SMT	110mA	1500	35Ω	30pF	1.5nA	3.28	2.72	2.59	2.46
<b>350V Load Voltage, SPST-NC Contact Form</b>														
653-G3VM-353A	G3VM-353A	A	4.58	DIP4	PCB	150mA	2500	15Ω	85pF	10.5nA	6.22	5.17	4.92	4.67
653-G3VM-353D	G3VM-353D	B	4.58	SMD4	SMT	150mA	2500	15Ω	85pF	10.5nA	6.16	5.12	4.87	4.62
653-G3VM-353G	G3VM-353G	C	3.90	SOP4	SMT	120mA	1500	15Ω	65pF	10.5nA	6.16	5.12	4.87	4.62
653-G3VM-353H	G3VM-353H	C	6.30	SOP6	SMT	120mA	1500	15Ω	65pF	10.5nA	6.22	5.17	4.92	4.67
<b>350V Load Voltage, SPST-NO/SPST-NC Contact Form</b>														
653-G3VM-355CR	G3VM-355CR	A	9.66	DIP8	PCB	120mA	2500	15Ω	65pF	1.5NO, 10.5NC nA	8.44	7.01	6.67	6.33
653-G3VM-355FR	G3VM-355FR	B	9.66	SMD8	SMT	120mA	2500	15Ω	65pF	1.5NO, 10.5NC nA	6.67	5.54	5.27	5.00
<b>400V Load Voltage, SPST-NO Contact Form</b>														
653-G3VM-401AY	G3VM-401AY	A	4.58	DIP4	PCB	120mA	5000	17Ω	80pF	1µA (Max.)	5.73	4.76	4.53	4.30
653-G3VM-401B	G3VM-401B	A	7.12	DIP6	PCB	120mA	2500	17Ω	40pF	0.8nA	2.86	2.37	2.26	2.14
653-G3VM-401Y	G3VM-401Y	A	7.12	DIP6	PCB	120mA	5000	17Ω	40pF	0.4nA	3.44	2.86	2.72	2.58
† 653-G3VM-401G1	G3VM-401G1	C	3.90	SOP4	SMT	100mA	1500	18Ω	70pF	1nA	3.69	3.07	2.92	2.77
653-G3VM-401G	G3VM-401G	C	3.90	SOP4	SMT	120mA	1500	17Ω	70pF	3nA	2.95	2.45	2.33	2.21
<b>400V Load Voltage, DPST-NO Contact Form</b>														
653-G3VM-402F	G3VM-402F	B	9.66	SMD8	SMT	120mA	2500	18Ω	40pF	0.8nA	4.83	4.01	3.82	3.62
653-G3VM-402J	G3VM-402J	C	9.40	SOP8	SMT	120mA	1500	17Ω	70pF	3nA	4.83	4.01	3.82	3.62
<b>600V Load Voltage, SPST-NO Contact Form</b>														
653-G3VM-601BY	G3VM-601BY	A	7.12	DIP6	PCB	100mA	5000	30Ω	120pF	0.5nA	6.22	5.17	4.92	4.67
653-G3VM-601DY	G3VM-601DY	B	4.58	SMD4	SMT	90mA	5000	30Ω	75pF	1µA (Max.)	6.16	5.12	4.87	4.62
653-G3VM-601EY	G3VM-601EY	B	7.12	SMD6	SMT	100mA	5000	30Ω	120pF	0.5nA	6.38	5.30	5.04	4.78
† 653-G3VM-601G1	G3VM-601G1	C	3.90	SOP4	SMT	70mA	1500	35Ω	75pF	1nA	4.93	4.10	3.90	3.70

# OMRON Solid State Relays

OMRON



## G3NA SERIES: SOLID STATE RELAYS

### Specifications:

- Insulation resistance: 100MΩ min. (@ 500VDC)
- Screws: 4 - M4x8 (-205B, -210B, -220B, -D210B)  
2 - M5x12 / 2 - M4x8 (-240B, -440B)

### Features:

- Built-in MOV to absorb external surges
- Operation indicator (amber LED) for monitoring
- Protective cover for greater safety



\* TÜV approved model

\*\* Loss time increases under 75VAC

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Zero Cross Function	**Rated Output Load	Rated Input Voltage	Price Each			
						1	25	50	100
<b>Photo-Triac</b>									
653-G3A-205B-AC1	G3NA-205B-AC100-120	A	Yes	5A @ 24-240VAC	100-120VAC	25.14	24.33	23.15	22.33
653-G3A-D210B-DC5	G3NA-D210B-DC5-24	A	No	10A @ 5-200VDC	5-24VDC	39.49	35.47	33.98	32.63
* 653-G3NA210BUTUDC524	G3NA-210B-UTU DC5-24	A	Yes	10A @ 24-240VAC	5-24VDC	23.92	21.72	19.91	18.38
653-G3NA220BAC100120	G3NA-220B-AC100-120	A	Yes	20A @ 24-240VAC	100-120VAC	34.02	30.92	28.31	26.16
653-G3A-225B-DC5	G3NA-225B-DC5-24	A	Yes	25A @ 24-240VAC	5-24VDC	25.08	23.85	21.71	21.08
653-G3A-240B-AC1	G3NA-240B-AC100-120	A	Yes	40A @ 24-240VAC	100-200VAC	46.53	42.81	40.39	38.06
653-G3A-240B-AC2	G3NA-240B-AC200-240	A	Yes	40A @ 24-240VAC	200-240VAC	47.78	44.69	41.35	39.57
<b>Photo-Coupler</b>									
653-G3A-205B-DC5	G3NA-205B-DC5-24	A	Yes	5A @ 24-240VAC	5-24VDC	24.67	22.41	20.55	18.98
653-G3A-210B-DC5	G3NA-210B-DC5-24	A	Yes	10A @ 24-240VAC	5-24VDC	16.06	15.40	14.59	14.04
653-G3A-210B-AC1	G3NA-210B-AC100-120	A	Yes	10A @ 24-240VAC	100-200VAC	37.75	32.81	29.40	27.64
653-G3A-210B-AC2	G3NA-210B-AC200-240	A	Yes	10A @ 24-240VAC	200-240VAC	22.65	20.95	19.74	18.59
653-G3NA-220B-DC524	G3NA-220B-DC5-24	A	Yes	20A @ 24-240VAC	5-24VDC	27.32	26.15	23.18	20.96
653-G3A-240B-DC5	G3NA-240B-DC5-24	A	Yes	40A @ 24-240VAC	5-24VDC	50.37	45.00	42.43	41.45
653-G3A-225B-AC1	G3NA-225B-AC100-120	A	Yes	25A @ 24-240VAC	100-200VAC	32.71	30.02	28.35	26.15
653-G3A-225B-AC2	G3NA-225B-AC200-240	A	Yes	25A @ 24-240VAC	200-240VAC	36.54	33.21	30.45	28.09
<b>Heat Sinks</b>									
653-Y92B-A100	Y92B-A100					13.22	11.83	11.33	11.08
653-Y92B-A150N	Y92B-A150N					19.17	18.74	17.43	16.44
653-Y92B-N50	Y92B-N50					15.88	14.70	13.72	12.74
<b>Mounting Track and Accessories</b>									
653-PFP-50N	PFP-50N			DIN rail track, 50cm (1.64ft.)		4.93	4.34	3.87	3.50
653-PFP-100N	PFP-100N			DIN rail track, 1m (3.28ft.)		6.46	6.07	5.73	5.43
653-PFP-S	PFP-S			Spacer		.43	.358	.317	.286
653-PFP-M	PFP-M			End cap		.68	.542	.531	.521
653-R9912FORG3NA	R99-12 FOR G3NA			One-touch mounting plates		20.43	19.46	17.53	17.41

## G3NE SERIES: COMPACT SOLID STATE RELAYS

### Specifications:

- Isolation method: Phototriac
- Terminals: QC #110 and QC #250 output connections
- Insulation resistance: 100MΩ min. (@ 500VDC)

### Features:

- Built-in varistor to absorb external surges
- Dedicated, compact aluminum PCB and power elements used
- Wide load voltage range: 75-264VAC



\* Heat sinks are thin and can be DIN track mounted.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Zero Cross Function	Rated Output Load (100-240VAC)	Rated Input Voltage (VDC)	Price Each			
						1	25	50	100
653-G3NE-205T-US-DC5	G3NE-205T-US-DC5	B	Yes	5A	5	21.07	19.15	17.55	16.21
653-G3NE-205T-USDC12	G3NE-205T-US DC12	B	Yes	5A	12	21.06	19.15	17.55	16.20
653-G3E-210T-US5	G3NE-210T-US-DC5	B	Yes	10A	5	19.51	17.73	16.26	15.00
653-G3E-210T-US12	G3NE-210T-US-DC12	B	Yes	10A	12	24.29	22.09	20.25	18.69
653-G3E-210T-US24	G3NE-210T-US-DC24	B	Yes	10A	24	21.15	19.77	18.13	16.73
653-G3E-220T-US5	G3NE-220T-US-DC5	B	Yes	20A	5	21.69	20.03	18.47	17.05
653-G3E-220T-US12	G3NE-220T-US-DC12	B	Yes	20A	12	23.41	21.28	19.51	18.01
653-G3E-220T-US24	G3NE-220T-US-DC24	B	Yes	20A	24	22.15	20.12	18.45	17.04
653-G3NE-220TL-USDC5	G3NE-220TL-US DC5	B	No	20A	5	18.61	17.48	17.05	16.17
653-G3NE-220TLUSDC24	G3NE-220TL-US-DC24	B	No	20A	24	24.45	22.23	20.37	18.82
<b>Heat Sinks</b>									
* 653-Y92B-N50	Y92B-N50			Description					
* 653-Y92B-N100	Y92B-N100			For 5A and 10A relays		15.88	14.70	13.72	12.74
				For 20A relays		22.26	20.72	19.37	18.20

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# PANASONIC Solid State Relays

Panasonic

 This page of product is RoHS compliant.

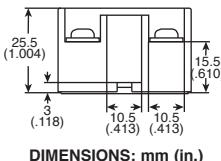
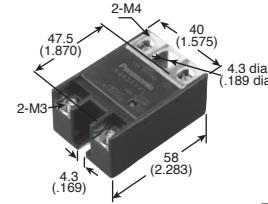
## AQ-A SERIES - DC CONTROL SOLID STATE RELAYS

### Features:

- Mounting pitch 47.5mm 1.870 inch Internal diode protects element on output side
- With LED indication for operation status verification
- Compact Size W 40 x L 58 x H 25.5mm
- With terminal cover for safety (output side only).
- Circuit: SPST-NO (1 Form A)
- Mounting Type: Chassis Mount or Panel Mount
- On-State Resistance: 20mΩ
- Package/Case: Hockey Puck
- Packaging: Bulk
- Termination Style: Screw Terminal

\* Operate Time : Max. 5ms / Release Time: Max. 1ms

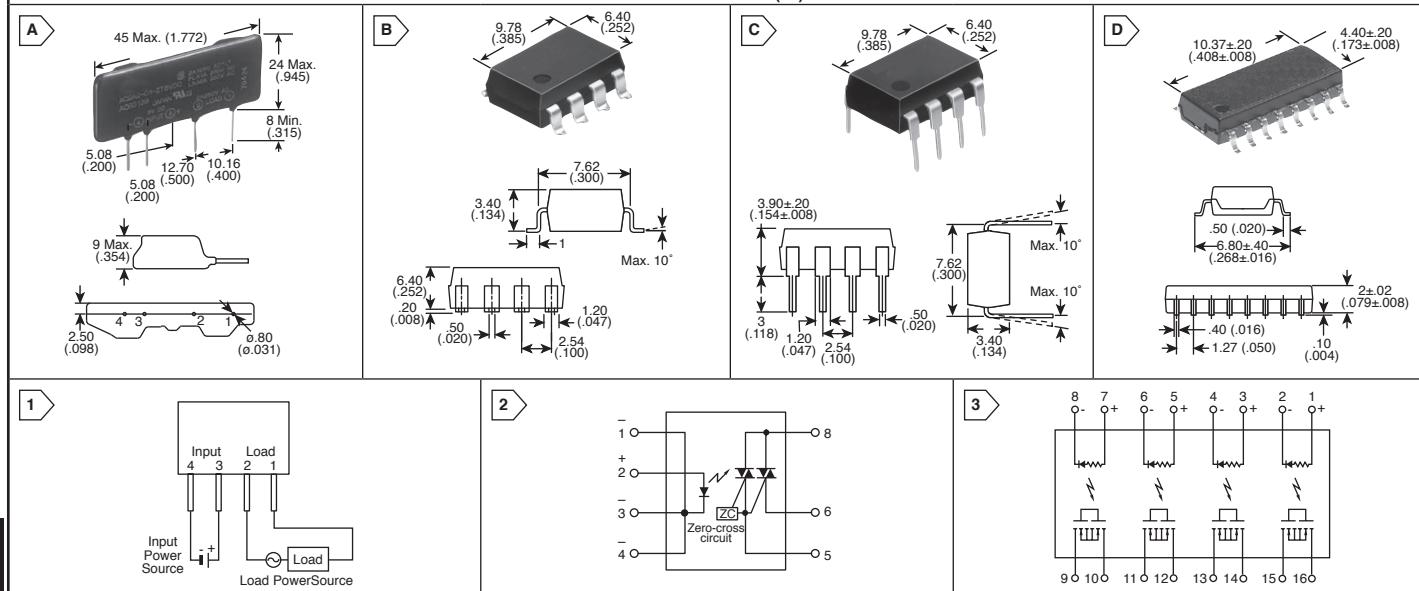
MOUSER STOCK NO.	Panasonic Part No.	Output Current (A)	Input Voltage Range (VDC)	Load Voltage (VDC)	Mounting Style	Price Each			
						1	10	100	500
769-AQAD551DL	AQAD551DL	30	4-32	100	DIN Rail	107.48	103.10	74.58	63.62
* 769-AQAD171DL	AQAD171DL	10	4-32	600	Din Rail	101.36	97.22	70.33	59.99



DIMENSIONS: mm (in.)

For quantities greater than listed, call for quote.

DIMENSIONS: mm (in.)



## AQ8 SERIES SIL TYPE - SOLID STATE RELAYS

### Features:

- Slim
- Excellent in noise resistance
- Snubber circuit integrated
- High dielectric strength
- Two kinds of terminals distance are available
- High reliability
- Long life
- Maintenance free

### Specifications:

- Circuit: SPST-NO (1 Form A)
- Load Current: 2A
- Mounting Type: Through Hole
- Package / Case: 4-SIP
- Packaging: Bulk
- Relay Type: Relay
- Supplier Device Package: 4-SIL
- Termination Style: PC Pin

### Typical Application:

- Printing machines
- Packing machines
- Computer peripherals
- NC machines
- Automatic ticket punches

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Max. Load Current (A)	Voltage (VDC)	Load Voltage (VAC)	Price Each			
						1	10	100	500
769-AQ2A2-C1-T24VDC	AQ2A2-C1-T24VDC	A1	Random turn ON, zero-cross turn OFF	24	75-250	12.27	11.78	8.52	7.52
769-AQ2A2-C1-T5VDC	AQ2A2-C1-T5VDC	A1	Random turn ON, zero-cross turn OFF	5	75-250	12.27	11.78	8.52	7.52
769-AQ2A2-C1-T12VDC	AQ2A2-C1-T12VDC	A1	Random turn ON, zero-cross turn OFF	12	750-250	12.27	11.78	8.52	7.52
769-AQ2A2-C1-ZT24VDC	AQ2A2-C1-ZT24VDC	A1	Zero-cross (Turn ON and Turn OFF)	24	750-250	15.58	14.95	10.82	9.54
769-AQ2A2-C1-ZT5VDC	AQ2A2-C1-ZT5VDC	A1	Zero-cross (Turn ON and Turn OFF)	5	750-250	15.58	14.95	10.82	9.54

## AQ-H SERIES - COMPACT, DIP TYPE, AC LOAD SOLID STATE RELAYS

### Features:

- Handles both 100 and 200VAC loads
- High dielectric strength: 5,000VAC (between input and output)

- Supports 0.3A, 0.6A, 0.9A and 1.2A ON-state RMS currents
- The 1.2 A type saves space with a DIP 8-pin package

### Typical Application:

- Home appliances
- Industrial equipment market

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	RMS Current (A)	Type	Terminal Type	Price Each			
						1	10	100	500
769-AQH1213	AQH1213	B2	0.6	Zero-Cross	Thru-Hole	1.94	1.58	1.35	1.19
769-AQH2213	AQH2213	B2	0.9	Zero-Cross	Thru-Hole	2.03	1.66	1.42	1.25
769-AQH2223	AQH2223	B2	0.9	Random	Thru-Hole	2.13	1.74	1.48	1.31
769-AQH1223	AQH1223	B2	0.6	Random	Thru-Hole	1.98	1.62	1.38	1.22
769-AQH2213A	AQH2213A	C2	0.9	Zero-Cross	SMD	2.03	1.66	1.42	1.25
769-AQH1213A	AQH1213A	C2	0.6	Zero-Cross	SMD	1.94	1.58	1.35	1.19
769-AQH1223A	AQH1223A	C2	0.6	Random	SMD	1.98	1.62	1.38	1.22
769-AQH2223A	AQH2223A	C2	0.6	Random	SMD	2.13	1.74	1.48	1.31

## AQS SERIES - PHOTOMOS SURFACE MOUNT, GULL WING SOLID STATE RELAYS

### Features:

- Built-in input resistor means less man-hours mounting
- Saves space on Board

- Wide variety small package
- Terminal type: SMD

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Load Voltage	Load Current	Power Disposition	Price Each			
						1	10	100	500
769-AQS221FR2S	AQS221FR2S	D3	40	.16A	260mW	38.75	31.64	26.89	23.72
769-AQS221FN2S	AQS221FN2S	D3	40	.06A	260mW	35.79	29.22	24.83	21.91
769-AQS225R2S	AQS225R2S	D3	80	.70mA	75mW	30.03	24.52	20.84	18.38

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# PANASONIC PhotoMos Relays

RoHS Compliant

Panasonic PhotoMOS™ relays offer high reliability with stable performance. Fast switching speed, low capacitance and small package size ensure that PhotoMOS relays meet the requirements of high performance switching applications, such as ATE, Instrumentation and Medical equipment.

# Panasonic

## AQV22 SERIES

- High frequency characteristics with low capacitance between output terminals
- High sensitivity, high speed response
- Low-level off state leakage current

- Controls low-level analog signals
- Low-level thermal electromotive force (Approx. 1µV)
- Small LED voltage drop on input side (Max. 1.5V)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
<b>Through-Hole Type</b>									
769-AQV221	AQV221	DIP-6	80	40	1 Form A	5.71	4.66	3.97	3.50
<b>SMD Type</b>									
769-AQV221A	AQV221A	SMD-6	80	40	1 Form A	5.71	4.66	3.97	3.50
769-AQV225A	AQV225A	SMD-6	120	80	1 Form A	5.71	4.66	3.97	3.50

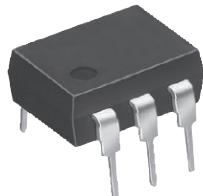
## AQV25 SERIES

- High sensitivity, low ON resistance
- Optical coupling for extremely high isolation

- Low-level thermal electromotive force (Approx. 1µV)
- Low-level off state leakage current

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
<b>Through-Hole Type</b>									
769-AQV251	AQV251	DIP-6	500	40	1 Form A	6.44	5.92	4.48	3.95
769-AQV252	AQV252	DIP-6	400	60	1 Form A	6.44	5.92	4.48	3.95
769-AQV253	AQV253	DIP-6	200	250	1 Form A	6.44	5.92	4.48	3.95
769-AQV254	AQV254	DIP-6	150	400	1 Form A	6.44	5.92	4.48	3.95
769-AQV257	AQV257	DIP-6	250	200	1 Form A	6.44	5.92	4.48	3.95
769-AQV258	AQV258	DIP-6	20	1500	1 Form A	7.25	6.66	5.04	4.44
769-AQV259	AQV259	DIP-6	30	1000	1 Form A	7.55	6.93	5.24	4.62
769-AQV253H	AQV253H	DIP-6	200	250	1 Form A	6.84	6.28	4.75	4.19
769-AQV254H	AQV254H	DIP-6	150	400	1 Form A	6.84	6.28	4.75	4.19
<b>SMD Type</b>									
769-AQV251A	AQV251A	SMD-6	500	40	1 Form A	6.44	5.92	4.48	3.95
769-AQV252A	AQV252A	SMD-6	400	60	1 Form A	6.44	5.92	4.48	3.95
769-AQV257A	AQV257A	SMD-6	250	200	1 Form A	6.44	5.92	4.48	3.95
769-AQV254A	AQV254A	SMD-6	150	400	1 Form A	6.44	5.92	4.48	3.95
769-AQV258A	AQV258A	SMD-6	20	1500	1 Form A	7.25	6.66	5.04	4.44
769-AQV259A	AQV259A	SMD-6	30	1000	1 Form A	7.55	6.93	5.24	4.62



DIP-6

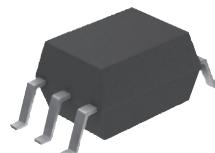
## AQV252G SERIES

- Greatly improved specs allow you to use this in place of mercury and mechanical relays.
- Greatly increased load current in the same package size



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
<b>Through-Hole Type</b>									
769-AQV252G	AQV252G	DIP-6	2500	60	1 Form A	6.44	5.92	4.48	3.95
<b>SMD/SMT Type</b>									
769-AQV252GA	AQV252GA	SMD-6	2500	60	1 Form A	6.44	5.92	4.48	3.95
769-AQV252G2S	AQV252G2S	SOP-6	3	50	1 Form A (SPST-NO)	11.49	9.38	7.82	6.90



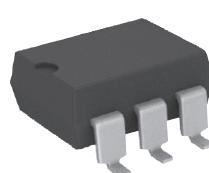
SOP-6

## AQV414 SERIES

- Controls low-level analog signals
- High sensitivity, low ON resistance

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
<b>Through-Hole Type</b>									
769-AQV414	AQV414	DIP-6	120	400	1 Form B	5.66	4.62	3.93	3.47
<b>SMD Type</b>									
769-AQV414A	AQV414A	SMD-6	120	400	1 Form B	5.65	4.62	3.92	3.46



SMT-6

## AQV414 E AND EH SERIES

- High sensitivity, low ON resistance
- Reinforced insulation 5,000 V type

- Low-level off-state leakage current

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
<b>Through-Hole Type</b>									
769-AQV414E	AQV414E	DIP-6	120	400	1 Form B	5.07	4.14	3.52	3.11
769-AQV414EH	AQV414EH	DIP-6	120	400	1 Form B	5.54	4.53	3.77	3.33
<b>SMD Type</b>									
769-AQV414EHA	AQV414EHA	SMD-6	120	400	1 Form B	5.44	4.44	3.78	3.33

## AQV234 SERIES

- High sensitivity type
- Low-level off state leakage current
- Stable ON resistance

- Low-level thermal electromotive force (Approx. 1µV)
- Extremely low closed-circuit offset voltages to enable control of small analog signals without distortion

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
<b>Through-Hole Type</b>									
769-AQV234	AQV234	DIP-6	120	400	1 Form A	6.59	6.06	4.58	4.04
<b>SMD Type</b>									
769-AQV234A	AQV234A	SMD-6	120	400	1 Form A	6.59	6.06	4.58	4.04

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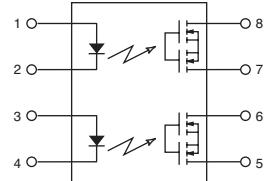
Panasonic PhotoMOS™ relays offer high reliability with stable performance. Fast switching speed, low capacitance and small package size ensure that PhotoMOS relays meet the requirements of high performance switching applications, such as ATE, Instrumentation and Medical equipment.

## AQW21 SERIES

- Controls low-level analog signals
- Low-level off state leakage current
- High sensitivity, high speed response
- Low-level thermal electromotive force (Approx. 1 $\mu$ V)
- Stable ON resistance

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
<b>Through-Hole Type</b>									
769-AQW212	AQW212	DIP-8	500	60	2 Form A	8.50	7.81	5.90	5.21
769-AQW214	AQW214	DIP-8	100	400	2 Form A	8.50	7.81	5.90	5.21
769-AQW215	AQW215	DIP-8	300	100	2 Form A	8.50	7.81	5.90	5.21
769-AQW216	AQW216	DIP-8	40	600	2 Form A	8.50	7.81	5.90	5.21
<b>SMD Type</b>									
769-AQW212A	AQW212A	SMD-8	500	60	2 Form A	8.50	7.81	5.90	5.21
769-AQW214A	AQW214A	SMD-8	100	400	2 Form A	8.50	8.16	5.90	5.21
769-AQW216A	AQW216A	SMD-8	40	600	2 Form A	8.50	8.16	5.90	5.21
769-AQW217A	AQW217A	SMD-8	160	200	2 Form A	8.50	7.81	5.90	5.21

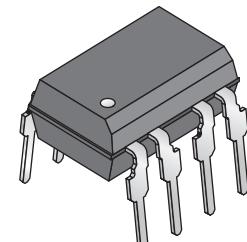


## AQW21 EH SERIES

- Reinforced insulation 5,000V type
- Compact 8-pin DIP size
- Low-level off state leakage current
- High sensitivity, high speed response
- Controls low-level analog signals

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
<b>Through-Hole Type</b>									
769-AQW210EH	AQW210EH	DIP-8	120	350	2 Form A	6.64	6.37	4.61	4.07
769-AQW214EH	AQW214EH	DIP-8	100	400	2 Form A	6.71	6.17	4.66	4.11
<b>SMD Type</b>									
769-AQW210EHA	AQW210EHA	SMD-8	120	350	2 Form A	6.64	6.10	4.61	4.07
769-AQW216EHA	AQW216EHA	SMD-8	40	600	2 Form A	6.44	5.92	4.48	3.95



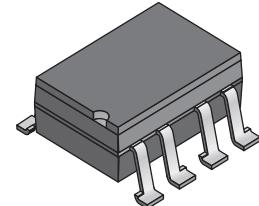
DIP-8

## AQW21 S SERIES

- 2 channels in super miniature design
- Low-level off state leakage current
- Controls low-level analog signals

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQW214S	AQW214S	SOP-8	80	400	2 Form A	9.09	8.35	6.31	5.57
769-AQW210S	AQW210S	SOP-8	120	350	2 Form A	9.09	8.35	6.31	5.57



SMD-8

## AQW414 SERIES - SMD TYPE

- Low-level thermal electromotive force (Approx. 1 $\mu$ V)
- Controls load currents up to 0.13A with an input current of 5mA
- Extremely low closed-circuit offset voltages to enable control of small
- High speed switching: operate time typical of 300 $\mu$ s
- Controls low-level analog signals

For quantities greater than listed, call for quote.

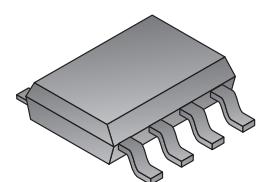
MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQW414A	AQW414A	SMD-8	100	400	2 Form B	10.63	10.20	7.38	6.51

## AQW414 EH SERIES

- Reinforced insulation 5,000V type
- Low-level off state leakage current
- Controls low-level analog signals

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQW414EH	AQW414EH	DIP-8	100	400	2 Form B	8.32	7.98	5.78	5.10
769-AQW414EHA	AQW414EHA	SMD-8	100	400	2 Form B	8.33	7.99	5.78	5.10



SOP-8

## AQW614 SERIES

- Low-level thermal electromotive force (Approx. 1 $\mu$ V)
- High speed switching: operate time of 300 $\mu$ s typical
- Stable ON resistance

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQW614	AQW614	DIP-8	100	400	1 Form A/1 Form B	10.63	9.77	7.38	6.51
769-AQW614A	AQW614A	SMD-8	100	400	1 Form A/1 Form B	10.63	10.20	7.38	6.51

## AQW654 SERIES

- Controls low-level analog signals
- Low-level off state leakage current
- Low-level thermal electromotive force (Approx. 1 $\mu$ V)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQW654A	AQW654A	SMD-8	120	400	1 Form A/1 Form B	13.08	12.55	9.08	8.01

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# PANASONIC PhotoMos Relays

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Panasonic PhotoMOS™ relays offer high reliability with stable performance. Fast switching speed, low capacitance and small package size ensure that PhotoMOS relays meet the requirements of high performance switching applications, such as ATE, Instrumentation and Medical equipment.

## AQW614 EH SERIES

- 60V type couples high capacity (0.5A) with low ON resistance ( $1\Omega$ )
- Reinforced insulation 5,000V type
- Low-level off-state leakage current
- Controls low-level analog signals
- High sensitivity, high speed response

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
<b>Through-Hole Type</b>									
769-AQW610EH	AQW610EH	DIP-8	120	350	1 Form A/1 Form B	7.50	7.20	5.21	4.59
769-AQW612EH	AQW612EH	DIP-8	500	60	1 Form A/1 Form B	9.21	8.46	6.40	5.64
769-AQW614EH	AQW614EH	DIP-8	100	400	1 Form A/1 Form B	6.88	6.61	4.78	4.22
<b>SMD Type</b>									
769-AQW614EHA	AQW614EHA	SMD-8	100	400	1 Form A/1 Form B	6.88	6.33	4.78	4.22
769-AQW610EHA	AQW610EHA	SMD-8	120	350	1 Form A/1 Form B	7.50	7.20	5.21	4.59

## AQW61 S SERIES

- 2 channels in super miniature design
- Controls low-level analog signals
- Low-level off-state leakage current
- 60V type couples high capacity (0.45A) with low ON resistance ( $1\Omega$ )

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
<b>769-AQW610S</b>									
	AQW610S	SMD-8	100	350	1 Form A/1 Form B	11.34	10.42	7.88	6.95

## AQV10 AND AQV20 SERIES

- Controls low-level analog signals
- Controlled with low-level input signals
- Low-level off state leakage current
- Optical coupling for extremely high isolation
- Stable ON resistance
- Low-level thermal electromotive force (Approx.  $1\mu V$ )

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
<b>Through-Hole Type</b>									
769-AQV101	AQV101	DIP-6	700	40	1 Form A	7.42	6.82	5.16	4.55
769-AQV102	AQV102	DIP-6	600	60	1 Form A	7.42	6.82	5.16	4.55
769-AQV201	AQV201	DIP-6	500	40	1 Form A	8.35	7.68	5.80	5.12
769-AQV202	AQV202	DIP-6	400	250	1 Form A	8.35	7.68	5.80	5.12
<b>SMD Type</b>									
769-AQV102A	AQV102A	SMD-6	600	60	1 Form A	7.42	6.82	5.16	4.55
769-AQV201A	AQV201A	SMD-6	500	40	1 Form A	8.35	7.68	5.80	5.12
769-AQV202A	AQV202A	SMD-6	40	60	1 Form A	8.35	7.68	5.80	5.12

## AQV21 AND AQV214H SERIES

- Controls low-level analog signals
- Controlled with low-level input signals
- Optical coupling for extremely high isolation
- Stable ON resistance
- Low-level thermal electromotive force (Approx.  $1\mu V$ )

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
<b>Through-Hole Type</b>									
769-AQV212	AQV212	DIP-6	400	60	1 Form A	5.07	4.14	3.52	3.11
769-AQV214	AQV214	DIP-6	120	400	1 Form A	5.07	4.14	3.52	3.11
769-AQV216	AQV216	DIP-6	40	600	1 Form A	5.29	4.32	3.68	3.24
769-AQV214H	AQV214H	DIP-6	120	400	1 Form A	5.44	4.44	3.78	3.33
<b>SMD Type</b>									
769-AQV212A	AQV212A	SMD-6	400	60	1 Form A	5.07	4.14	3.52	3.11
769-AQV214A	AQV214A	SMD-6	120	400	1 Form A	5.07	4.14	3.52	3.11
769-AQW210A	AQW210A	SMD-6	120	350	2 Form A	8.50	7.81	5.90	5.21

## AQV21 E AND EH SERIES

- Controls low-level analog signals
- Controlled with low-level input signals
- Optical coupling for extremely high isolation
- Stable ON resistance
- Low-level off state leakage current
- Low-level thermal electromotive force (Approx.  $1\mu V$ )

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
<b>Through-Hole Type</b>									
769-AQV210E	AQV210E	DIP-6	130	350	1 Form A	3.60	2.94	2.50	2.21
769-AQV214E	AQV214E	DIP-6	120	400	1 Form A	3.60	2.94	2.50	2.21
769-AQV210EH	AQV210EH	DIP-6	130	350	1 Form A	3.90	3.18	2.71	2.39
769-AQV214EH	AQV214EH	DIP-6	120	400	1 Form A	3.90	3.18	2.71	2.39
<b>SMD Type</b>									
769-AQV210EA	AQV210EA	SMD-6	130	350	1 Form A	3.65	2.98	2.54	2.24
769-AQV214EA	AQV214EA	SMD-6	120	400	1 Form A	3.65	2.98	2.54	2.24
769-AQV210EHA	AQV210EHA	SMD-6	130	350	1 Form A	3.99	3.26	2.78	2.45
769-AQV214EHA	AQV214EHA	SMD-6	120	400	1 Form A	3.99	3.26	2.78	2.45

## AQV21 S AND AQV22 NS SERIES

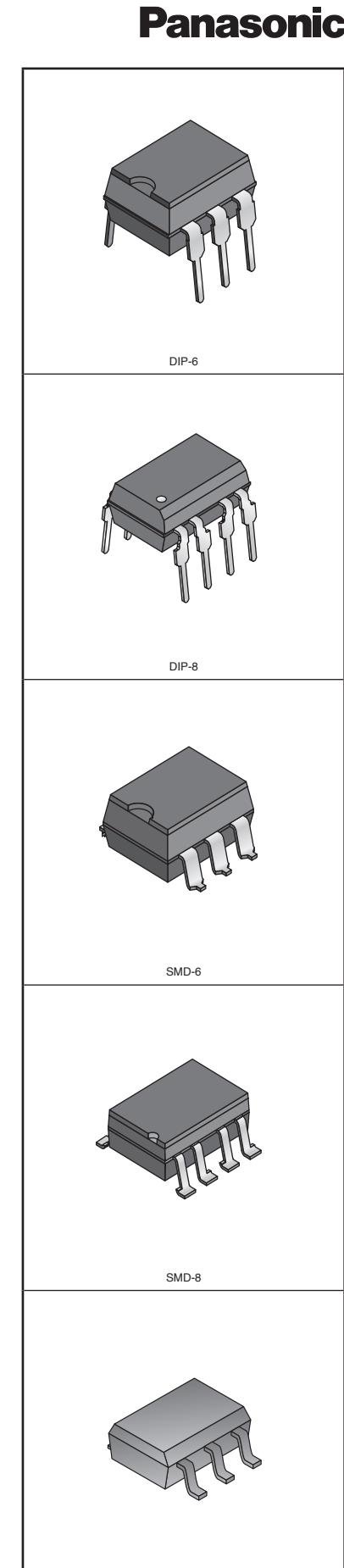
- 1 channel (Form A) in super miniature design
- Controls low-level analog signals
- Low-level off state leakage current

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
<b>AQV21 S Series</b>									
769-AQV210S	AQV210S	SOP-6	120	350	1 Form A	5.37	4.38	3.73	3.29
769-AQV212S	AQV212S	SOP-6	350	60	1 Form A	5.37	4.38	3.73	3.29
769-AQV214S	AQV214S	SOP-6	100	400	1 Form A	5.37	4.38	3.73	3.29
769-AQV215S	AQV215S	SOP-6	900	100	1 Form A	5.37	4.38	3.73	3.29
769-AQV216S	AQV216S	SOP-6	40	600	1 Form A	5.37	4.38	3.73	3.29
<b>AQV22 NS Series</b>									
769-AQV227NS	AQV227NS	SOP-6	50	200	1 Form B	6.22	5.65	4.32	3.81

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# PANASONIC PhotoMos Relays

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Panasonic PhotoMOS™ relays offer high reliability with stable performance. Fast switching speed, low capacitance and small package size ensure that PhotoMOS relays meet the requirements of high performance switching applications, such as ATE, Instrumentation and Medical equipment.

## AQY221R6 SERIES

- Low on-resistance (R type)
- On resistance (Typical) : 0.18Ω
- Output Capacitance (Typical) : 37.5pF

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQY221R6V	AQY221R6V	SSOP-4	1	30	1 Form A (SPST-NO)	10.12	8.26	7.02	6.19
769-AQY221R6T	AQY221R6T	VSSOP	800	30	1 Form A (SPST-NO)	14.69	12.00	10.19	9.00

## AQY2 GS SERIES

- Continuous load current: Max. 1.6A high capacity (AQY21G2S)
- Broad lineup of high capacity types
- Low on resistance: typical 0.1Ω (AQY21G2S)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Tape/Reel Packaging Style	Price Each			
							1	10	100	500
769-AQY211G2S	AQY211G2S	SOP-4	1.6 A	40	1 Form A	Tube	9.19	7.51	6.25	5.52
769-AQY211G2SX	AQY211G2SX	SOP-4	1.6 A	40	1 Form A	1/2 pin side - Tape/Reel	9.02	8.65	6.26	5.52
769-AQY211G2SZ	AQY211G2SZ	SOP-4	1.6 A	40	1 Form A	3/4 pin side - Tape/Reel	9.19	7.51	6.38	5.63

## AQY221N1S SERIES

- Low output capacitance between output terminals and low ON resistance
- High speed switching
- Low-level off state leakage current
- Controls low-level analog signals
- Low thermal electromotive force (Approx. 1µV)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQY221N2X	AQY221N2X	SOP-4	120	40	1 Form A	7.34	6.00	5.10	4.50

## AQY221 2S SERIES

- R type (AQY221R2S) offers greatly reduced ON resistance
- C type (AQY221N2S) offers lower output capacitance
- Low-level off state leakage current of 10pA
- High speed switching

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQY221N2S	AQY221N2S	SOP-4	120	40	1 Form A	7.55	6.93	5.24	4.62
769-AQY221R2S	AQY221R2S	SOP-4	250	40	1 Form A	7.35	6.75	5.10	4.50

## AQY221R2T SERIES

- Tape and Reel packing style: AQY221R2TY-Picked from the 1 and 4-pin side
- VSSOP type with further reduction in mounting area
- Low on resistance (R type) available
- High speed switching

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQY221R2TY	AQY221R2TY	VSSOP	250	40	1 Form A	13.52	11.04	9.38	8.28
769-AQY221R2TW	AQY221R2TW	VSSOP	250	40	1 Form A	13.79	11.26	9.57	8.45

## AQY212GH SERIES

- Greatly increased load current
- Reinforced insulation 5,000V type
- Greatly improved specs allow you to use this in place of mercury and mechanical relays

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQY212GH	AQY212GH	DIP-4	1.1A	60	1 Form A	5.78	4.72	4.02	3.54

## AQY212GS SERIES

- Greatly increased load current in the same, miniature, 4-pin SO package
- Greatly improved specs allow you to use this in place of mercury and mechanical relays

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQY212GS	AQY212GS	SOP-4	1000	60	1 Form A	6.25	5.74	4.34	3.83

## AQV45 SERIES

- Controls low-level analog signals
- Reinforced insulation 5,000V type
- High sensitivity, low ON resistance
- Low-level thermal electromotive force (Approx. 1µV)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQV453A	AQV453A	DIP-6	200	250	1 Form B	7.91	7.27	5.50	4.85

## AQY21 KS SERIES

- Short circuit protection (Latch type)
- Controls low-level analog signals
- SO package 4-Pin type in super miniature design
- Low-level off state leakage current

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQY210KS	AQY210KS	SOP-4	120	350	1 Form A	6.96	6.39	4.83	4.26

## AQY21 EH SERIES

- Reinforced insulation 5,000V type
- High sensitivity, low ON resistance
- Controls low-level analog signals
- Low-level off state leakage current

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQY210EH	AQY210EH	DIP-4	130	350	1 Form A	3.80	3.10	2.64	2.33

## SMD Type

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each
769-AQY214EHA	AQY214EHA	SMD-4	120	400	1 Form A	3.33

## AQY21 S SERIES

- Controls low-level analog signals
- Low-level off state leakage current

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQY210S	AQY210S	SOP-4	120	350	1 Form A	5.61	4.58	3.90	3.44

## AQY212S SERIES

- Reinforced insulation 5,000V type
- Controls low-level analog signals
- Low on resistance (Max. 50Ω) at 400V for normally-closed type

For quantities greater than listed, call for quote.

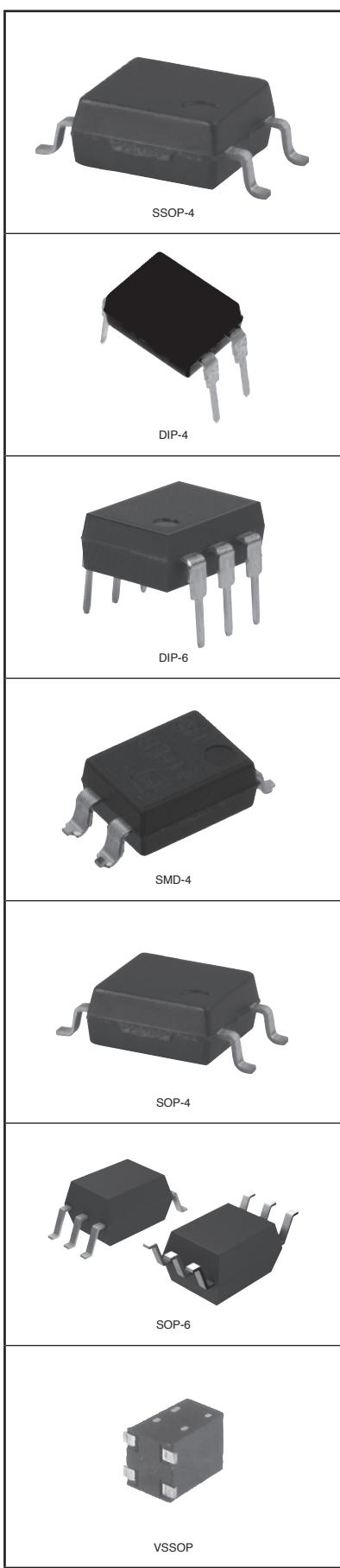
MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each
769-AQY212S	AQY212S	SOP-4	120	400	1 Form A	5.86

## AQY214S SERIES

- 1 channel (Form B) in super miniature design
- Low-level off state leakage current
- Low on resistance (Max. 50Ω) at 400V for normally-closed type

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each
769-AQY414S	AQY414S	SOP-6	100	400	1 Form B	6.03



# PANASONIC PhotoMos Relays

Panasonic

RoHS Compliant This page of product is RoHS compliant.

Panasonic PhotoMOS™ relays offer high reliability with stable performance. Fast switching speed, low capacitance and small package size ensure that PhotoMOS relays meet the requirements of high performance switching applications, such as ATE, Instrumentation and Medical equipment.

## AQZ192/197 SERIES

- High capacity type power PhotoMOS.
- Thru Hole Type
- Low on-resistance and high sensitivity
- Termination Style: PC Pin
- Voltage - Input: 1.16VDC ~ 1.4VDC
- On-State Resistance: 15mΩ ~ 4Ω

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	5	10	25
769-AQZ192	AQZ192	SIL-4	10	60	1 Form A (SPST-NO)	42.97	42.10	41.22	38.15
769-AQZ197	AQZ197	SIL-4	5	200	1 Form A (SPST-NO)	40.42	36.31	33.01	30.74

## AQY221N3V SERIES

- Reduced package size
- High speed switching
- Lower output capacitance and on-resistance

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQY221N3V	AQY221N3V	SSOP-4	150	25	1 Form A	7.64	7.34	5.31	4.68

## AQY27 SERIES

- High capacity
- High sensitivity
- Flat-Packaged Type(W) 8.8 x (D) 9.3 x (H) 3.9mm (W)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
<b>Through-Hole Type</b>									
769-AQY272	AQY272	DIP-4	2000	60	1 Form A	14.77	14.18	10.26	9.05
769-AQY274	AQY274	DIP-4	350	400	1 Form A	14.77	14.18	10.26	9.05
<b>SMD Type</b>									
769-AQY272A	AQY272A	SMD-4	2000	60	1 Form A	14.77	14.18	10.26	9.05
769-AQY275A	AQY275A	SMD-4	1300	100	1 Form A	14.77	14.18	10.26	9.05
769-AQY277A	AQY277A	SMD-4	650	200	1 Form A	14.77	14.18	10.26	9.05

## AQY41 S SERIES

- Controls low-level analog signals
- Low-level off-state leakage current
- 60V type couples high capacity (0.5A) with low ON resistance ( $1\Omega$ )

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQY410S	AQY410S	SOP-4	120	350	1 Form B	6.20	5.70	4.31	3.80
769-AQY414S	AQY414S	SOP-4	100	400	1 Form B	6.20	5.70	4.31	3.80

## AQY221 2V SERIES

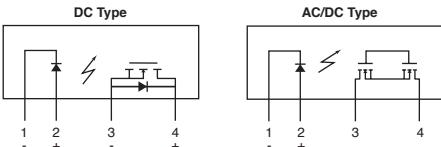
- R type (AQY221R2S) offers greatly reduced ON resistance.
- C type (AQY221N2S) offers lower output capacitance.
- Reduced package size
- High speed switching

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQY221N2V	AQY221N2V	SSOP-4	120	40	1 Form A	7.69	7.38	5.34	4.71
769-AQY221R2V	AQY221R2V	SSOP-4	250	40	1 Form A	11.71	11.24	8.13	7.17

## AQZ10/20 SERIES

- High capacity PhotoMOS Relay in a compact and slim 4-pin SIL
- Extremely low ON resistance
- Control low-level signal
- Low-level off state leakage current
- High I/O isolation voltage 2,500V
- PCB board layout is simplified
- No restriction on mounting direction



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
<b>DC Type</b>									
769-AQZ102	AQZ102	SIL-4	4.0	60	1 Form A	11.00	9.99	7.64	6.74
769-AQZ105	AQZ105	SIL-4	2.6	100	1 Form A	11.00	10.56	7.64	6.74
<b>AC/DC Type</b>									
769-AQZ202	AQZ202	SIL-4	3.0	60	1 Form A	11.93	10.83	8.28	7.31
769-AQZ204	AQZ204	SIL-4	0.5	400	1 Form A	11.93	10.83	8.28	7.31
769-AQZ205	AQZ205	SIL-4	2.0	100	1 Form A	11.93	10.83	8.28	7.31
769-AQZ207	AQZ207	SIL-4	1.0	200	1 Form A	11.93	10.83	8.28	7.31

## AQZ262 SERIES

- High capacity type power photoMOS relay
- Low ON resistance and high sensitivity
- AC/DC dual use
- Controls low-level analog signals
- Low-level off state leakage current

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	5	10	25
769-AQZ262	AQZ262	SIL-4	6A	60	-	31.56	31.31	30.27	29.50

## AQZ404 SERIES

- High capacity

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Package Style	Current Rating (mA)	Max. Load Voltage (V)	Contact Arrangement	Price Each			
						1	10	100	500
769-AQZ404	AQZ404	SIL-4	0.5	400	1 Form B	14.97	14.36	10.39	9.17

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(800) 346-6873

2003

Panasonic  
Solid State Relays

# TELEDYNE Solid State Power Relays

 **TELEDYNE  
RELAYS**  
A Teledyne Technologies Company

## S SERIES SINGLE OUTPUT, AC/DC CONTROL SOLID STATE RELAYS

### Features:

- Industry standard package
- Excellent thermal performance
- Internal Snubber
- Tight zero-cross window for low EMI
- UL High Immunity to surges
- UL Recognized

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Load Current	Voltage	Control Voltage	Switch Type	Price Each	
							1	25
881-S24A40	S24A40	A	40A	240VAC	90-240VAC/DC	Zero-Cross	75.77	73.58
881-S24D25	S24D25	A	25A	240VAC	4-30VDC	Zero-Cross	60.84	59.08
881-S24D40	S24D40	A	40A	240VAC	4-30VDC	Zero-Cross	68.97	66.96
881-S24R40	S24R40	A	40A	240VAC	3-30VDC	Random	62.56	60.74
881-S48A50	S48A50	A	50A	480VAC	90-240VAC/DC	Zero-Cross	79.03	77.08
881-S48D25	S48D25	A	25A	480VAC	5-30VDC	Zero-Cross	67.42	65.46
881-S48D50	S48D50	A	50A	480VAC	5-30VDC	Zero-Cross	70.03	68.00
881-S60D50	S60D50	A	50A	600VAC	7-30VDC	Zero-Cross	136.31	132.34



## SD SERIES DUAL OUTPUT SOLID STATE RELAYS

- Dual output (2 in 1)
- Fast-on and screw terminals available
- Low zero cross level
- Available with EZ Mount™ thermal pad installed (-12 Option)
- Excellent thermal performance
- Fast-on terminals included.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Load Current	Voltage	Control Voltage	Switch Type	Price Each	
							1	25
* 881-SD24D40-06	SD24D40-06	B	40A	280VAC	4-30VDC	Zero-Cross	157.18	154.40
* 881-SD24D50-06	SD24D50-06	B	50A	280VAC	4-30VDC	Zero-Cross	157.19	146.10
881-SD48D50A	SD48D50A	B	50A	600VAC	10-30VDC	Zero-Cross	159.06	154.41
* 881-SD24R50-06	SD24R50-06	B	50A	280VAC	4-30VDC	Random	157.21	146.11

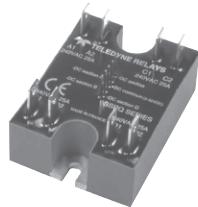


## SQ SERIES QUAD OUTPUT SOLID STATE RELAY

- Quad output (4 in 1)
- Low zero cross level
- Excellent thermal performance
- Fast-on terminals

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Load Current	Voltage	Control Voltage	Switch Type	Price Each	
							1	25
881-SQ24D25	SQ24D25	C	25A	280VAC	3-32VDC	Zero-Cross	170.29	165.34



## ST SERIES SINGLE OUTPUT, AC/DC CONTROL SOLID STATE RELAYS

- Excellent thermal performance
- High immunity for surges
- Tight zero-cross window for low EMI
- UL Recognized

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Load Current	Voltage	Control Voltage	Switch Type	Price Each	
							1	25
881-ST24D12	ST24D12	D	12A	240VAC	4-30VDC	Zero-Cross	49.16	47.70
881-ST24D25	ST24D25	D	25A	240VAC	4-30VDC	Zero-Cross	58.63	54.28
881-ST48D50	ST48D50	D	50A	480VAC	5-30VDC	Zero-Cross	67.32	63.95



## HIGH INDUSTRIAL PERFORMANCE (HIPPAK) SOLID STATE RELAYS

### SH Series

#### Features:

- Low zero cross turn on voltage
- IP20 touch proof flaps
- Input and output protection and control LED
- Connectors for power wiring and heat sinks available

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Load Current	Voltage	Control Voltage	Switch Type	Price Each	
							1	25
881-SH24A25	SH24A25	E	25A	12-275VAC	20-265VAC/DC	Zero-Cross	48.82	
881-SH24D25	SH24D25	E	25A	12-275VAC	3-32VDC	Zero-Cross	45.65	
881-SH24R50	SH24R50	E	50A	12-275VAC	3-32VDC	Random	67.09	
881-SH48A125	SH48A125	E	125A	24-510VAC	20-265VAC/DC	Zero-Cross	160.11	
881-SH48A50	SH48A50	E	50A	24-510VAC	20-265VAC/DC	Zero-Cross	53.29	
881-SH48D125	SH48D125	E	125A	24-510VAC	3.5-32VDC	Zero-Cross	147.92	
881-SH48D95	SH48D95	E	95A	24-510VAC	3.5-32VDC	Zero-Cross	102.63	
881-SH48R125	SH48R125	E	125A	24-510VAC	3.5-32VDC	Random	168.30	
881-SH60D125	SH60D125	E	125A	24-690VAC	3.5-32VDC	Zero-Cross	223.10	



### STH Series

#### Features:

- Zero cross
- Regulated input current
- Voltage protection on input (transil)
- Control status LED

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Load Current	Voltage	Control Voltage	Switch Type	Price Each	
							1	25
881-STH24D12	STH24D12	F	12A	12-280VAC	3-32VDC	Zero-Cross-Resistive	35.47	34.44
881-STH24D25	STH24D25	F	25A	12-280VAC	3-32VDC	Zero-Cross-Resistive	42.17	37.76
881-STH48D50	STH48D50	F	50A	24-600VAC	3.5-32VDC	Zero-Cross-Resistive	51.72	50.18



# TELEDYNE Solid State Power Relays

 **TELEDYNE  
RELAYS**  
A Teledyne Technologies Company

## S20DC30/S20DC100 DC SOLID STATE RELAYS

### Features:

- Output to 100A, 200VDC
- Ultra low output leakage current
- Ultra low on state resistance
- Low control current consumption

\* Available with EZ Mount™ thermal pad installed (-12 Option)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Load Current	Voltage	Control Voltage	Switch Type	Price Each
* 881-S20DC30	S20DC30	A	30A	200VDC	4.5-32VDC	DC	193.27
* 881-S20DC100	S20DC100	A	100A	200VDC	4.5-32VDC	DC	224.80

## E3P SERIES THREE-PHASE SOLID STATE RELAYS

### Features:

- Internal output protection
- Low zero cross level
- Control LED on all models

† Includes MOV

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Load Current	Voltage	Control Voltage	Switch Type	Price Each
881-E3P48D25	E3P48D25	B	25A	600VAC	8.5-30VDC	Zero-Cross	135.44
881-E3P48D50	E3P48D50	B	50A	600VAC	8.5-30VDC	Zero-Cross	158.61
881-E3P48D75	E3P48D75	B	75A	600VAC	8.5-30VDC	Zero-Cross	186.40
881-E3P48D75-16	E3P48D75-16	B	75A	520VAC	8.5-30VDC	Zero-Cross	197.46

## AS/BS/DS SERIES LOW CURRENT SOLID STATE SIP RELAYS

- Industry standard package
- High Inrush capabilities

- Low input current draw
- High DV/DT capability

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Load Current	Voltage	Control Voltage	Switch Type	Price Each	
							1	25
881-AS24D4E	AS24D4E	C	4A	275VAC	4-30VDC	Zero-Cross	21.62	20.97
881-AS46D4E	AS46D4E	C	4A	460VAC	4-30VDC	Zero-Cross	30.76	29.87
881-BS24D4A	BS24D4A	C	4A	280VAC	3-10VDC	Zero-Cross	17.53	17.02
881-BS24D4F	BS24D4F	C	4A	280VAC	8-30VDC	Zero-Cross	17.53	17.01
881-DS6R3E	DS6R3E	C	3A	60VDC	3-30VDC	Random	19.76	18.70
881-DS22R1E	DS22R1E	C	1A	220VDC	3-30VDC	Random	28.30	26.92

## C3P SERIES THREE-PHASE SOLID STATE SIP RELAY

### Features:

- Industry standard package
- Tight zero-cross window for low EMI
- High Temp plastic housing
- Exposed ceramic baseplate for reduced thermal resistance

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Load Current	Voltage	Control Voltage	Switch Type	Price Each
881-C3P24D25	C3P24D25	D	25A	280VAC	10-30VDC	Zero-Cross	135.94

## DX SERIES DIN-RAIL SOLID STATE RELAY, AC/DC CONTROL

### Features:

- AC/DC control
- Control visualization by LED
- High immunity to surges

- High immunity to surges

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Load Current	Voltage	Control Voltage	Switch Type	Price Each	
							1	25
881-DX6R3E-02	DX6R3E-02	E	3A	60VDC	3-30VDC	Random	49.09	46.14

## FS SERIES DC CONTROL SOLID STATE RELAYS

- Miniature size package

- High immunity to surges

- Tight zero-cross window for low EMI

- UL Recognized

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Load Current	Voltage	Control Voltage	Switch Type	Price Each	
							1	25
881-FS24D10-06	FS24D10-06	F	10A	280VAC	4-30VDC	Zero-Cross	38.88	36.86
881-FS24D20-06	FS24D20-06	F	20A	280VAC	4-30VDC	Zero-Cross	39.56	38.41

## L SERIES SINGLE OUTPUT, DC CONTROL SOLID STATE RELAY

### Features:

- Ultraminiature package

- PCB Switch Type

- Optional thermal pad available

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Load Current	Voltage	Control Voltage	Switch Type	Price Each
881-L24D25G	L24D25G	G	25A	280VAC	12.5-32VDC	Zero-Cross	52.49

## LS SERIES DC CONTROL SOLID STATE SIP RELAY

- Industry standard package

- Over-sized thyristor ratings

- Designed for an external heat-sink attachment

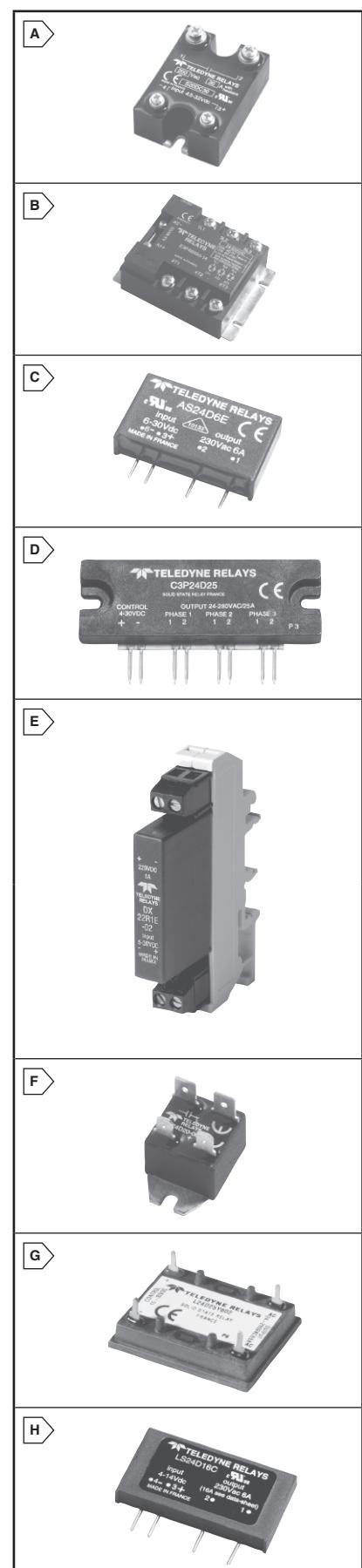
- Direct-copper bonding technology

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Teledyne Part No.	Fig.	Load Current	Voltage	Control Voltage	Switch Type	Price Each
881-LS24D16C-HS1	LS24D16C-HS1	H	16A	240VAC	4-14VDC	Zero-Cross	36.33

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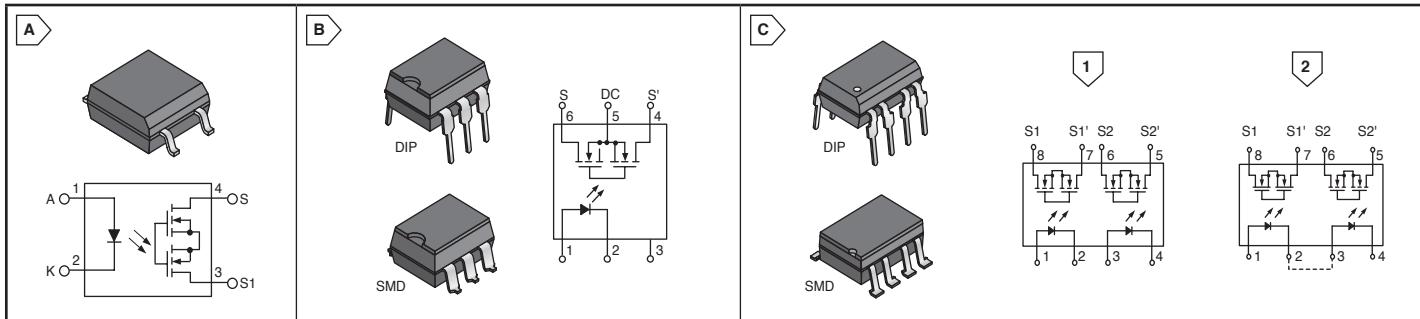


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2005

# VISHAY Solid State Relays



Vishay's Solid State Relays (SSRs), previously sold under the Infineon, Siemens, and AT&T brand names, deliver fast switching while optically isolating and protecting equipment from damaging external high-voltage spikes. By eliminating the majority of wire bonds found in other SSRs, Vishay's monolithic structure has set the performance standard. With no moving parts, our solid state relays are noiseless, bounce-free and reliable, commonly replacing electromechanical relays. Used in industrial, automotive, and communication applications, all of our solid state relays feature low power consumption, small packaging, and low turn-on current. Exceeding industry standards, they are approved by VDE, UL, CSA and other safety regulatory agencies.

## Vishay Semiconductors

### Applications:

- General Telecom Switching On/off-hook
- Ring Relay/Dial Pulse
- Ground Start/Fault Protection
- Industrial Controls
- Triac Predrivers
- Output Modules
- Instrumentation
- Automatic Tuning/Balancing
- Flying Capacitor
- Analog Multiplex On/off-hook

### Safety Standards:

- UL/BSI = UL Recognized (E52744) and BSI (7980)
- UL/VDE = UL Recognized (E300068) and VDE (VDE0884)
- UL/CSA = UL Recognized (E52744) and CSA Approved (093751)
- UL/BSI/CSA = UL Recognized (E52744), BSI (7980) and CSA Approved (093751)



## 1 FORM A

### ◆ Surface Mount Device

For quantities greater than listed, call for quote.

MOUSER STOCK NO.		Fig.	Package	Safety Standard	R <sub>ON</sub>			t <sub>on</sub> (ms) (Typ.)	t <sub>off</sub> (ms) (Typ.)	V <sub>L</sub> (V) (max.)	I <sub>L</sub> (mA) (max.)	P <sub>diss</sub> (mW) (max.)	Isolation Voltage (VRMS)	Output Type	Price Each			
Mfr.	Mfr. Part No.				(Ω) (Typ.)	I <sub>F</sub> (mA)	I <sub>L</sub> (mA)								1	10	100	1000
◆ 782-LH1546AEFTR		A	SOP-4	UL/BSI	28.00	5.0	50	2.0	0.08	350	120	550	3000	SPST NO	1.97	1.63	1.30	1.20
782-VO1400AEFTR		A	SOP-4	UL/VDE	2.30	10.0	100	52.0	36.0	60	100	400	1500	SPST NO	1.10	.923	.761	.68
◆ 782-LH1510AABTR		B	SMD-6	UL/BSI/CSA	11.27	5.0	50	0.5	0.7	200	200	550	5300	SPST NO	3.14	2.60	2.07	1.89
◆ 782-LH1510AAB		B	SMD-6	UL/BSI/CSA	11.27	5.0	50	0.5	0.7	200	200	550	5300	SPST NO	2.90	2.43	2.01	1.76
◆ 782-LH1510AT		B	DIP-6	UL/BSI/CSA	11.27	5.0	50	0.5	0.7	200	200	550	5300	SPST NO	2.85	2.39	1.97	1.74
◆ 782-LH1500AACTR		B	SMD-6	UL/BSI/CSA	20.00	5.0	50	0.3	0.60	350	150	----	5300	SPST NO	2.43	2.05	1.68	1.54
782-LH1500AT		B	DIP-6	UL/BSI/CSA	20.00	5.0	50	0.3	0.60	350	150	----	5300	SPST NO	2.31	1.94	1.60	1.41
◆ 782-LH1540AAB		B	SMD-6	UL/BSI/CSA	20.00	5.0	50	1.2	0.50	350	120	550	5300	SPST NO	2.19	1.84	1.52	1.33
782-LH1540AT		B	DIP-6	UL/BSI/CSA	20.00	5.0	50	1.2	0.50	350	120	550	5300	SPST NO	2.19	1.89	1.80	1.44
◆ 782-LH1546AABTR		B	SMD-6	UL/BSI/CSA	28.00	5.0	50	1.14	0.71	350	120	550	5300	SPST NO	2.02	1.70	1.40	1.17
◆ 782-LH1525AACBTR		B	SMD-6	UL/BSI/CSA	26.00	1.5	50	1.25	0.60	400	125	550	5300	SPST NO	3.11	2.62	2.16	1.82

## DUAL FORM A

For quantities greater than listed, call for quote.

MOUSER STOCK NO.		Fig.	Package	Safety Standard	R <sub>ON</sub>			t <sub>on</sub> (ms) (Typ.)	t <sub>off</sub> (ms) (Typ.)	V <sub>L</sub> (V) (max.)	I <sub>L</sub> (mA) (max.)	P <sub>diss</sub> (mW) (max.)	Isolation Voltage (VRMS)	Output Type	Price Each			
Mfr.	Mfr. Part No.				(Ω) (Typ.)	I <sub>F</sub> (mA)	I <sub>L</sub> (mA)								1	10	100	1000
◆ 782-LH1522AAC		C1	SMD-8	UL/BSI/CSA	10.00	5.0	50	1.0	0.70	200	200	600	5300	SPST NO	5.10	4.15	3.63	2.98
782-LH1522AB		C1	DIP-8	UL/BSI/CSA	10.00	5.0	50	1.0	0.70	200	200	600	5300	SPST NO	5.10	4.29	3.54	3.11
◆ 782-LH1520AAC		C1	SMD-8	UL/BSI/CSA	20.00	5.0	50	1.4	0.70	350	150	600	5300	SPST NO	5.10	4.29	3.54	3.11

## 1 FORM B

For quantities greater than listed, call for quote.

MOUSER STOCK NO.		Fig.	Package	Safety Standard	R <sub>ON</sub>			t <sub>on</sub> (ms) (Typ.)	t <sub>off</sub> (ms) (Typ.)	V <sub>L</sub> (V) (max.)	I <sub>L</sub> (mA) (max.)	P <sub>diss</sub> (mW) (max.)	Isolation Voltage (VRMS)	Output Type	Price Each			
Mfr.	Mfr. Part No.				(Ω) (Typ.)	I <sub>F</sub> (mA)	I <sub>L</sub> (mA)								1	10	100	1000
782-LH1501BT		B	DIP-6	UL/CSA	20.00	0.0	50	2.0	1.0	350	150	550	3750	SPST NC	3.17	2.66	2.19	1.93

## DUAL FORM A, B/C

For quantities greater than listed, call for quote.

MOUSER STOCK NO.		Fig.	Package	Safety Standard	R <sub>ON</sub>			t <sub>on</sub> (ms) (Typ.)	t <sub>off</sub> (ms) (Typ.)	V <sub>L</sub> (V) (max.)	I <sub>L</sub> (mA) (max.)	P <sub>diss</sub> (mW) (max.)	Isolation Voltage (VRMS)	Output Type	Price Each			
Mfr.	Mfr. Part No.				(Ω) (Typ.)	I <sub>F</sub> (mA)	I <sub>L</sub> (mA)								1	10	100	1000
◆ 782-LH1502BAC		C2	SMD-8	UL/CSA	20.00	5/0	50/50	3.2/3.8	1.6/0.8	350	150	600	3750	NO or NC	5.14	4.32	3.56	3.14
782-LH1512BB		C2	DIP-8	UL/CSA	10.00	5/0	50/50	1.4/1.2	0.7/2.0	200	200	600	3750	NO or NC	5.50	4.62	3.82	3.21

# MAGNECRAFT General Purpose Relays

RoHS Compliant This page of product is RoHS compliant.

Schneider Electric

## CLASS 782 GENERAL PURPOSE RELAYS

### Specifications:

- Contact material: 3 amps bifurcated - silver gold plated
- 3 amps - silver gold flashed
- 5, 10 and 15 Amps - silver cadmium oxide, gold flashed
- Coil power: 0.9 - 1.1 watts DC, 1.0 - 1.2VA (60Hz) AC. @ 25°C
- Class B insulation
- Dielectric strength: 1500Vrms

### Solder/Plug-in Mount

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Contact		Coil		Price Each		
			Form	Rating	Volts	Ω	1	10	50
528-7880-6	782BXBC-6D	A1	DPDT	20A	6VDC	40	9.80	9.47	9.07
528-7880-7	782BXBC-12D	A1	DPDT	15A	12VDC	160	10.25	9.43	7.86
528-7880-8	782BXBC-24D	A1	DPDT	15A	24VDC	650	8.91	8.20	7.71
528-7870-9	782BXBC-24A	A1	DPDT	15A	24VAC	180	9.27	8.54	7.91
528-7870-11	782BXBC-120A	A1	DPDT	15A	120VAC	4430	10.48	9.64	9.08

### Enclosed, Printed Circuit Mount

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Contact		Coil		Price Each		
			Form	Rating	Volts	Ω	1	10	50
528-7830-1	782BXCT-6D	A1	DPDT	20A	6VDC	40	8.79	6.46	6.10
528-7830-2	782BXCT-12D	A1	DPDT	15A	12VDC	160	10.28	9.69	9.08
528-7830-3	782BXCT-24D	A1	DPDT	15A	24VDC	650	10.00	9.42	8.83
528-7820-2	782DXD9CT-12D	A2	4PDT	3A	12VDC	160	9.88	6.77	5.98
528-7820-3	782DXD3CT-24D	A2	4PDT	3A	24VDC	650	9.68	6.63	6.26
528-7850-5	782BXCT-120A	A1	DPDT	15A	120VAC	4430	6.79	6.33	6.19
528-7825-3	782DXD3CT-24A	A2	4PDT	3A	24VAC	180	9.07	6.22	5.87

### HARDWARE FOR CLASS 782 RELAYS

#### Finger Safe-Sockets with Screw Clamp Terminals

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Description		Use with Relay Series	Price Each		
			1	10	50			
528-70-782D8-1A	70-782D8-1A	B	8 Pin DIN/Panel Mount	782, w/0.187 Terminal	5.32	5.23	4.84	
528-70-782D14-1	70-782D14-1	C	14 Pin Ice Cube Socket	782, 4 Pole (Plain and Full Featured)	5.69	5.15	5.02	
528-70-782E14-1	70-782E14-1	D	DIN/PM Socket 14-Pin, Elev Term	700	7.24	6.87	6.46	
528-70-782EL14-1	70-782EL14-1	D	DIN/PM Socket 14-Pin, Elev Term	700	6.12	6.00	5.57	

#### Finger Safe-Sockets with Eurostyle (Elevator) Terminals

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Description		Use with Relay Series	Price Each		
			1	10	50			
528-70-782EL8-1	70-728EL8-1	E	DIN Rail Socket	782, 2 Pole (All)	4.92	4.65	4.38	
528-70-783D11-1A	70-783D11-1A	E	DIN/PM Socket 11-Pin, Screw Term	700	5.93	5.44	5.03	

#### Classic Sockets with Screw Clamp Terminals

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Description		Use with Relay Series	Price Each		
			1	10	50			
528-459	70-459-1	F	8 Pin Screw Terminals	782, w/0.187 Terminal	7.24	6.81	6.39	
528-461	70-461-1	-	14 Pin Screw Terminals	782 (All and Hermetic)	6.68	6.29	5.90	

#### Chassis Mount Sockets with Solder Terminals

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Description		Use with Relay Series	Price Each		
			1	10	50			
528-3781	70-378-1	G	14 Pin Solder Terminals	782 (All and Hermetic)	2.07	2.02	1.96	

#### Chassis Mount Sockets with 0.187" Quick Connect Terminals

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Description		Use with Relay Series	Price Each		
			1	10	50			
528-401	70-401-1	-	8 Pin Solder Terminals	782, w/0.187 Terminal	2.58	2.43	2.29	

#### Printed Circuit Sockets with Thru-Hole Solder Pins

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Description		Use with Relay Series	Price Each		
			1	10	50			
528-3791	70-379-1	-	14 Pin PC Terminals	782 (All and Hermetic)	TDR782	2.43	2.30	2.16
528-402	70-402-1	-	8 Pin PC Terminals	782, w/0.187 Terminal	1.46	1.38	1.34	

#### Clips for Class 782-784 Relays

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Description		Use with Relay Series	Price Each		
			1	10	50			
528-16-1342	16-1342	-	Hold Down Clip	782 (All)	.98	.661	.63	
528-16-782IDC	16-782IDC	-	Write - On ID Clip	782	2.68	2.09	1.75	
528-16-782PC-1	16-782PC-1	-	Plastic Hold-Down Clip	782	.71	.544	.458	
528-16-782SC	16-782SC	-	Metal Spring Clip	782	.92	.84	.812	
528-16-784IDC	16-784IDC	-	Write - On ID Clip	784	1.61	1.44	1.31	
528-16-784SC	16-784SC	-	Metal Spring Clip	784	1.25	1.14	1.06	
528-16-TDR782SC	16-TDR782SC	-	Metal Spring Clip	782	1.81	1.38	1.17	

#### Hardware for 70-782

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Description		Use with Relay Series	Price Each		
			1	10	50			
528-16-700ST-1	16-700ST-1	H	ID Tags for 16-782PC-1	782	6.84	6.56	5.59	
528-70-ASMM-24	70-ASMM-24	I	MOV Suppressor	70-750-70-788	3.12	2.87	2.65	
528-70-BSMM-120	70-BSMM-120	I	MOV Suppressor	70-782	3.29	3.03	2.80	
528-70-BSMM-24	70-BSMM-24	I	MOV Suppressor	70-782	2.70	2.48	2.29	
528-70-BSMM-240	70-BSMM-240	I	MOV Suppressor	70-782	1.91	1.87	1.83	
528-70-BSMD-250	70-BSMD-250	J	Protection Diode	70-785	1.51	1.48	1.45	
528-70-BSMLG-24	70-BSMLG-24	K	LED Indicator	70-782	3.33	3.06	2.85	

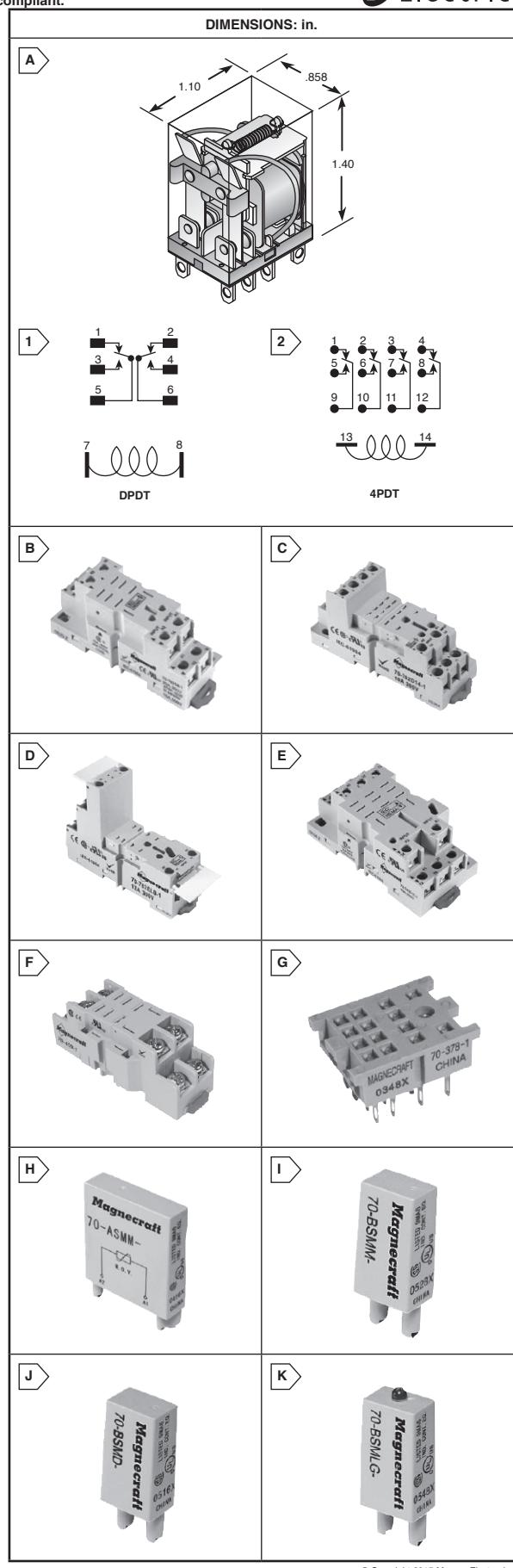
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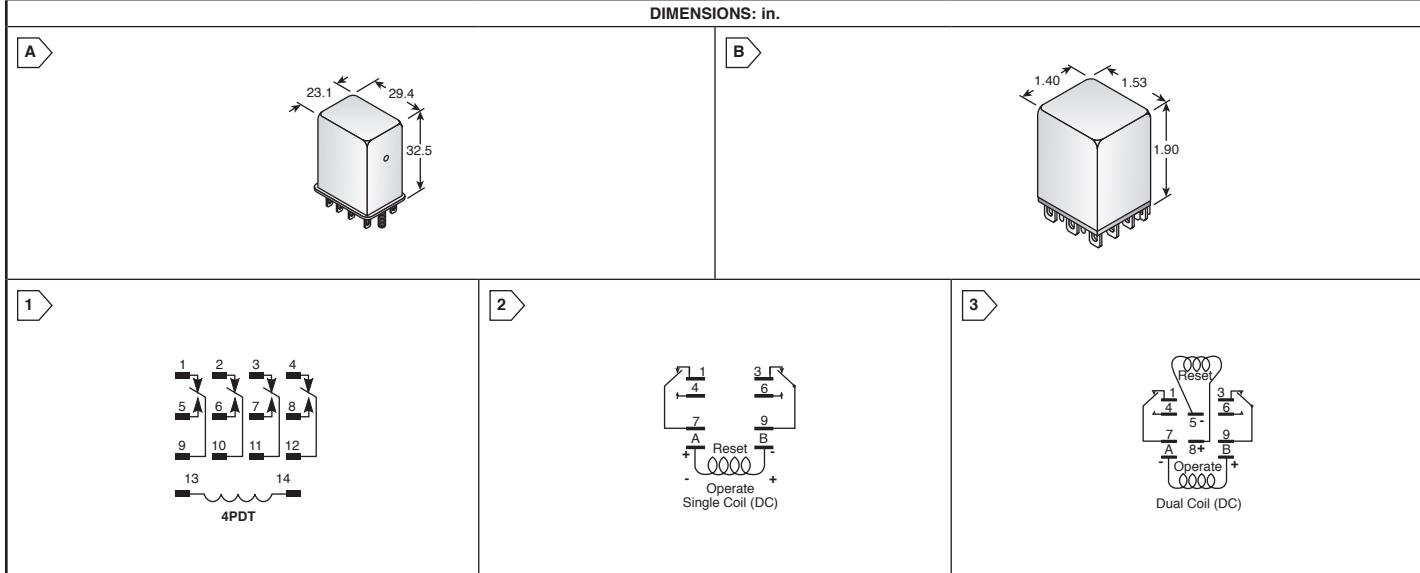


# MAGNECRAFT General Purpose Relays

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**Schneider**  
Electric

DIMENSIONS: in.



## CLASS 782H HERMETICALLY SEALED RELAYS

### Solder/Plug-In

- UL Class 1 Div. 2 for use in hazardous locations.
- UL Listed when used with DIN mount socket 528-461 and hold down clip 528-1328 listed below.
- Coil power: 0.9 watts DC, 1.2VA (60Hz) AC @ 25°C
- Class B insulation
- Dielectric strength: 1240Vrms

### Features:

- Vacuum baked and dry nitrogen filled
- Removes contaminants and provides a clean and dry atmosphere for contacts
- Hermetically sealed metal enclosure

### Applications:

- Ideal for use in hazardous locations



UL Recognized  
File No. E43641

### Solder/Plug-In

MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Contact		Coil		Price Each			
			Form	Rating	Volts	Ω	1	10	50	100
528-782XH21-12D	782XDH21-12D	A1	4PDT	5A	12VDC	160	98.96	94.42	81.99	76.28
528-782XH10-24D	782XDH10-24D	A1	4PDT	3A	24VDC	650	72.83	59.08	56.02	53.81
528-782XH21-24D	782XDH21-24D	A1	4PDT	5A	24VDC	650	78.25	63.29	60.53	58.15
528-782XH10-120A	782XDH10-120A	A1	4PDT	3A	120VAC	3900	76.25	71.68	66.44	63.25

### Sockets and Hold Down Clip for Class 782DXH Relays

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Description			Price Each			
						1	10	50	100
528-3781	70-378-1	-	14 Pin Solder terminals, 4 Pole			2.07	2.02	1.96	1.83
528-3791	70-379-1	-	14 Pin PC terminals, 4 Pole			2.43	2.30	2.16	1.97
528-461	70-461-1	-	14 Pin DIN/Panel mount with screw terminals			6.68	6.29	5.90	5.41
528-16-1342	16-1342	-	Metal hold down clip for 782 relays			.98	.661	.63	.58

## CLASS 783 RELAYS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Description			Price Each				
						1	10	25	50	
528-783XCXM4L-24A	783XCXM4L-24A	-	3PDT	15A	24VAC	103	17.60	17.19	16.69	15.61

## CLASS 784 ICE CUBE RELAYS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Contact			Coil		Price Each		
			Form	Rating	Volts	Ω	1	10	25	50
528-784XDXC-24A	784XDXC-24A	-	4DPDT	15A	24VAC	84.5	14.60	14.40	14.21	14.03
528-784XDXC-24D	784XDXC-24D	-	4DPDT	15A	24VDC	388	14.41	14.24	14.05	13.86
528-784XDXM4L-12D	784XDXM4L-12D	-	4DPDT	15A	48VDC	1550	14.36	13.94	13.49	13.07

## CLASS 785 SQUARE BASE MAGNETIC LATCHING RELAYS

### Specifications:

- Contact resistance: 50mΩ maximum
- Initial at rated current
- Coil power: 1.9 watts DC, 2.1 VA(60Hz) AC @ 25°C
- Contact material: silver cadmium oxide, gold flashed
- Dielectric strength: 1500Vrms



### Single Coil Latching

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft® Part No.	Supercedes	Fig.	Contact		Coil		Price Each		
				Form	Rating	Volts	Ω	1	10	50
528-785XBXC-12D	785XBXC-12D	W388MLCPX-6	B2	DPDT	16A	12VDC	120	21.26	19.76	15.08

### Dual Coil Latching

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft® Part No.	Supercedes	Fig.	Contact		Coil		Price Each		
				Form	Rating	Volts	Ω	1	10	50
528-785BXCD-12D	785BXCD-12D	W388ML2CPX-6	B3	DPDT	16A	12VDC	88/88	18.14	15.53	14.21
528-785BXCD-24D	785BXCD-24D	W388ML2CPX-7	B3	DPDT	16A	24VDC	350/350	20.32	19.55	15.75

### Sockets and Hold Down Clips for 785 Relays

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Description				Price Each		
							1	10	50
528-1241	70-124-1	-	11 Pin Solder terminals with mounting tabs				3.03	1.54	1.52
528-1242	70-124-2	-	11 Pin QC terminals with mounting tabs				1.95	1.83	1.73
528-1781	70-178-1	-	11 Pin PC terminals with mounting tabs				1.67	1.57	1.47
528-1782	70-178-2	-	11 Pin PC terminals without mounting tabs				2.01	1.96	1.90
528-4631	70-463-1	-	11 Pin DIN/Panel mount with screw terminals				4.83	4.59	4.44
528-70-788EL11-1	70-788EL11-1	-	11 Pin Logic style DIN mount elevator terminals, module compatible				7.29	6.86	6.43

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# MAGNECRAFT Time Delay Relays

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## CLASS TDRSOX/SRX COMPACT TIME DELAY RELAYS

### Specifications:

- Contact material: Silver alloy
- Contact rating: 12A
- Temp Range: -20°C to +55°C
- Wide Time Range: 0.1 seconds to 10 hour, 8 scales, fine adjustment with knob
- Indicator LED's: Green-power applied, Red-output energized
- Compact Size: 36mm wide to optimize DIN Rail space

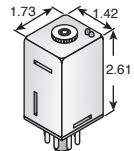


### 8 Pin Octal Base - On Delay / Interval

MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Contact Form	Input Voltage	Mating Socket Part No.	Price Each		
						1	10	50
528-TDRSOXP-24V	TDRSOXP-24V	A	DPDT	24VAC/VDC	528-464	55.85	49.56	45.03
528-TDRSOXP-120V	TDRSOXP-120V	A	DPDT	120VAC/VDC	528-464	46.34	38.54	34.27

DIMENSIONS: in.

A

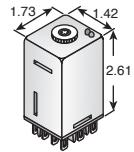


### 11 Pin Octal Base - Off Delay / Retriggerable One Shot

MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Contact Form	Input Voltage	Mating Socket Part No.	Price Each		
						1	10	50
528-TDRSRXP-24V	TDRSRXP-24V	A	DPDT	24VAC/VDC	528-465	68.50	58.55	52.07
528-TDRSRXP-120V	TDRSRXP-120V	A	DPDT	120VAC/VDC	528-465	57.96	49.54	44.06



B



### 10 Blade Square Base - Off Delay / Retriggerable One Shot

MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Contact Form	Input Voltage	Mating Socket Part No.	Price Each		
						1	10	50
528-TDRSRXB-24V	TDRSRXB-24V	B	DPDT	24VAC/VDC	528-4631	62.47	60.33	54.12
528-TDRSRXB-120V	TDRSRXB-120V	B	DPDT	120VAC/VDC	528-4631	68.50	58.55	52.07



## CLASS TDR782 MINIATURE DPDT TIME DELAY RELAYS, 5 AMP

### Features:

- A Single-function, single-voltage time delay relay with multiple time ranges
- Two LED status indicators which indicate status at a glance

### Specifications:

- Timing Range: 0.1s to 100hrs
- Tolerance: Mechanical Setting 5%
- Reset Time: Maximum 50ms



MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Input Voltage	Price Each		
				1	10	50
528-TDR782BXA-12D	TDR782BXA-12D	C	12VDC	33.72	31.18	28.58
528-TDR782BXA-24D	TDR782BXA-24D	C	24VDC	35.54	33.84	31.80
528-TDR782BXA-110A	TDR782BXA-110A	C	110VAC	43.32	41.78	38.12

### Sockets for TDR782 Relays

MOUSER STOCK NO.	MagneCraft® Part No.	Description	Price Each		
			1	10	50
528-3781	70-378-1	14 Pin Solder terminals, 4 Pole.	2.07	2.02	1.96
528-3791	70-379-1	14 Pin PC terminals, 4 Pole.	2.43	2.30	2.16
528-461	70-461-1	14 Pin Screw terminals, DIN Mount, 2 Pole.	6.68	6.29	5.90

## TYPE 820 TIME DELAY VOLTAGE SENSING RELAY, 15 AMP

### Features:

- 10 Timing Functions
- 2 Status LEDs
- Output Terminals DPDT (822 Version)
- 0.1 second to 10 days
- Clips directly to Din Rail



MOUSER STOCK NO.	MagneCraft® Part No.	Fig.	Contact Form	Input Voltage	Timing/Voltage Range	Price Each			
						1	10	25	50
528-822TDR10H-UNI	822TD10H-UNI	D	DPDT	12-240VAC/VDC	0.1 Sec. to 10 Days	63.23	60.82	58.01	53.59

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2009

# MAGNECRAFT Power Relays

Schneider  
Electric

## CLASS 92 GENERAL PURPOSE POWER RELAYS

### Specifications:

- Rated at 30A Switching; NC Contacts rated at 3A
- Contact resistance: 100,000,000 @ initial rated current (switched)
- Contact material: silver alloy
- Class F insulation
- Dielectric strength: 1500Vrms
- Mechanical Life: 5,000,000
- Flange Mounting
- 1/4" Quick-Connect Terminals for simple connection

 RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Magnecraft® Part No.	Fig.	Contact		Coil		Price Each			
			Form	Rating	Volts	Ω	1	10	25	50
528-92722-12	W92S7D22D-12D	A1	DPST-NO	30A	12VDC	86	14.45	13.41	13.04	12.69
528-92722-24	W92S7D22D-24D	A1	DPST-NO	30A	24VDC	350	10.95	10.17	9.60	9.07
528-921122-12	W92S11D22D-12D	A1	DPDT	30A	12VDC	86	14.95	13.88	13.10	12.38
528-921122-24	W92S11D22D-24D	A1	DPDT	30A	24VDC	350	9.66	8.97	8.37	7.85
528-9257A22D-24A	W92S7A22D-24A	A2	DPST-NO	30A	24VAC	250	13.62	10.44	9.86	9.23
528-92722-120	W92S7A22D-120A	A3	DPST-NO	30A	120VAC	1600	21.22	15.02	14.46	13.93
528-92S11A22D-24A	W92S11A22D-24A	A4	DPDT	30A	24VAC	250	15.32	11.74	11.55	11.38
528-921122-120	W92S11A22D-120A	A4	DPDT	30A	120VAC	1600	11.90	11.05	10.43	9.86

## CLASS 9A SEALED GENERAL PURPOSE FLANGE MOUNT POWER RELAYS

### Specifications:

- Rated at 30A; NC Contacts rated at 15A
- Contact resistance: 75mΩ @ 1A rated current
- Contact material: silver alloy
- Class F insulation
- Dielectric strength: 2500Vrms
- Mechanical Life: 10,000,000
- Flange Mounting
- 1/4" Quick-Connect Terminals for simple connection



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Magnecraft® Part No.	Fig.	Contact		Coil		Price Each			
			Form	Rating	Volts	Ω	1	10	50	100
528-9152-5	W9AS1D52-5	B5	SPST-NO	30A	5VDC	25	6.73	6.41	6.03	5.74
528-9152-12	W9AS1D52-12	B5	SPST-NO	30A	12VDC	144	8.78	8.11	7.52	7.02
528-9152-24	W9AS1D52-24	B5	SPST-NO	30A	24VDC	576	6.35	5.85	5.48	5.17
528-9552-5	W9AS5D52-5	B6	SPDT	20A	5VDC	25	8.28	7.81	7.32	6.89
528-9552-12	W9AS5D52-12	B6	SPDT	20A	12VDC	144	7.91	7.27	6.85	6.45

### Accessory

Accessory	Description	Price
528-16-9ADIN1	16-9ADIN-1	C
	Optional DIN Adapter	.84 .828 .812 .796

## CLASS 199 HEAVY DUTY POWER RELAYS

### Specifications:

- Contact resistance: 50mΩ initially
- Coil power: 2.0 watts DC, 10VA (60Hz) AC @ 25°C
- Panel mount, open style construction
- Contact material: Silver cadmium oxide, gold flashed
- Class 816 insulation
- Combination screw terminals
- Dielectric strength: 1500Vrms



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Magnecraft® Part No.	Fig.	Contact		Coil		Price Each			
			Form	Rating	Volts	Ω	1	10	50	100
528-199X-12	199X-12	D	DPDT	40A	12VDC	70	37.13	33.96	32.38	30.80
528-199AX-9	199AX-9	E	DPST-NO	40A	120VAC	290	43.79	32.12	30.95	28.85

### Metal Enclosure

Metal Enclosure	Description	Price
528-50-1289-1	50-1289-1	F
	For use with the 199 style relays. The box uses four, 1/2" knock outs for standard electrical connector. Cover hold down hardware is included.	11.32 10.99 8.99 8.40

## CLASS 782 GENERAL PURPOSE POWER RELAYS (FULL-FEATURED), SOLDER/PLUG-IN

### Specifications:

- Coil power: 0.9 watts DC, 1.2VA (60Hz) AC @ 25°C
- Contact material: 3 amps bifurcated - silver gold plated 3 amps - silver gold flashed
- 10A and 15A - silver cadmium oxide, gold flashed
- Class B insulation
- Dielectric strength: 1500Vrms
- Features:

- Lockdown door holds pushbutton and contacts in the operate position
- Flag indicator shows relay status of either manual or powered
- LED status lamp shows coil "on" or "off" status
- Polycarbonate dust cover

- Ideal in low light conditions
- Ideal to test control circuits

  
RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Magnecraft® Part No.	Fig.	Contact		Coil		Price Each			
			Form	Rating	Volts	Ω	1	10	50	100
528-782X4-12D	782XBXM4L-12D	G7	DPDT	15A	12VDC	160	10.02	9.73	8.95	8.14
528-782X4-24D	782XBXM4L-24D	G7	DPDT	15A	24VDC	650	8.45	7.75	7.30	6.85
528-782X4-24A	782XBXM4L-24A	G7	DPDT	15A	24VAC	180	10.39	10.09	9.00	8.45
528-782X4-120A	782XBXM4L-120A	G7	DPDT	15A	120VAC	4430	9.64	9.35	8.38	8.12

## HARDWARE FOR CLASS 782 RELAYS

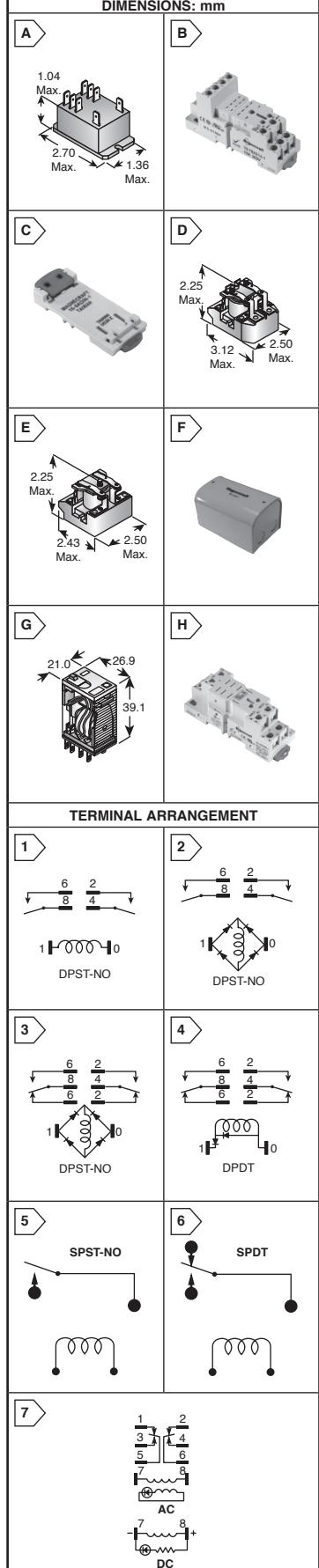
MOUSER STOCK NO.	Magnecraft® Part No.	Fig.	Description	Use with Relay Series	Price Each
<b>For quantities greater than listed, call for quote.</b>					
528-70-782D8-1A	70-782D8-1A	H	8 Pin DIN/Panel Mount	782, with 0.187 Terminal	5.32 5.23 4.84 4.56
528-70-782D14-1	70-782D14-1	B	14 Pin Ice Cube Socket	782, 4 Pole (Plain and Full Featured) 782, Hermetic Only	5.69 5.15 5.02 4.53
<b>Finger Safe-Sockets with Eurostyle (Elevator) Terminals</b>					
528-70-782EL8-1	70-782EL8-1	-	DIN Rail Socket	782, 2 Pole (All)	4.92 4.65 4.38 4.00
<b>Classic Sockets with Screw Clamp Terminals</b>					
528-459	70-459-1	-	8 Pin Screw Terminals	782, with 0.187 Terminal	7.24 6.81 6.39 5.85
528-461	70-461-1	-	14 Pin Screw Terminals	782 (All and Hermetic)	6.68 6.29 5.90 5.41
<b>Chassis Mount Sockets with Solder Terminals</b>					
528-3781	70-378-1	-	14 Pin Solder Terminals	782 (All and Hermetic); 782C, Hermetic Only	2.07 2.02 1.96 1.83
<b>Chassis Mount Sockets with 0.187" Quick Connect Terminals</b>					
528-401	70-401-1	-	8 Pin Solder Terminals	782, with 0.187 Terminal	2.58 2.43 2.29 2.10
<b>Printed Circuit Sockets with Thru-Hole Solder Pins</b>					
528-3791	70-379-1	-	14 Pin PC Terminals	782, (All and Hermetic) TDR782	2.43 2.30 2.16 1.97
528-402	70-402-1	-	8 Pin PC Terminals	782, with 0.187 Terminal	1.46 1.38 1.34 1.24
<b>Hold Down Clip for Class 782 Relays</b>					
528-16-1342	16-1342	-	Hold Down Clip	782 (All)	.98 .661 .63 .58

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## OMRON General Purpose Relays

OMRON

## **LY SERIES: GENERAL PURPOSE RELAYS**

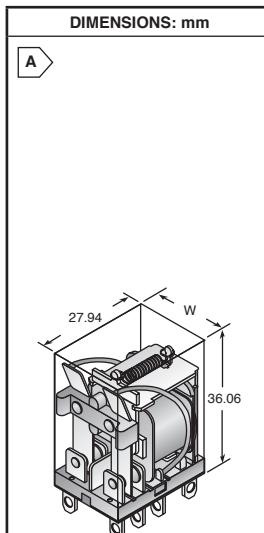
## Specifications:

- Operate/Release time: 25/25ms
  - Mechanical Life: AC 50 million operations min. (at 18,000/hr.)  
DC 1 billion operations min. (at 18,000/hr.)
  - Dielectric strength: 2000VAC, 50/60Hz for 1 minute
  - Insulation resistance: 100MΩ min. (@ 500VDC)

## Features:

- Arc barrier equipped
  - Long dependable service life assured by Ag-Alloy contacts

MOUSER STOCK NO.	Omron Part No.	Fig.	Terminal Type	Mounting Type	Coil Voltage	Contact Form	Contact Rating	Dimensions "W" (mm)	For quantities greater than listed, call for quote.			
									1	25	50	100
<b>Standard Type</b>												
<b>653-LY1-0-DC12</b>	LY1-0-DC12	A	PCB	Standard	12VDC	SPDT	15A	21.59	6.47	5.93	5.48	5.08
<b>653-LY1-0-DC24</b>	LY1-0-DC24	A	PCB	Standard	24VDC	SPDT	15A	21.59	6.47	5.93	5.48	5.08
<b>653-LY1-0-AC1</b>	LY1-0-AC110/120	A	PCB	Standard	110/120VAC	SPDT	15A	21.59	7.28	6.68	6.16	5.72
<b>653-LY2-0-DC12</b>	LY2-0-DC12	A	PCB	Standard	12VDC	DPDT	10A	21.59	7.46	7.05	6.69	6.46
<b>653-LY2-0-DC24</b>	LY2-0-DC24	A	PCB	Standard	24VDC	DPDT	10A	21.59	7.46	7.05	6.69	6.46
<b>653-LY2-0-DC48</b>	LY2-0-DC48	A	PCB	Standard	48VDC	DPDT	10A	21.59	10.40	9.36	8.87	8.32
<b>653-LY2-0-DC100/110</b>	LY2-0-DC 100 110	A	PCB	Standard	100/110VDC	DPDT	10A	21.59	11.51	10.36	9.20	8.28
<b>653-LY2-0-AC24</b>	LY2-0-AC24	A	PCB	Standard	24VAC	DPDT	10A	21.59	8.67	8.19	7.78	7.50
<b>653-LY2-0-AC1</b>	LY2-0-AC110/120	A	PCB	Standard	110/120VAC	DPDT	10A	21.59	7.46	7.05	6.69	6.27
<b>653-LY4-0-DC24</b>	LY4-0-DC24	A	PCB	Standard	24VDC	4PDT	10A	41.40	11.92	11.27	10.68	10.32
<b>653-LY4-0-AC120</b>	LY4-0-AC120	A	PCB	Standard	120VAC	4PDT	10A	21.59	11.29	10.94	10.39	9.70
<b>653-LY1-DC12</b>	LY1-DC12	A	Plug-in/Solder	Standard	12VDC	SPDT	15A	21.59	7.12	6.74	6.38	6.17
<b>653-LY1-DC24</b>	LY1-DC24	A	Plug-in/Solder	Standard	24VDC	SPDT	15A	21.59	6.35	6.01	5.68	5.50
<b>653-LY1-AC24</b>	LY1-AC24	A	Plug-in/Solder	Standard	24VAC	SPDT	15A	21.59	6.45	6.10	5.79	5.60
<b>653-LY1-AC1</b>	LY1-AC110/120	A	Plug-in/Solder	Standard	110/120VAC	SPDT	15A	21.59	6.48	5.94	5.47	5.08
<b>653-LY2-DC12</b>	LY2-DC12	A	Plug-in/Solder	Standard	12VDC	DPDT	10A	21.59	7.27	7.06	6.82	6.51
<b>653-LY2-DC24</b>	LY2-DC24	A	Plug-in/Solder	Standard	24VDC	DPDT	10A	21.59	7.27	7.06	6.81	6.51
<b>653-LY2-DC48</b>	LY2-DC48	A	Plug-in/Solder	Standard	48VDC	DPDT	10A	21.59	7.46	7.05	6.69	6.27
<b>653-LY2-DC100/110</b>	LY2-DC100/110	A	Plug-in/Solder	Standard	100/110VDC	DPDT	10A	21.59	7.35	7.07	6.71	6.29
<b>653-LY2-AC12</b>	LY2-AC12	A	Plug-in/Solder	Standard	12VAC	DPDT	10A	21.59	7.46	7.05	6.69	6.46
<b>653-LY2-AC24</b>	LY2-AC24	A	Plug-in/Solder	Standard	24VAC	DPDT	10A	21.59	7.65	7.16	6.84	6.55
<b>653-LY2-AC100/110</b>	LY2-AC100/110	A	Plug-in/Solder	Standard	100/110VAC	DPDT	10A	21.59	7.46	7.05	6.69	6.46
<b>653-LY2-AC1</b>	LY2-AC110/120	A	Plug-in/Solder	Standard	110/120VAC	DPDT	10A	21.59	7.46	7.05	6.69	6.46
<b>653-LY2-AC220/240</b>	LY2-AC220/240	A	Plug-in/Solder	Standard	220/240VAC	DPDT	10A	21.59	7.32	6.94	6.59	6.29
<b>653-LY3-DC12</b>	LY3-DC12	A	Plug-in/Solder	Standard	12VDC	3PDT	10A	31.49	11.84	11.18	10.61	10.24
<b>653-LY3-DC24</b>	LY3-DC24	A	Plug-in/Solder	Standard	24VDC	3PDT	10A	31.49	10.23	9.67	9.16	8.87
<b>653-LY3-AC24</b>	LY3-AC24	A	Plug-in/Solder	Standard	24VAC	3PDT	10A	31.49	9.65	9.11	8.64	8.35
<b>653-LY3-AC1</b>	LY3-AC120	A	Plug-in/Solder	Standard	120VAC	3PDT	10A	31.49	9.65	9.11	8.64	8.35
<b>653-LY3-AC240</b>	LY3-AC240	A	Plug-in/Solder	Standard	240VAC	3PDT	10A	31.49	10.80	9.83	9.02	8.31
<b>653-LY4-DC12</b>	LY4-DC12	A	Plug-in/Solder	Standard	12VDC	4PDT	10A	41.40	11.91	11.27	10.68	10.32
<b>653-LY4-DC24</b>	LY4-DC24	A	Plug-in/Solder	Standard	24VDC	4PDT	10A	41.40	13.00	12.09	11.62	11.23
<b>653-LY4-DC48</b>	LY4-DC48	A	Plug-in/Solder	Standard	48VDC	4PDT	10A	41.40	13.42	12.65	11.28	10.92
<b>653-LY4-AC24</b>	LY4-AC24	A	Plug-in/Solder	Standard	24VAC	4PDT	10A	41.40	11.59	10.95	10.38	10.03
<b>653-LY4-AC1</b>	LY4-AC120	A	Plug-in/Solder	Standard	120VAC	4PDT	10A	41.40	11.92	11.27	10.68	10.32
<b>653-LY4-AC240</b>	LY4-AC240	A	Plug-in/Solder	Standard	240VAC	4PDT	10A	41.40	12.27	11.59	10.99	10.63
<b>653-LY1F-DC12</b>	LY1F-DC12	B	Plug-in/Solder	Upper	12VDC	SPDT	15A	22.60	5.90	5.54	5.28	5.07
<b>653-LY1F-DC24</b>	LY1F-DC24	B	Plug-in/Solder	Upper	24VDC	SPDT	15A	22.60	6.75	6.38	6.06	5.85
<b>653-LY1F-AC12</b>	LY1F-AC12	B	Plug-in/Solder	Upper	12VAC	SPDT	15A	22.60	6.57	6.01	5.54	5.15
<b>653-LY1F-AC24</b>	LY1F-AC24	B	Plug-in/Solder	Upper	24VAC	SPDT	15A	22.60	6.75	6.38	6.06	5.85
<b>653-LY1F-AC1</b>	LY1F-AC110/120	B	Plug-in/Solder	Upper	110/120VAC	SPDT	15A	22.60	6.75	6.38	6.06	5.85
<b>653-LY1F-AC220/240</b>	LY1F-AC220/240	B	Plug-in/Solder	Upper	220/240VAC	SPDT	15A	22.60	7.07	6.68	6.33	6.12
<b>653-LY2F-DC12</b>	LY2F-DC12	B	Plug-in/Solder	Upper	12VDC	DPDT	10A	22.60	7.61	7.20	6.82	6.40
<b>653-LY2F-DC24</b>	LY2F-DC24	B	Plug-in/Solder	Upper	24VDC	DPDT	10A	22.60	6.72	6.32	6.02	5.77
<b>653-LY2F-AC24</b>	LY2F-AC24	B	Plug-in/Solder	Upper	24VAC	DPDT	10A	22.60	7.61	7.20	6.82	6.59
<b>653-LY2F-AC1</b>	LY2F-AC110/120	B	Plug-in/Solder	Upper	110/120VAC	DPDT	10A	22.60	7.63	7.16	6.83	6.53
<b>653-LY2F-AC220-240</b>	LY2F-AC220-240	B	Plug-in/Solder	Upper	220/240VAC	DPDT	10A	22.60	8.64	8.16	7.73	7.48
<b>653-LY3F-DC12</b>	LY3F-DC12	B	Plug-in/Solder	Upper	12VDC	3PDT	10A	32.00	9.64	9.11	8.65	8.35
<b>653-LY3F-DC24</b>	LY3F-DC24	B	Plug-in/Solder	Upper	24VDC	3PDT	10A	32.00	10.23	9.67	9.16	8.87
<b>653-LY3F-AC24</b>	LY3F-AC24	B	Plug-in/Solder	Upper	24VAC	3PDT	10A	32.00	9.65	9.11	8.64	8.35
<b>653-LY3F-AC1</b>	LY3F-AC120	B	Plug-in/Solder	Upper	120VAC	3PDT	10A	32.00	10.23	9.67	9.16	8.87
<b>653-LY4F-DC12</b>	LY4F-DC12	B	Plug-in/Solder	Upper	12VDC	4PDT	10A	41.40	11.24	10.62	10.08	9.73
<b>653-LY4F-DC24</b>	LY4F-DC24	B	Plug-in/Solder	Upper	24VDC	4PDT	10A	41.40	11.92	11.27	10.68	10.32
<b>653-LY4F-AC1</b>	LY4F-AC120	B	Plug-in/Solder	Upper	120VAC	4PDT	10A	41.40	11.92	11.27	10.68	10.32

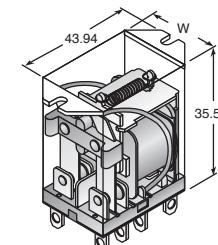


Shown with plug-in/solder terminal



**LED Indicator Type**

<b>653-LY1N-DC24</b>	LY1N-DC24	A	Plug-in/Solder	Standard	24VDC	SPDT	15A	21.59	9.39	8.62	7.96	7.39
<b>653-LY1N-AC110/120</b>	LY1N-AC110/120	A	Plug-in/Solder	Standard	110/120VAC	SPDT	15A	21.59	11.12	10.26	9.67	9.05
<b>653-LY2N-DC12</b>	LY2N-DC12	A	Plug-in/Solder	Standard	12VDC	DPDT	10A	21.59	9.19	8.37	7.95	7.75
<b>653-LY2N-DC24</b>	LY2N-DC24	A	Plug-in/Solder	Standard	24VDC	DPDT	10A	21.59	9.65	8.86	8.42	8.03
<b>653-LY2N-AC24</b>	LY2N-AC24	A	Plug-in/Solder	Standard	24VAC	DPDT	10A	21.59	10.89	9.90	9.18	8.92
<b>653-LY2N-AC110-120</b>	LY2N-AC110-120	A	Plug-in/Solder	Standard	110/120VAC	DPDT	10A	21.59	10.03	9.48	8.98	8.69
<b>653-LY2N-AC200/220</b>	LY2N-AC200/220	A	Plug-in/Solder	Standard	200/220VAC	DPDT	10A	21.59	10.89	9.90	9.18	8.92
<b>653-LY2N-AC220-240</b>	LY2N-AC220-240	A	Plug-in/Solder	Standard	220/240VAC	DPDT	10A	21.59	10.20	9.65	9.15	8.85
<b>653-LY4N-DC24</b>	LY4N-DC24	A	Plug-in/Solder	Standard	24VDC	4PDT	10A	41.40	16.59	15.69	14.86	14.37
<b>653-LY4N-AC110-120</b>	LY4N-AC110-120	A	Plug-In/Solder	Standard	110/120VAC	4PDT	10A	41.40	12.45	11.64	10.72	10.09
<b>653-LY4N-AC120</b>	LY4N-AC120	A	Plug-in/Solder	Standard	120VAC	4PDT	10A	41.40	19.33	18.26	17.31	16.74



## **LED Indicator and Diode Surge Suppression Type**

<b>653-LY1N-D2DC24</b>	LY1N-D2-DC24	A	Plug-in/Solder	Standard	24VDC	SPDT	15A	21.59	<b>12.10</b>	<b>11.10</b>	<b>10.24</b>	<b>9.51</b>
<b>653-LY2N-D2-DC24</b>	LY2N-D2-DC24	A	Plug-in/Solder	Standard	24VDC	DPDT	10A	21.59	<b>16.58</b>	<b>15.73</b>	<b>14.03</b>	<b>13.61</b>
<b>653-LY4N-D2-DC24</b>	LY4N-D2-DC24	A	Plug-in/Solder	Standard	24VDC	4PDT	10A	41.40	<b>19.49</b>	<b>18.49</b>	<b>16.49</b>	<b>15.98</b>



**653-LY2I4NAC24** LY2I4N AC24 A Plug-in/Solder Standard 24VAC DPDT 10A 21.59 10.89 9.90 9.18 8.92

## ACCESSORIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Description	Price Each			
			1	25	50	100
653-PT08	PT08	Back connecting socket for SPDT and DPDT, solder	1.85	1.64	1.56	1.51
653-PT08-0	PT08-0	PC terminal socket for SPDT and DPDT, PCB	1.54	1.49	1.44	1.37
653-PT14-0	PT14-0	PC terminal socket for 4PDT, PCB	2.64	2.47	2.35	2.26
653-PTF08A-E	PTF08A-E	Track mounted socket for SPDT and DPDT	4.46	4.28	4.18	3.96
653-PTF11A	PTF11A	Track mounted socket for 3PDT	6.41	6.05	5.74	5.60
653-PTF14A-E	PTF14A-E	Track mounted socket for 4PDT	6.34	6.23	5.95	5.68
653-PYC-P	PYC-P	Hold-down clip for back connecting socket	.27	.256	.245	.232
653-PFP-M	PFP-M	DIN rail end stop plate	.68	.542	.531	.521
653-PFP-S	PFP-S	Spacer	.43	.358	.317	.286
653-PFP-50N	PFP-50N	DIN rail 50cm (19.5")	4.93	4.34	3.87	3.50
653-PFP-100N	PFP-100N	DIN rail 100cm (.39")	6.46	6.07	5.73	5.43

# OMRON General Purpose Relays

OMRON

## MK SERIES: OCTAL BASE GENERAL PURPOSE RELAYS

### Specifications:

- Operate/Release time: 20/20ms (AC); 30/20ms (DC)
- Terminals: Plug-in
- Contact resistance: 50mΩ max.
- Insulation resistance: 1000MΩ min. @ 500VDC

### Features:

- Exceptionally reliable general purpose relay
- Mechanical indicator and push-to-test button
- Silver contacts
- Long life (minimum 100,000 electrical operations)
- Built-in operation indicator (mechanical, LED), diode surge suppression, varistor surge suppression



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Rated Current (mA)		Coil Resistance (Ω)	Coil Voltage	Price Each			
				@ 50Hz	@ 60Hz			1	25	50	100
<b>Mechanical Indicator</b>											
653-MKS2PDC12	MKS2P DC12	A	DPDT	112.0	112.0	107.0	12VDC	12.56	12.00	11.35	10.24
653-MKS2PDC24	MKS2P DC24	A	DPDT	55.8	55.8	430.0	24VDC	13.14	11.83	11.20	10.51
653-MKS2PAC120	MKS2P AC120	A	DPDT	22.2	19.3	1130.0	120VAC	9.88	9.42	9.03	8.69
653-MKS3P-5AC120	[MKS3P-5 AC120]	A	3PDT	22.2	19.3	1130.0	120VAC	16.08	14.47	13.70	12.85
<b>Mechanical and LED Indicator</b>											
653-MKS2PNDC24	MKS2PN DC24	A	DPDT	55.8	55.8	430.0	24VDC	15.35	14.37	13.28	12.56
653-MKS2PNAC120	MKS2PN AC120	A	DPDT	22.2	19.3	1130.0	120VAC	11.81	11.28	10.81	10.38
<b>Mechanical Indicator and Lockable Test Button</b>											
653-MKS2PIDC12	MKS2PI DC12	B	DPDT	112.0	112.0	107.0	12VDC	11.08	10.58	10.16	9.60
653-MKS2PIDC24	MKS2PI DC24	B	DPDT	55.8	55.8	430.0	24VDC	11.08	10.58	10.16	9.78
653-MKS2PIDC48	MKS2PI DC48	B	DPDT	28.1	28.1	1710.0	48VDC	12.56	11.82	11.16	10.76
653-MKS2PIDC110	MKS2PI DC110	B	DPDT	13.5	13.5	7390.0	110VDC	12.01	10.78	10.33	9.94
653-MKS2PIAC12	MKS2PI AC12	B	DPDT	221.0	193.0	13.7	12VAC	12.61	11.82	10.89	10.31
653-MKS2PIAC24	MKS2PI AC24	B	DPDT	110.0	96.3	48.4	24VAC	12.10	11.34	10.47	9.90
653-MKS2PIAC110	MKS2PI AC110	B	DPDT	24.2	21.0	932.0	110VAC	15.60	14.05	13.30	12.49
653-MKS2PIAC120	MKS2PI AC120	B	DPDT	22.2	19.3	1130.0	120VAC	10.91	10.40	9.96	9.58
653-MKS2PIAC240	MKS2PI AC240	B	DPDT	11.0	9.6	4480.0	240VAC	14.91	14.00	12.92	12.20
653-MKS3PI-5DC12	MKS3PI-5 DC12	B	3PDT	112.0	112.0	107.0	12VDC	10.55	10.07	9.65	9.29
653-MKS3PI-5DC24	MKS3PI-5 DC24	B	3PDT	55.8	55.8	430.0	24VDC	12.82	12.25	11.76	11.33
653-MKS3PI-5AC24	MKS3PI-5 AC24	B	3PDT	110.0	96.3	48.4	24VAC	10.89	10.39	9.96	9.58
653-MKS3PI-5AC120	MKS3PI-5 AC120	B	3PDT	22.2	19.3	1130.0	120VAC	18.30	16.46	14.63	13.17
653-MKS3PI-5AC240	MKS3PI-5 AC240	B	3PDT	11.0	9.6	4480.0	240VAC	12.31	11.73	11.26	10.82
<b>Mechanical and LED Indicator and Lockable Test Button</b>											
653-MKS2PINDDC12	MKS2PINDC12	B	DPDT	112.0	112.0	107.0	12VDC	13.75	13.34	12.43	11.45
653-MKS2PINDC24	MKS2PIN DC24	B	DPDT	55.8	55.8	430.0	24VDC	13.42	12.82	12.31	11.86
653-MKS2PINAC24	MKS2PIN AC24	B	DPDT	110.0	96.3	48.4	24VAC	15.28	14.31	13.20	12.49
653-MKS2PINAC120	MKS2PIN AC120	B	DPDT	22.2	19.3	1130.0	120VAC	12.57	11.99	11.48	11.06
653-MKS2PINAC240	MKS2PIN AC240	B	DPDT	11.0	9.6	4480.0	240VAC	12.63	12.03	11.54	11.10
653-MKS3PIN-5DC24	MKS3PIN-5 DC24	B	3PDT	55.8	55.8	430.0	24VDC	16.47	15.44	14.25	13.47
653-MKS3PIN-5AC240	MKS3PIN-5 AC240	B	3PDT	22.2	19.3	1130.0	120VAC	14.78	13.91	13.14	12.46

### Accessories for MK Series

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Description	Price Each			
			1	25	50	100
653-PTF11QDC	PTF11QDC	11-pin QC terminal, screw mount	1.45	1.36	1.26	1.14
653-PF083A-E	PF083A-E	8-pin octal for DPDT, track mount	3.95	3.93	3.64	3.47
653-PF113A-E	PF113A-E	11-pin octal for 3PDT, track mount	5.61	5.32	5.27	5.03
653-PFP-M	PFP-M	DIN rail end stop plate	.68	.542	.531	.521
653-PFP-S	PFP-S	Spacer	.43	.358	.317	.286
653-PFP-50N	PFP-50N	DIN rail 50cm (19.5")	4.93	4.34	3.87	3.50
653-PFP-100N	PFP-100N	DIN rail 100cm (39")	6.46	6.07	5.73	5.43

## GENERAL PURPOSE LOAD SWITCHING POWER RELAYS

### MKS-X Series

#### Specifications:

- Operate/Release time: 20ms max.
- Contact resistance: 100mΩ max.
- Insulation resistance: 100MΩ min.
- Contact material: AgSnIn

#### Features:

- Models for DC loads can switch 220VDC, 10A (resistive)
- Models for AC loads can switch 250VAC, 15A (resistive)



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Rated Current (mA)		Coil Resist. (Ω)	Coil Voltage	Price Each			
				@ 50 Hz	@ 60 Hz			1	25	50	100
<b>Standard</b>											
653-MKS1XT-10DC12	MKS1XT-10 DC12	C	SPST-NO	126.0	126.0	95.0	12VDC	28.42	26.92	23.92	21.53
653-MKS1XT-10DC24	MKS1XT-10 DC24	C	SPST-NO	63.2	63.2	380.0	24VDC	26.14	24.43	22.45	21.64
653-MKS1XT-10AC24	MKS1XT-10 AC24	C	SPST-NO	110.0	96.3	48.4	24VAC	23.04	21.75	19.91	19.24
653-MKS1XT-10AC120	MKS1XT-10 AC120	C	SPST-NO	22.2	19.3	1130.0	120VAC	19.17	18.10	16.54	16.01
653-MKS2XT-11DC24	MKS2XT-11 DC24	C	SPST-NO/SPST-NC	63.2	63.2	380.0	24VDC	26.17	24.44	22.47	21.64
<b>Built-in Operation Indicator</b>											
653-MKS1XTN-10DC24	MKS1XTN-10 DC24	C	SPST-NO	63.2	63.2	380.0	24VDC	24.16	22.84	21.26	20.19
653-MKS1XTN-10AC120	MKS1XTN-10 AC120	C	SPST-NO	22.2	19.3	1130.0	120VAC	25.70	23.59	22.00	21.28
653-MKS2XTN-11DC24	MKS2XTN-11 DC24	C	SPST-NO/SPST-NC	63.2	63.2	380.0	24VDC	26.38	24.94	23.20	22.04
653-MKS2XTN-11AC120	MKS2XTN-11 AC120	C	SPST-NO/SPST-NC	22.2	19.3	1130.0	120VAC	26.41	24.46	22.79	22.06

### Test Button

653-MKS1XTI-10DC24	MKS1XTI-10 DC24	D	SPST-NO	63.2	63.2	380.0	24VDC	25.35	23.92	21.89	21.18
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### Test Button and Built-in Operation Indicator

653-MKS1XTN-10AC120	MKS1XTN-10 AC120	D	SPST-NO	22.2	19.3	1130.0	120VAC	25.47	23.59	22.02	21.28
653-MKS2XTN-11DC24	MKS2XTN-11 DC24	D	SPST-NO/SPST-NC	63.2	63.2	380.0	24VDC	24.12	22.78	21.78	21.23
653-MKS2XTN-11AC120	MKS2XTN-11 AC120	D	SPST-NO/SPST-NC	22.2	19.3	1130.0	120VAC	29.90	26.82	25.67	24.73

### Accessories for MKS-X Series

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Description	Price Each			
			1	25	50	100
653-P7M-06P	P7M-06P	PCB mount, back-connecting socket without built-in diode	13.91	13.57	12.86	12.17
653-P7MF-06	P7MF-06	DIN track or panel mount, front-connecting socket without built-in diode	13.62	12.14	11.30	10.93
653-P7MF-06-D	P7MF-06-D	DIN track or panel mount, front-connecting socket with built-in diode	16.24	14.93	13.72	13.31
653-PYC-A2	PYC-A2	Hold-down clip	.70	.648	.622	.583

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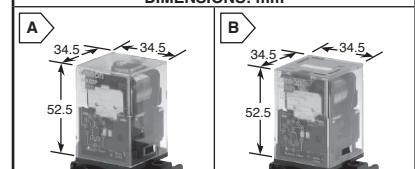


Image includes relay and socket. Socket is ordered separately.

### Terminal Arrangement (Bottom View)

MKS2P(I)

MKS3P(I)-5

MKS2P(I)N

MKS3P(I)-N-5

MKS2P(I)N-5

MKS3P(I)N-5

MKS2XT-10

MKS2XTI-10

MKS2XT-11

MKS2XTI-11

MKS2XTN-10

MKS2XTI-10

MKS2XTN-11

MKS2XTI-11

MKS2XTN-10

MKS2XTI-11

MKS2XTN-11

MKS2XTI-11

MKS2XTN-11

MKS2XTI-11

MKS2XTN-11

MKS2XTI-11

# OMRON General Purpose Relays

RoHS Compliant

This page of product is RoHS compliant.

## MY SERIES: GENERAL PURPOSE, MINIATURE POWER RELAYS

### Specifications:

- Operate frequency:  
Mechanical: 18,000 operations/hr.  
Electrical: 1,800 operations/hr. (under rated load)
- Insulation resistance: 1000MΩ min. (@ 500VDC)
- Operate/release time: 20ms. max.

- Power Consumption:  
AC < 50V: 1.0 - 1.2VA (60Hz)  
AC > 50V: 0.9 - 1.1VA (60Hz)  
DC: 0.9W
- Terminals: Plug-in socket/solder

### Features:

- Versatile, multi-featured, miniature power relay for sequence control and power switching applications
- Maximum switching current: 10A 2-Pole, 5A 4-Pole
- Provided with nameplate



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Contact Form	Coil Resistance (Ω)	Coil Voltage	Rated Current (mA)		Price Each			
					50Hz	60Hz	1	25	50	100
<b>Without LED Indicator, Standard Coil Polarity</b>										
653-MY2-AC24	MY2-AC24(S)	DPDT	180.0	24VAC	53.8	46.0	4.95	4.64	4.43	4.24
653-MY2-AC1	MY2-AC110/120(S)	DPDT	4430.0	110/120VAC	9.9/10.8	8.4/9.2	4.72	4.42	4.22	4.06
653-MY2AC220240S	MY2 AC220/240 (S)	DPDT	18790.0	220/240VAC	4.8/5.3	4.2/4.6	6.03	5.65	5.40	5.17
653-MY2-DC12	MY2-DC12(S)	DPDT	160.0	12VDC	75.0	75.0	5.35	5.01	4.76	4.58
653-MY2-DC24	MY2-DC24(S)	DPDT	636.0	24VDC	37.7	37.7	5.22	4.97	4.80	4.44
* 653-MY2-02DC24	MY2-02 DC24	DPDT	650.0	24VDC	36.9	36.9	5.74	5.23	4.96	4.84
653-MY4DC48(S)	MY4 DC48 (S)	4PDT	2560.0	48VDC	18.8	18.8	5.67	5.28	5.05	4.87
653-MY4DC100110S	MY4 DC100/110 (S)	4PDT	11100.0	110/120VDC	9.0/9.9	9.0/9.9	7.07	6.61	6.31	6.04
* 653-MY4-02-AC110-120	MY4-02-AC110-120	4PDT	4430.0	110/120VAC	9.9/10.8	8.4/9.2	8.06	7.51	7.20	6.93
* 653-MY4-02DC6C	MY4-02 DC6	4PDT	39.8	6VDC	151.0	151.0	10.99	10.23	9.67	9.08
* 653-MY4-02DC12	MY4-02-DC12	4PDT	160.0	12VDC	75.0	75.0	7.12	6.75	6.37	6.02
* 653-MY4-02DC24	MY4-02 DC24	4PDT	636.0	24VDC	37.7	37.7	7.43	7.20	6.94	6.65
* 653-MY4-02-DC48	MY4-02-DC48	4PDT	2560.0	48VDC	18.8	18.8	8.11	7.29	6.91	6.47
653-MY4AC12(S)	MY4 AC12 (S)	4PDT	46.0	12VAC	106.5	91.0	5.46	5.12	4.88	4.67
653-MY4-AC24	MY4-AC24(S)	4PDT	180.0	24VAC	53.8	46.0	5.41	5.06	4.84	4.63
653-MY4-AC1	MY4-AC110/120(S)	4PDT	4430.0	110/120VAC	9.9/10.8	8.4/9.2	5.60	5.25	5.01	4.80
653-MY4-AC220-240S	MY4-AC220-240S	4PDT	18790.0	220/240VAC	4.8/5.3	4.2/4.6	6.58	6.12	5.87	5.64
653-MY4DC6S	MY4-DC6(S)	4PDT	39.8	6VDC	151.0	151.0	7.64	7.20	6.82	6.39
653-MY4-DC12	MY4-DC12(S)	4PDT	160.0	12VDC	75.0	75.0	5.45	5.11	4.88	4.66
653-MY4-DC24	MY4-DC24(S)	4PDT	636.0	24VDC	37.7	37.7	6.26	5.96	5.77	5.33
653-MY4H-USDC24	MY4H-US DC24	4PDT	636.0	24VDC	37.7	37.7	53.72	50.55	47.74	46.04
653-MY4Z-DC24S	MY4Z-DC24(S)	4PDT (bifurcated)	636.0	24VDC	37.7	37.7	10.76	10.49	9.95	8.87
653-MY4ZAC24S	MY4Z AC24 (S)	4PDT (bifurcated)	180.0	24VAC	53.8	46.0	11.78	11.14	10.72	10.09
<b>With LED Indicator, Standard Coil Polarity</b>										
653-MY2N-AC24S	MY2N-AC24(S)	DPDT	180.0	24VAC	53.8	46.0	13.64	13.09	12.50	11.77
653-MY2N-AC1	MY2N-AC110/120(S)	DPDT	4430.0	110/120VAC	9.9/10.8	8.4/9.2	5.95	5.58	5.32	5.10
653-MY2N-AC220/240S	MY2N-AC220/240(S)	DPDT	18790.0	220/240VAC	4.8/5.3	4.2/4.6	6.51	6.11	5.79	5.33
653-MY2N-DC12S	MY2N-DC12(S)	DPDT	160.0	12VDC	75.0	75.0	6.73	5.82	5.63	5.46
653-MY2N-DC24S	MY2N-DC24(S)	DPDT	636.0	24VDC	37.7	37.7	5.97	5.59	5.35	5.12
653-MY4N-AC24S	MY4N-AC24(S)	4PDT	180.0	24VAC	53.8	46.0	6.83	6.39	6.09	5.82
653-MY4N-AC110/120S	MY4N-AC110/120S	4PDT	4430.0	110/120VAC	9.9/10.8	8.4/9.2	7.18	6.94	6.62	6.32
653-MY4NAC220240S	MY4NAC220/240 (S)	4PDT	18790.0	220/240VAC	4.8/5.3	4.2/4.6	8.33	7.76	7.43	7.15
653-MY4N-DC12(S)	MY4N-DC12(S)	4PDT	160.0	12VDC	75.0	75.0	5.81	5.50	5.23	5.03
653-MY4N-DC24S	MY4N-DC24(S)	4PDT	636.0	24VDC	37.7	37.7	8.28	7.95	7.59	7.15
653-MY4N-AC1	MY4N-AC110/120(S)	4PDT	4430.0	110/120VAC	9.9/10.8	8.4/9.2	13.57	11.13	10.66	10.26
653-MY4N-DC24S	MY4N-DC24(S)	4PDT	636.0	24VDC	37.7	37.7	11.22	10.22	9.70	9.46
<b>With LED Indicator and Built-In Diode, Standard Coil Polarity</b>										
653-MY2N-D2-DC24S	MY2N-D2-DC24S	DPDT	636.0	24VDC	37.7	37.7	10.28	9.68	9.26	8.73
653-MY4N-D2-DC24S	MY4N-D2-DC24S	4PDT	636.0	24VDC	37.7	37.7	11.60	10.86	10.35	9.98
653-MY4Z-D2DC24S	MY4Z-D2 DC24 (S)	4PDT (bifurcated)	636.0	24VDC	37.7	37.7	30.75	27.50	26.33	25.34
<b>With LED Indicator and Built-In Capacitor Resistor, Standard Coil Polarity</b>										
653-MY2N-CRAC110120S	MY2N-CR AC110/120 (S)	DPDT	4430.0	110/120VAC	9.9/10.8	8.4/9.2	13.18	12.28	11.74	11.30
653-MY4N-CRAC110120S	MY4N-CR AC110/120 (S)	4PDT	4430.0	110/120VAC	9.9/10.8	8.4/9.2	14.56	13.64	13.08	12.60
<b>With LED Indicator and Lockable Test Button, Reverse Coil Polarity</b>										
653-MY2N-DC24S	MY2N-DC24S	DPDT	180.0	24VAC	53.8	46.0	7.16	6.75	6.36	6.13
653-MY2N-DC12S	MY2N-DC12(S)	DPDT	160.0	12VDC	75.0	75.0	6.69	6.28	5.99	5.73
653-MY2NDC24S	MY2N DC24 (S)	DPDT	636.0	24VDC	37.7	37.7	5.40	5.05	4.84	4.63
653-MY4N-AC24	MY4N-AC24(S)	4PDT	180.0	24VAC	53.8	46.0	7.78	7.46	6.93	6.37
653-MY4NAC110120S	MY4N AC110/120 (S)	4PDT	4430.0	110/120VAC	9.9/10.8	8.4/9.2	6.68	6.27	5.98	5.77
653-MY4NAC220240S	MY4N AC220/240 (S)	4PDT	18790.0	220/240VAC	4.8/5.3	4.2/4.6	8.36	7.72	7.52	7.23
653-MY4N-DC12S	MY4N-DC12(S)	4PDT	160.0	12VDC	75.0	75.0	6.65	6.16	5.89	5.71
653-MY4N-DC24S	MY4N-DC24(S)	4PDT	636.0	24VDC	37.7	37.7	7.28	6.81	6.52	6.24

\* PBC Terminals

## ACCESORIES FOR MY SERIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.		Description	Price Each			
				1	25	50	100
653-PFP-100N	PFP-100N		DIN rail 100cm (39")	6.46	6.07	5.73	5.43
653-PFP-50N	PFP-50N		DIN rail 50cm (19.7")	4.93	4.34	3.87	3.50
653-PFP-M	PFP-M		DIN rail end stop plate	.68	.542	.531	.521
653-PFP-S	PFP-S		DIN rail spacer	.43	.358	.317	.286
653-PY08	PY08		Back connect socket for DPDT, solder terminals	1.25	1.18	1.11	1.06
653-PY08-02	PY08-02		Back connect socket for DPDT, PCB terminals	1.23	1.16	1.10	1.06
653-PY14	PY14		Back connect socket for 4PDT, solder terminals without hold-down clip	1.79	1.71	1.53	1.45
653-PY14-02	PY14-02		Back connect socket for 4PDT, PCB terminals without hold-down clip	1.71	1.61	1.53	1.47
653-PYC-A1	PYC-A1		Hold-down clip for track mounted socket DPDT	.25	.248	.234	.226
653-PYC-P	PYC-P		Hold-down clip for back connect socket	.27	.256	.245	.232
653-PYC-P2	PYC-P2		Push-to-test hold-down clip for back connect socket	1.51	1.42	1.38	1.31
653-PYF08A-E	PYF08A-E		Track mounted socket for DPDT	5.23	4.91	4.64	4.40
653-PYF14A-E	PYF14A-E		Front connect socket with screw terminals without hold-down clip and track mounted for 4PDT	6.71	6.56	6.27	6.01
653-Y92H-3	Y92-H3		Hold-down clip for track mounted socket and RC circuit	2.00	1.82	1.66	1.53

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2013

# OMRON General Purpose Relays

OMRON

## MJN SERIES: SQUARE-BASE GENERAL PURPOSE RELAYS

### Specifications:

- Contact resistance: 50mΩ Max.
- Plug-in terminals
- Power consumption: AC DPDT - 1.7VA, 3PDT-2.0VA; DC-1.2W

\*Socket not required for 20A models; they are flange mounted and do not require terminals

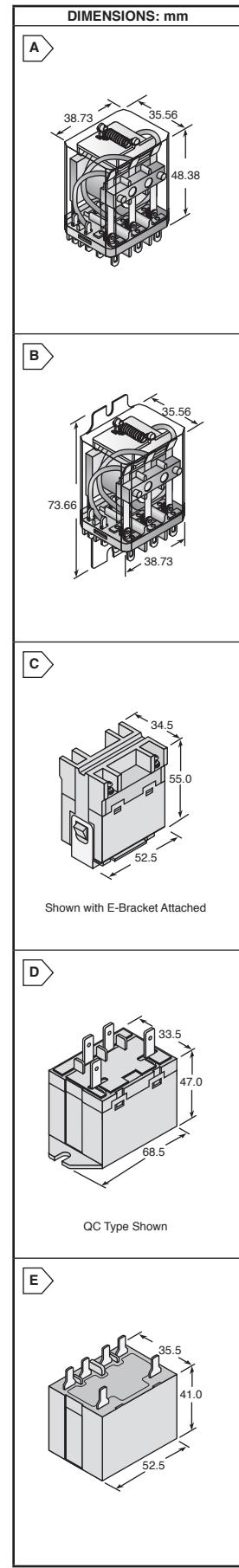
### Features:

- Rugged power driver offers superior 3/16" through-air and 3/8" over-surface spacing
- Interlocked frame and contact block prevent contact misalignment during plug-in
- Available with dust covers, indicator lamps and push-to-operate buttons



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Coil Voltage	Contact Rating	Price Each			
						1	25	50	100
<b>Standard Mount</b>									
653-MJN2C-DC12	MJN2C-DC12	A	DPDT	12VDC	10A	10.80	10.18	9.79	9.16
653-MJN2C-DC24	MJN2C-DC24	A	DPDT	24VDC	10A	15.25	14.49	13.72	12.46
653-MJN3C-DC12	MJN3C-DC12	A	3PDT	12VDC	10A	14.11	13.45	11.96	11.79
653-MJN3C-DC24	MJN3C-DC24	A	3PDT	24VDC	10A	13.69	11.64	10.13	9.50
653-MJN3C-AC12	MJN3C-AC12	A	3PDT	12VAC	10A	11.60	11.26	10.93	10.60
653-MJN3C-AC1	MJN3C-AC120	A	3PDT	120VAC	10A	13.15	12.62	12.22	11.91
<b>Flange Mount</b>									
653-MJN1CF-DC12	MJN1CF-DC12	B	SPDT	12VDC	10A	15.26	14.81	14.38	13.66
653-MJN2CF-DC12	MJN2CF-DC12	B	DPDT	12VDC	10A	14.61	12.42	10.81	10.41
* 653-MJN2CF-AC1	MJN2CF-AC120	B	DPDT	120VAC	10A	11.11	10.70	10.51	10.05
* 653-MJN2CE-DC12	MJN2CE-DC12	B	DPDT	12VDC	20A	19.53	17.58	15.62	14.05
653-MJN2CE-DC24	MJN2CE-DC24	B	DPDT	24VDC	20A	20.12	18.10	16.08	14.48
653-MJN2CE-AC1	MJN2CE-AC120	B	DPDT	120VAC	20A	23.27	20.93	18.60	16.75
<b>Sockets for MJN Series</b>									
653-PTFPCB	PTFPCB			11-pin PCB terminal, screw mount		1.22	1.15	1.10	1.06
653-PTF11QDC	PTF11QDC			11-pin QC terminal, screw mount		1.45	1.36	1.26	1.14
653-PTF21PC	PTF21PC			11-pin screw terminal, screw mount		7.57	7.16	6.79	6.55
653-PTF11PC	PTF11PC			11-pin screw terminal, DIN mount		6.86	6.48	6.15	5.95
653-PFP-M	PFP-M			DIN rail end stop plate		.68	.542	.531	.521
653-PFP-100N	PFP-100N			DIN rail 100cm (39")		6.46	6.07	5.73	5.43



## G7L SERIES: HIGH-CAPACITY GENERAL PURPOSE RELAYS

### Specifications:

- Contact rating: Single-pole type 30A @ 220VAC  
Double-pole type 25A @ 220VAC
- Power consumption: AC coil 1.70-2.50VAC/DC coil 1.90W
- Contact material: Ag Alloy
- Impulse withstand voltage: 10,000V between coil and contacts
- Conforms to IEC 950
- Class B insulation
- E-Bracket type requires E-Bracket or socket to mount.

### Features:

- Ideally suited for high-inrush fluid pump controls: pool/spa, water processing, emergency, chemical industry, etc.
- High-capacity, high-withstand voltage relay with no contact chattering for momentary voltage drops up to 50% of rated voltage.
- Wide-range AC-activated coil that handles 100-120VAC at either 50 or 60Hz
- Miniature hinge for maximum switching capacity, particularly for inductive loads



RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Coil Voltage	Terminal Type	Price Each			
						1	25	50	100
<b>*E-Bracket Type</b>									
653-G7L-2A-B-CB-DC12	G7L-2A-B-CB-DC12	C	DPST-NO	12VDC	Screw terminals	12.69	11.55	10.60	9.77
653-G7L-1ATCB-AC1	G7L-1ATCB-AC100/120	C	SPST-NO	100/120VAC	.250" Quick connect	8.93	8.12	7.45	6.87
<b>*E-Bracket Type with Test Button</b>									
653-G7L-1A-BJ-DC24	G7L-1A-BJ-CB-DC24	C	SPST-NO	24VDC	Screw terminals	19.80	18.00	16.50	15.22
653-G7L-1A-TJ-DC24	G7L-1A-TJ-CB-DC24	C	SPST-NO	24VDC	.250" Quick connect	9.57	8.91	8.71	8.22
653-G7L-2A-BJ-DC24	G7L-2A-BJ-CB-DC24	C	DPST-NO	24VDC	Screw terminals	16.10	13.08	11.99	11.62
653-G7L2ATJCBAC24	G7L-2A-TJ-CB-AC24	C	DPST-NO	24VAC	.250" Quick connect	11.71	8.95	8.21	7.58
653-G7L-2A-TJ-AC2	G7L-2A-TJ-CB-AC200/240	C	DPST-NO	200/240VAC	.250" Quick connect	11.84	10.76	9.86	9.10
653-G7L-2A-TJ-DC24	G7L-2A-TJ-CB-DC24	C	DPST-NO	24VDC	.250" Quick connect	11.92	10.83	9.92	9.15
<b>Upper Bracket</b>									
653-G7L-1A-AC100/120	G7L-1A-TUB-CB-AC100/120	D	SPST-NO	100/120VAC	.250" Quick connect	9.53	8.67	7.96	7.33
653-G7L-2ABUBCBAC24	G7L-2ABUB-CB-AC24	D	DPST-NO	24VAC	Screw terminals	13.49	12.25	11.23	10.35
653-G7L-2A-TUBCBAC24	G7L-2A-TUB-CB-AC24	D	DPST-NO	24VAC	.250" Quick connect	9.53	8.68	7.96	7.33
653-G7L-2ATUBCBAC200	G7L-2A-TUB-CB-AC200/240	D	DPST-NO	200/240VAC	.250" Quick connect	12.76	11.63	10.66	9.82
653-G7L-2AT-DC24	G7L-2A-TUB-CB-DC24	D	DPST-NO	24VDC	.250" Quick connect	11.25	10.24	9.40	8.66
<b>Upper Bracket with Test Button</b>									
653-G7L-1ABUBJCBAC24	G7L-1ABUB-J-CB-AC24	D	SPST-NO	24VAC	Screw terminals	11.96	11.30	10.71	10.02
653-G7L1ABUBJCBAC	G7L-1ABUB-J-CB-AC100/120	D	SPST-NO	100/120VAC	Screw terminals	13.10	11.93	10.94	10.09
653-G7L1ABUBJCB200	G7L-1ABUB-J-CB-AC200/240	D	SPST-NO	200/240VAC	Screw terminals	19.78	18.37	16.94	16.94
653-G7L-1A-BUB-JDC12	G7L-1A-BUB-J-CB-DC12	D	SPST-NO	12VDC	Screw terminals	11.06	10.27	9.76	9.46
653-G7L-1A-AC24	G7L-1A-TUB-J-CB-AC24	D	SPST-NO	24VAC	.250" Quick connect	9.52	8.67	7.95	7.33
653-G7L-1A-AC1	G7L-1A-TUB-J-CB-AC100/120	D	SPST-NO	100/120VAC	.250" Quick connect	9.53	8.68	7.96	7.34
653-G7L-1A-AC2	G7L-1A-TUB-J-CB-AC200/240	D	SPST-NO	200/240VAC	.250" Quick connect	12.66	11.51	10.55	10.07
653-G7L-1ATUBJCBDC12	G7L-1A-TUB-J-CB-DC12	D	SPST-NO	12VDC	.250" Quick connect	19.70	18.62	16.56	14.07
653-G7L-1A-DC24	G7L-1A-TUB-J-CB-DC24	D	SPST-NO	24VDC	.250" Quick connect	8.76	7.31	6.97	6.79
653-G7L-2AB-AC24	G7L-2A-BUB-J-CB-AC24	D	DPST-NO	24VAC	Screw terminals	18.43	17.01	16.05	15.80
653-G7L-2AB-AC1	G7L-2A-BUB-J-CB-AC100/120	D	DPST-NO	100/120VAC	Screw terminals	13.69	12.47	11.44	10.55
653-G7L-2AB-AC2	G7L-2A-BUB-J-CB-AC200/240	D	DPST-NO	200/240VAC	Screw terminals	16.09	15.20	12.96	11.96
653-G7L-2AB-DC12	G7L-2A-BUB-J-CB-DC12	D	DPST-NO	12VDC	Screw terminals	16.18	15.06	13.88	13.14
653-G7L-2AB-DC24	G7L-2A-BUB-J-CB-DC24	D	DPST-NO	24VDC	Screw terminals	17.62	16.61	15.80	15.21
653-G7L-2AB-AC24	G7L-2A-BUB-J-CB-AC24	D	DPST-NO	24VAC	.250" Quick connect	12.78	11.89	11.30	10.83
653-G7L-2A-AC1	G7L-2A-TUB-J-CB-AC100/120	D	DPST-NO	100/120VAC	.250" Quick connect	10.14	9.43	8.96	8.59
653-G7L-2A-AC2	G7L-2A-TUB-J-CB-AC200/240	D	DPST-NO	200/240VAC	.250" Quick connect	11.39	10.79	9.58	8.96
653-G7L-2AJ-DC12	G7L-2A-TUB-J-CB-DC12	D	DPST-NO	12VDC	.250" Quick connect	7.77	7.67	7.46	7.26
653-G7L-2A-DC24	G7L-2A-TUB-J-CB-DC24	D	DPST-NO	24VDC	.250" Quick connect	14.10	12.80	11.74	10.82
653-G7L2ATUBJCBDC48	G7L-2A-TUB-J-CB-DC48	D	DPST-NO	48VDC	.250" Quick connect	8.95	8.15	7.46	6.88
<b>PCB Mount</b>									
653-G7L-2A-PCB-DC12	G7L-2A-P-CB-DC12	E	DPST-NO	12VDC	PCB terminals	21.87	19.90	18.21	16.81
653-G7L2APCBDC24	G7L-2A-P-CB-DC24	E	DPST-NO	24VDC	PCB terminals	14.90	13.54	12.41	11.45
<b>Accessories</b>									
653-P7LF-C	P7LF-C				Description				
653-P7LF-06	P7LF-06				Cover for QC terminal type	.75	.718	.688	.668
					Front connecting socket for QC terminal (includes P7LF-C)	14.90	14.19	13.58	13.03

# OMRON General Purpose Relays

OMRON

## G2RS SERIES: SLIM, POWER PLUG-IN RELAYS

### Specifications:

- Contact rating: SPDT 10A @ 250VAC/30VDC
- DPDT 5A @ 250VAC/30VDC
- Power consumption: AC 0.90VA @ 60Hz
- DC 0.53W

### Features:

- Slim and space-saving power plug-in relays
- Built-in mechanical operation indicator
- Provided with nameplate
- Slim and space-saving power plug-in relays
- LED type is equipped with a coil-disconnection, self-diagnostic function.
- High switching power (1-pole: 10A)



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Number of Poles	Rated Current (mA)		Coil Resistance (Ω)	Coil Voltage	Price Each			
					@50Hz	@60Hz			1	25	50	100
<b>General Purpose Type</b>												
653-G2R-1-S-DC24S	G2R-1-S-DC24S	A	SPDT	1	21.6	21.6	1,113	24VDC	4.24	3.99	3.79	3.63
653-G2R-1-SDC48S	G2R-1-S-DC48(S)	A	SPDT	1	11.4	11.4	4,220	48VDC	5.05	4.60	4.21	3.88
653-G2R-1-S-AC24S	G2R-1-S-AC24S	A	SPDT	1	43.5	37.4	253	24VAC	6.72	6.11	5.60	5.17
653-G2R-1-AC120S	G2R-1-S-AC120S	A	SPDT	1	8.6	7.5	7,286	120VAC	7.12	6.67	6.14	5.66
653-G2R-1-SAC240S	G2R-1-S-AC240(S)	A	SPDT	1	3.7	3.2	30,360	240VAC	12.23	11.11	10.18	9.40
653-G2R-2-SDC6S	G2R-2-SDC6(S)	B	DPDT	2	87.0	87.0	69	6VDC	6.04	5.48	4.96	4.48
653-G2R-2-SDC12S	G2R-2-S-DC12(S)	B	DPDT	2	43.2	43.2	278	12VDC	4.86	4.54	4.34	4.07
653-G2R-2-SDC24S	G2R-2-S-DC24S	B	DPDT	2	21.6	21.6	1,113	24VDC	5.72	5.26	4.75	4.28
653-G2R-2-SDC48S	G2R-2-S-DC48(S)	B	DPDT	2	11.4	11.4	4,220	48VDC	5.88	5.34	4.89	4.51
653-G2R-2-S-AC24S	G2R-2-S-AC24S	B	DPDT	2	43.5	37.4	253	24VAC	7.38	6.92	6.61	6.33
653-G2R-2-S-AC120S	G2R-2-S-AC120S	B	DPDT	2	8.6	7.5	7,286	120VAC	8.03	7.51	7.18	6.90
653-G2R-2-SAC240S	G2R-2-S-AC240(S)	B	DPDT	2	3.7	3.2	30,360	240VAC	12.42	11.30	10.19	9.20

### With Diode

653-G2R-1-SDDC24S	G2R-1-SD DC24(S)	C	SPDT	1	21.6	21.6	1,113	24VDC	6.66	5.76	5.45	4.92
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### With LED Indicator

653-G2R-1-SN-DC12S	G2R-1-SN-DC12S	D	SPDT	1	43.2	43.2	278	12VDC	10.95	10.58	9.70	8.96
653-G2R-1-SN-DC24S	G2R-1-SN-DC24S	D	SPDT	1	21.6	21.6	1,113	24VDC	8.25	7.50	6.88	6.35
653-G2R-1-SN-AC24S	G2R-1-SN-AC24S	E	SPDT	1	43.5	37.4	253	24VAC	8.45	7.68	7.03	6.48
653-G2R-1-SN-AC120S	G2R-1-SN-AC120S	E	SPDT	1	8.6	7.5	7,286	120VAC	10.87	9.88	8.91	8.04
653-G2R-2-SDNC6S	G2R-2-SD NC6(S)	F	DPDT	2	87.0	87.0	69	6VDC	10.00	9.08	8.33	7.69
653-G2R-2-SD-DC24S	G2R-2-SD-DC24S	F	DPDT	2	21.6	21.6	1,113	24VDC	11.37	10.47	9.46	8.55
653-G2R-2-SD-AC24S	G2R-2-SD-AC24S	G	DPDT	2	43.5	37.4	253	24VAC	9.71	9.18	8.71	8.43
653-G2R-2-SD-AC120S	G2R-2-SD-AC120S	G	DPDT	2	8.6	7.5	7,286	120VAC	11.62	10.68	9.78	9.04

### LED Indicator with Test Button

653-G2R-1-SNIDC24S	G2R-1-SNI DC24(S)	D	SPDT	1	21.6	21.6	1,113	24VDC	8.87	8.14	7.37	6.63
653-G2R-2-SNIDC24S	G2R-2-SNI DC24(S)	G	DPDT	2	21.6	21.6	1,113	24VDC	8.44	7.98	7.56	7.31

### With LED Indicator and Diode

653-G2R-1-SND-DC24S	G2R-1-SND-DC24S	H	SPDT	1	21.6	21.6	1,113	24VDC	9.51	8.64	7.91	7.56
653-G2R-2-SND-DC12S	G2R-2-SND-DC12(S)	I	DPDT	2	43.2	43.2	278	12VDC	10.87	10.48	9.44	8.53
653-G2R-2-SND-DC24S	G2R-2-SND-DC24S	I	DPDT	2	21.6	21.6	1,113	24VDC	12.73	11.72	10.59	9.57

### With LED Indicator and Diode with Test Button

653-G2R-2-SNDIDC24S	G2R-2-SNDI DC24(S)	I	DPDT	2	21.6	21.6	1,113	24VDC	13.99	12.88	11.63	10.52
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### Accessories

MOUSER STOCK NO.	Omron Part No.	Fig.	Description									
653-P2RF-05-E	P2RF-05-E		Track mount socket for G2R-1-S and G2R-1-SN, screw terminals						3.71	3.51	3.35	3.18
653-P2RF-08	P2RF-08		Track mount socket for G2R-2-S and G2R-2-SN, solder terminals						8.17	7.72	7.32	7.09
653-P2RF-08-E	P2RF-08-E		Track mount socket for G2R-2-S and G2R-2-SN, screw terminals						6.92	6.30	5.76	5.31
653-P2RF-05S	P2RF-05S		Track mount socket for G2R-1-S and G2R-1-SN, screwless clamp						6.07	5.46	4.86	4.37
653-P2RF-08S	P2RF-08S		Track mount socket for G2R-2-S and G2R-2-SN, screwless clamp						11.16	9.96	8.92	8.03
653-P2R-05P	P2R-05P		Back mount socket for G2R-1-S and G2R-1-SN, PCB terminals						1.69	1.67	1.57	1.51
653-P2R-08P	P2R-08P		Back mount socket for G2R-2-S and G2R-2-SN, PCB terminals						1.88	1.78	1.69	1.57
653-PFP-100N	PFP-100N		DIN rail 100mm (39") length						6.46	6.07	5.73	5.43
653-PFP-M	PFP-M		Din rail end stop plate						.68	.542	.531	.521

## MGN SERIES: 30A HEAVY-DUTY, OPEN-FRAME POWER RELAYS

### Specifications:

- Life expectancy: • Maximum operating frequency: Rated load: 1,200 operations/hour Mechanical: 1,000,000 operations
- Dielectric strength: 2,200VRMS, 50/60Hz
- Terminal type: Screw

### Features:

- Class F coil insulation system for 155°C (311°F)
- Coil molded in DuPont Rynite® for environmental protection
- Rugged construction rivets terminals to base
- Short Circuit Current Rating (SCCR) of 5kA, 600VAC

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Rated Coil Voltage	Base Size	Price Each			
						1	25	50	100
653-MGN1-AC120	MGN1-AC120	J	SPDT	120VAC	Short	28.59	27.01	26.06	24.70
653-MGN1-DC12	MGN1-DC12	J	SPDT	12VDC	Short	32.37	29.16	27.46	26.42
653-MGN1-DC24	MGN1-DC24	J	SPDT	24VDC	Short	26.04	23.13	21.63	20.83
653-MGN2A-AC240	MGN2A-AC240	J	DPST-NO	240VAC	Short	33.26	29.80	29.40	28.89
653-MGN2A-DC12	MGN2A-DC12	J	DPST-NO	12VDC	Short	33.50	31.73	29.98	28.21
653-MGN2A-DC24	MGN2A-DC24	J	DPST-NO	24VDC	Short	23.60	21.95	20.51	19.76
653-MGN2C-AC120	MGN2C-AC120	K	DPDT	120VAC	Long	36.71	33.03	29.35	24.96
653-MGN2C-DC12	MGN2C-DC12	K	DPDT	12VDC	Long	48.72	43.83	38.96	35.09

## G7Z SERIES: POWER RELAYS WITH AUXILIARY CONTACT BLOCKS

### Specifications:

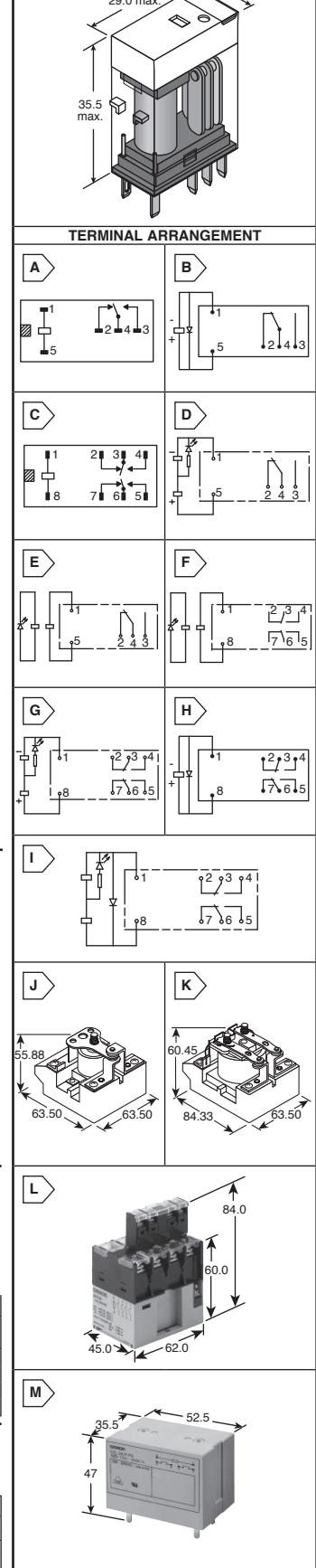
- Maximum operating frequency: Rated load: 1,200 operations/hour
- Mechanical: 1,800 operations/hour
- Dielectric strength: 4,000VAC, 50/60Hz
- Terminal type: Screw

### Features:

- Possible to reach a maximum load capacity of 160A when using 4-pole parallel connections
- EN 60947-4-1 certification for mirror contact mechanisms has been obtained by using a combination of the relay and auxiliary contact blocks

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Configuration		Coil Voltage (VDC)	Price Each			
			Relay	Auxiliary Contact Block		1	25	50	100
653-G7Z-2A2B-11ZDC12	G7Z-2A2B-11Z DC12	L	DPST-NO/DPST-NC	SPST-NO/SPST-NC	12	121.65	113.06	109.94	104.15
653-G7Z-2A2B-02ZDC24	G7Z-2A2B-02Z DC24	L	DPST-NO/DPST-NC	DPST-NC	24	121.65	113.06	109.94	104.15
653-G7Z-4A-11ZDC12	G7Z-4A-11Z DC12	L	4PST-NO	SPST-NO/SPST-NC	12	121.65	113.06	109.94	104.15
653-G7Z-4A-11ZDC24	G7Z-4A-11Z DC24	L	4PST-NO	SPST-NO/SPST-NC	24	129.94	120.68	117.35	111.18



# OMRON Power Relays

RoHS Compliant

This page of product is RoHS compliant.

## G9EA-1 SERIES: 60A AND 100A DC POWER RELAYS

## Specifications:

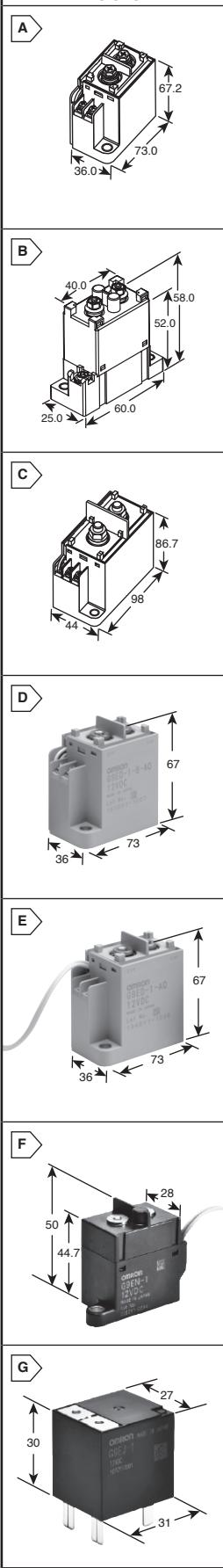
- Contact form: SPST-NO
- Power consumption: Approx. 5W
- Rated load: 60A @ 400VDC  
100A @ 120VDC
- Terminal type: Screw

## Features:

- Switching and driving sections are gas-injected/hermetically sealed which allow relays to interrupt high-capacity loads
- Sealed construction requires no arc space, saves space, and helps ensure safe applications
- No restrictions on the mounting direction



DIMENSIONS: mm



MOUSER STOCK NO.	Omron Part No.	Fig.	Rated Current (mA)	Coil Resistance (Ω)	Coil Voltage (VDC)	Price Each			
						1	25	50	100
<b>Switching/Current Conduction Models, 60A</b>									
653-G9EA-1-B-DC12	G9EA-1-B-DC12	A	417.0	28.8	12	135.18	129.31	123.92	118.98
653-G9EA-1-B-DC24	G9EA-1-B-DC24	A	208.0	115.2	24	152.31	145.68	139.62	134.03
<b>High-Current Conduction Models, 100A</b>									
653-G9EA-1-B-CA-DC12	G9EA-1-B-CA-DC12	A	417.0	28.8	12	231.10	223.61	213.83	200.50
653-G9EA-1-B-CA-DC24	G9EA-1-B-CA-DC24	A	208.0	115.2	24	220.12	212.22	205.56	195.98
<b>Accessories</b>									
653-P9EA-C	P9EA-C	-		Terminal cover		2.67	2.40	2.13	1.92
653-P9EA-D	P9EA-D	-		DIN track adapter		13.55	12.19	10.84	9.76

For quantities greater than listed, call for quote.

## G9EB-1 SERIES: 25A DC POWER RELAYS



## Specifications:

- Contact form: SPST-NO
- Power consumption: Approx. 5W
- Terminal type: Screw

## Features:

- Low-cost relay that is both compact 25x60x58mm and lightweight @ approx. 135g
- Unique gas-filled, fully sealed, non-ceramic construction reduces need for special processing and materials

For quantities greater than listed, call for quote.

**Switching/Current Conduction Models, 25A**

653-G9EB-1-B-DC12	G9EB-1-B-DC12	B	166.7	72.0	12	127.45	120.37	106.20	99.12
653-G9EB-1-B-DC24	G9EB-1-B-DC24	B	83.3	288.0	24	159.31	144.37	132.75	123.90
653-G9EB-1-B-DC48	G9EB-1-B-DC48	B	41.7	1152.0	48	165.80	160.83	154.79	143.73

## G9EC-1 SERIES: 200A DC POWER RELAYS



## Specifications:

- Contact form: SPST-NO
- Power consumption: Approx. 11W
- Rated load: 200A @ 400VDC
- Terminal type: Screw

## Features:

- Switching and driving sections are gas-injected/hermetically sealed which allow relays to interrupt high-capacity loads.
- Sealed construction requires no arc space, saves space, and helps ensure safe applications.
- No restrictions on the mounting direction

For quantities greater than listed, call for quote.

**Switching/Current Conduction Models, 200A**

653-G9EC-1-B-DC24	G9EC-1-B-DC24	C	469.0	51.2	24	270.35	262.06	247.87	238.00
<b>Accessory</b>									
653-P9EC-C	P9EC-C	-		Terminal cover		3.74	3.36	2.99	2.69

## G9ED-1 SERIES: 150A COMPACT DC POWER RELAYS



## Specifications:

- Contact form: SPST-NO
- Power consumption: Approx. 4W
- Rated load: 150A @ 400VDC
- Maximum switching voltage: 400V
- Maximum switching current: 150A

## Features:

- Switching and driving sections are gas-injected/hermetically sealed which allow relays to interrupt high-capacity loads.
- Sealed construction requires no arc space, saves space, and helps ensure safe applications.
- High contact reliability unaffected by ambient atmosphere
- No restrictions on the mounting direction

For quantities greater than listed, call for quote.

**Models with M3.5 Screw Terminals**

653-G9ED-1-B-AQ-DC12	G9ED-1-B-AQ-DC12	D	150.0	36.0	12	334.00	261.86	252.50	239.79
653-G9ED-1-B-AQ-DC24	G9ED-1-B-AQ-DC24	D	150.0	144.0	24	314.00	246.18	237.38	225.43

**Models with Leadwires**

653-G9ED-1-AQ-DC12	G9ED-1-AQ-DC12	E	150.0	36.0	12	335.00	262.64	253.26	240.50
653-G9ED-1-AQ-DC24	G9ED-1-AQ-DC24	E	150.0	144.0	24	325.00	254.80	245.70	233.32

## G9EN-1 SERIES: 60A SMALL, LIGHTWEIGHT DC POWER RELAYS



## Specifications:

- Contact form: SPST-NO
- Power consumption: Approx. 5W
- Rated load: 60 A at 400 VDC
- Maximum switching voltage: 400V
- Maximum switching current: 60A

## Features:

- DC Power Relays enable load interruption at high voltage/current
- Enables downsizing and non-polarization in main contact circuit (contact terminal) by using proprietary design of contact block
- Improves ease of wiring, mounting, and error-proofing against faulty wiring
- Class' Smallest: 50x28x40mm (HxWxL)
- Class' Lightest: approx. 140g

For quantities greater than listed, call for quote.

**MOUSER STOCK NO.**

MOUSER STOCK NO.	Omron Part No.	Fig.	Rated Current (mA)	Coil Resistance (Ω)	Coil Voltage (VDC)	Price Each	1	25	50	100
653-G9EN-1-UVD-DC12	G9EN-1-UVD-DC12	F	167.0	72.0	12	179.68	157.27	147.97	142.68	
653-G9EN-1-UVD-DC24	G9EN-1-UVD-DC24	F	417.0	28.8	12	179.69	157.28	147.98	142.69	

## G9EJ-1 SERIES: 25A SWITCHING CURRENT DC POWER RELAYS

## Specifications:

- Contact form: SPST-NO
- Power consumption: Approx. 2W
- Rated load: 25 A at 400 VDC
- Maximum switching voltage: 400V
- Maximum switching current: 25A

## Features:

- DC Power Relays capable of loading at high voltage/current
- Achieves improvement of inrush-withstand performance and long-life by adopting Omron's own contact driving system.
- High capacity switching through use of high-efficiency magnetic arc blowout circuit
- Small and lightweight

For quantities greater than listed, call for quote.

653-G9EJ-1-DC12	G9EJ-1-DC12	G	208.0	115.2	24	31.00	26.04	25.69	24.30
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# OMRON Safety, Low Signal and General Purpose Relays

RoHS Compliant

This page of product is RoHS compliant.

## G7SA SERIES: SLIM, PLUG-IN SAFETY RELAYS FOR MACHINE CONTROL

### Specifications:

- Rated voltage: 24VDC
- Rated load: 6A @ 250VAC/30VDC
- Flux-tight
- Electrical life: 100,000 operations min.

### Features:

- Slim body
- Terminal arrangement simplifies PCB pattern design
- Positive, force-guided contacts



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	No. of Contacts	Contact Form	NO Contacts	NC Power	Price Each			
							1	10	25	50
653-G7SA-2A2B-DC24	G7SA-2A2B-DC24	A	4	DPST-NO, DPST-NC	2	2	34.26	33.23	32.54	31.58
653-G7SA-3A1B-DC24	G7SA-3A1B-DC24	A	4	3PST-NO, SPST-NC	3	1	44.65	42.45	37.84	35.84
653-G7SA-4A2B-DC24	G7SA-4A2B-DC24	B	6	4PST-NO, DPST-NC	4	2	40.04	36.76	35.89	35.45
653-G7SA-5A1B-DC24	G7SA-5A1B-DC24	B	6	5PST-NO, SPST-NC	5	1	47.95	45.65	41.04	38.95

### Sockets for G7SA

		Description								
653-P7SA-10F	P7SA-10F	4-pole DIN rail and screw mounting					33.19	31.62	30.17	28.48
653-P7SA-14F	P7SA-14F	6-pole DIN rail and screw mounting					31.45	29.41	28.06	26.43
653-P7SA-10P	P7SA-10P	4-pole PCB terminal					8.00	7.50	7.15	6.73
653-P7SA-14P	P7SA-14P	6-pole PCB terminal					8.65	8.25	7.79	6.92
653-P7SA-10F-NDDC24	P7SA-10F-ND DC24	4-pole DIN rail and screw mounting with LED indicator					33.87	31.80	31.00	29.38
653-P7SA-14F-ND	P7SA-14F-ND DC24	6-pole DIN rail and screw mounting with LED indicator					40.19	37.09	35.01	33.46

## G2RV SERIES: 6A INDUSTRIAL, SLIM RELAYS

### Specifications:

- Rated load: 6A @ 250VAC/30VDC
- Contact resistance: 100mΩ max.
- Contact form: SPDT
- Contact material: AgSln
- Terminal type: Screw

### Features:

- Large, plug-in terminals for reliable connection
- LED indicator, clear case, and mechanical flag allows easy and immediate visual operation verification.
- Has a maximum switching voltage of 440VAC
- Low power consumption for system energy savings

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Coil Voltage	Rated Current (mA)		Power Consumption (approx.)		Price Each				
				50Hz	60Hz	DC	AC(VA)	DC(mW)	1	25	50	100
653-G2RV-SL-ACDC24	G2RV-SL700-AC/DC24	C	24VAC/DC	21.1	22.5	13.0	0.5	300	18.31	16.66	14.81	14.08
653-G2RV-SL0AC110	G2RV-SL700-AC110	C	110VAC	7.1	7.5	-	0.8	-	23.78	21.29	20.38	19.74
653-G2RV-SL700AC230	G2RV-SL700 AC230	C	230VAC	7.3	7.9	-	1.7	-	28.48	25.88	23.72	21.89
653-G2RV-SL-DC24	G2RV-SL700-DC24(DC24)	C	24VDC	-	-	13.3	-	300	19.54	17.50	16.75	15.59

## G7J SERIES: MULTI-POLE POWER RELAYS

### Specifications:

- Contact rating: 25A (NO) @ 250 VAC/30VDC, 8A (NC) @ 220VAC/30VDC
- Maximum switching current: 25A (NO), 8A (NC)
- Power consumption: AC 1.8-2.6VA / DC 2.0W

### Features:

- Push-to-test button on all models
- Ideal for 3-phase motor control applications
- Class F insulation
- UL508 and 1950 approved



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Contact Form	Rated Current (mA)	Coil Resistance (Ω)	Coil Voltage	Terminal Type	Price Each			
								1	25	50	100
<b>Relay and W-Bracket Set</b>											
653-G7J-2A2BBW-AC1	G7J-2A2B-B-W1-AC100/120	D	DPST-NO/DPST-NC	18.0-21.6	-	100/120VAC	Screw	37.45	34.05	31.20	28.80
653-G7J-3A1BBW-DC24	G7J-3A1B-B-W1-DC24	D	3PST-NO/SPST-NC	83.0	288.0	24VDC	Screw	30.50	28.80	27.78	26.36
653-G7J-4A-B-ACW-AB1	G7J-4A-B-W1-AC100/120	D	4PST-NO	18.0-21.6	-	100/120VAC	Screw	32.53	31.42	30.29	28.28
653-G7J-4A-B-BW-DC24	G7J-4A-B-W1-DC24	D	4PST-NO	83.0	288.0	24VDC	Screw	32.41	30.57	27.41	25.92
<b>Relay Only, Requires a W-Bracket for Mounting (Purchased Separately)</b>											
653-G7J-3A1B-T-AC24	G7J-3A1B-T AC24	D	3PST-NO/SPST-NC	75.0	-	24VAC	QC	31.04	28.23	25.89	23.90
653-G7J-3A1B-B-DC24	G7J-3A1B-B DC24	D	3PST-NO/SPST-NC	83.0	288.0	24VDC	Screw	31.87	28.96	26.53	24.50
653-G7J-3A1B-T-DC24	G7J-3A1B-T DC24	D	3PST-NO/SPST-NC	83.0	288.0	24VDC	QC	27.08	24.38	23.08	21.68
653-G7J-4A-B-DC24	G7J-4A-B DC24	D	4PST-NO	83.0	288.0	24VDC	Screw	27.88	25.33	23.23	21.43
<b>Relay Only, PCB Mount</b>											
653-G7J-2A2BP-AC1	G7J-2A2B-P-AC100/120	D	DPST-NO/DPST-NC	18.0-21.6	-	100/120VAC	PCB	34.62	31.48	28.86	26.65
653-G7J-3A1BP-DC24	G7J-3A1B-P DC24	D	3PST-NO/SPST-NC	83.0	288.0	24VDC	PCB	27.86	25.34	23.22	21.43
653-G7J-4A-P-PAC200240	G7J-4A-P AC200/240	D	4PST-NO	9.0-10.8	-	200/240VAC	PCB	34.51	31.38	28.75	26.54
653-G7J-4A-P-DC12	G7J-4A-P-DC12	D	4PST-NO	167.0	72.0	12VDC	PCB	35.04	31.87	29.19	26.95
653-G7J-4A-P-DC24	G7J-4A-P-DC24	D	4PST-NO	83.0	288.0	24VDC	PCB	28.46	25.87	23.71	22.27
<b>W-Bracket</b>											
653-R99-04FORG5F	R99-04 FOR G5F	-	Description					1.29	1.27	1.13	.982

## G6J-Y SERIES: 1A DPDT ULTRA-COMPACT LOW SIGNAL RELAYS

### Specifications:

- Rated load: 0.3A @ 125VAC 1A @ 30VDC
- Non-latching
- Contact resistance: 100mΩ max.
- Contact material: Ag (Au Clad)

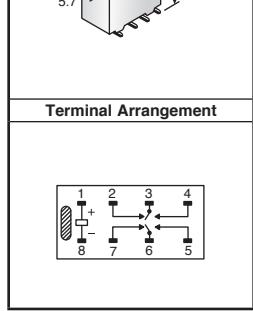
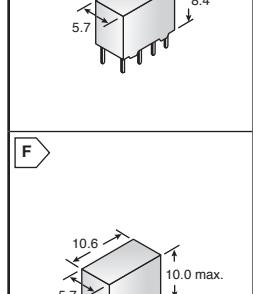
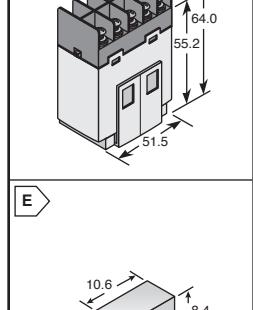
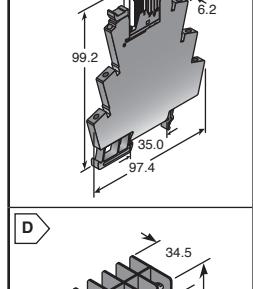
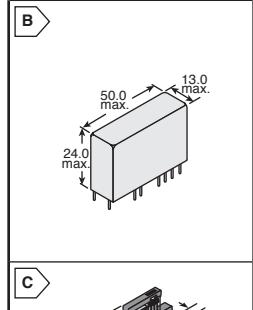
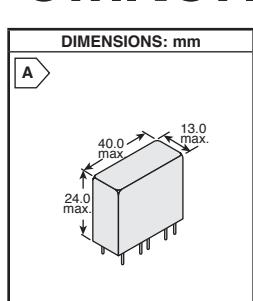
### Features:

- Slim design provides a mounting area reduction
- Dielectric strength of 1500VAC and an impulse withstand voltage of 2500V for 2x10μs which conforms to Telcordia specifications (formerly Bellcore)
- Conforms to FCC Part 68 requirements (1500V, 10x160μs)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Rated Current (mA)	Coil Resistance (Ω)	Coil Voltage (VDC)	Terminal Type	Price Each			
							1	25	50	100
653-G6J-2P-Y-DC3	G6J-2P-Y-DC3	E	48.0	62.5	3	Thru-hole	4.43	3.69	3.50	3.32
653-G6J-2P-Y-DC4.5	G6J-2P-Y-DC4.5	E	32.6	137.9	4.5	Thru-hole	4.72	3.93	3.73	3.54
653-G6J-2P-Y-DC5	G6J-2P-Y-DC5	E	28.9	173.1	5	Thru-hole	4.43	3.69	3.50	3.32
653-G6J-2P-Y-DC12	G6J-2P-Y-DC12	E	12.3	976.8	12	Thru-hole	4.43	3.69	3.50	3.32
653-G6J-2P-Y-DC24	G6J-2P-Y-DC24	E	9.2	2600.5	24	Thru-hole	4.72	3.93	3.73	3.54
653-G6J-2FS-Y-DC3	G6J-2FS-Y-DC3	F	48.0	62.5	3	SMT Short leads	4.43	3.69	3.50	3.32
653-G6J-2FS-Y-DC5	G6J-2FS-Y-DC5	F	28.9	173.1	5	SMT Short leads	4.43	3.69	3.50	3.32
653-G6J-2FS-Y-DC12	G6J-2FS-Y-DC12	F	12.3	976.8	12	SMT Short leads	4.72	3.93	3.73	3.54
653-G6J-2FS-Y-DC24	G6J-2FS-Y-DC24	F	9.2	2600.5	24	SMT Short leads	4.72	3.93	3.73	3.54
653-G6J-2FL-Y-DC4.5	G6J-2FL-Y-DC4.5	F	32.6	137.9	4.5	SMD Gull-wing	4.43	3.69	3.50	3.32
653-G6J-2FL-Y-DC5	G6J-2FL-Y-DC5	F	28.9	173.1	5	SMD Gull-wing	4.43	3.69	3.50	3.32

OMRON



# TE General Purpose Relays



## KUHP SERIES: 20A AND 30A ENCLOSED GENERAL PURPOSE RELAYS

### Specifications:

- Enclosure: Clear polycarbonate cover
- Contact material: AgCdO
- Expected mechanical life: 10 million operations min.
- Terminals: 250° QC/Solder

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	P&B Part No.	Fig.	Coil Voltage	Contact Form	Contact Rating	Price Each			
						1	25	50	100
<b>Bracket Mount Case</b>									
655-KUHP-5A51-24	KUHP-5A51-24	A1	24VAC	SPDT	30A	30.30	26.50	23.99	21.34
655-KUHP-5A51-120	KUHP-5A51-120	A1	120VAC	SPDT	30A	33.94	29.68	26.86	20.81
655-KUHP-5D51-12	KUHP-5D51-12	A1	12VDC	SPDT	30A	16.85	15.02	13.61	10.96
655-KUHP-5D51-24	KUHP-5D51-24	A1	24VDC	SPDT	30A	30.50	26.68	24.16	19.04
655-KUHP-11A51-24	KUHP-11A51-24	A2	24VAC	DPDT	20A	38.87	34.00	30.76	24.28
655-KUHP-11A51-120	KUHP-11A51-120	A2	120VAC	DPDT	20A	19.61	17.16	14.77	11.45
655-KUHP-11D51-12	KUHP-11D51-12	A2	12VDC	DPDT	20A	18.71	16.37	14.82	11.70
655-KUHP-11D51-24	KUHP-11D51-24	A2	24VDC	DPDT	20A	18.92	16.55	14.98	11.44
<b>Top Flange Case</b>									
655-KUHP-5AT1-120	KUHP-5AT1-120	B1	120VAC	SPDT	30A	32.52	27.10	25.01	21.12
655-KUHP-5DT1-12	KUHP-5DT1-12	B1	12VDC	SPDT	30A	30.68	26.82	24.29	18.72
655-KUHP-11A1T1-120	KUHP-11A1T1-120	B2	120VAC	DPDT	20A	17.44	15.25	13.82	12.67
655-KUHP-11D1T1-12	KUHP-11D1T1-12	B2	12VDC	DPDT	20A	18.92	16.55	14.98	11.44
655-KUHP-11D1T1-24	KUHP-11D1T1-24	B2	24VDC	DPDT	20A	34.76	28.96	26.73	22.60

## KUL SERIES: 10A MAGNETIC LATCHING RELAYS

### Specifications:

- Enclosure: Clear polycarbonate cover
- Contact material: AgCdO
- Expected mechanical life: 100,000 operations min.
- Terminals: 187° QC/Solder; silver-cadmium oxide, 10A

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	P&B Part No.	Fig.	Coil Voltage	Contact Form	Number of Coils	Price Each			
						1	25	50	100
655-KUL-11A1S-120	KUL-11A1S-120	C3	120VAC	DPDT	1	55.78	48.80	44.15	34.86
655-KUL-11D15-12	KUL-11D15-12	C4	12VDC	DPDT	2	63.04	55.16	49.91	43.64
655-KUL-11D15-24	KUL-11D15-24	C4	24VDC	DPDT	2	61.81	54.08	48.94	42.79

### Sockets and Accessories for KUL Series

#### Description

655-27E043	27E043	Solder eyelet socket, rated 15A, for 1-3 pole relays	2.05	1.86	1.80	1.67
655-27E067	27E067	PCB terminal socket, rated 15A, for 1-3 pole relays	3.72	3.32	3.20	2.87
655-27E121	27E121	Screw terminal socket, rated 15A, for 1-3 pole relays	8.12	6.81	6.29	5.65
655-27E396	27E396	.187" quick connect socket, rated 15A, for 1-3 pole relays	3.82	3.33	3.02	2.38
655-27E893	27E893	Screw term., DIN rail snap-mnt socket, for 1-3 pole relays	9.66	8.05	7.44	6.77
655-20C247	20C247	Hold down spring for 27E043 and 27E067	1.62	1.43	1.28	1.02
655-20C314	20C314	Hold down spring for 27E121	.33	.315	.305	.30
655-20C318	20C318	Hold down spring for 27E893	.33	.284	.25	.216
655-24A110	24A110	Aluminum DIN rail track, 36"	14.02	12.27	11.11	8.77

## KUMP SERIES: 15A ENCLOSED GENERAL PURPOSE RELAYS

### Specifications:

- Enclosure: Clear polycarbonate cover
- Contact material: AgCdO
- Expected mechanical life: 100,000 operations min.

- Terminals: .187" QC/solder; silver-cadmium-oxide
- Mounting: #6-32 stud, .218" locating tab

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	P&B Part No.	Fig.	Coil Voltage	Contact Form	Contact Rating	Price Each			
						1	25	50	100
655-KUMP-11A18-24	KUMP-11A18-24	D5	24VAC	DPDT	15A	18.36	16.06	14.52	11.52
655-KUMP-11A18-120	KUMP-11A18-120	D5	120VAC	DPDT	15A	15.90	15.25	13.40	12.83
655-KUMP-11D18-12	KUMP-11D18-12	D5	12VDC	DPDT	15A	14.97	12.66	11.77	10.69
655-KUMP-11D18-24	KUMP-11D18-24	D5	24VDC	DPDT	15A	17.47	15.27	13.82	10.91
655-KUMP-11D18-110	KUMP-11D18-110	D5	110VDC	DPDT	15A	17.91	15.68	14.17	11.24
655-KUMP-14A18-120	KUMP-14A18-120	D6	120VAC	3PDT	15A	17.58	14.28	13.44	13.05
655-KUMP-14D18-12	KUMP-14D18-12	D6	12VDC	3PDT	15A	17.30	14.16	13.17	12.35
655-KUMP-14D18-24	KUMP-14D18-24	D6	24VDC	3PDT	15A	18.84	15.41	14.14	13.17

### Sockets and Accessories for KUMP Series

#### Description

655-27E043	27E043	Solder eyelet socket, rated 15A, for 1-3 pole relays	2.05	1.86	1.80	1.67
655-27E067	27E067	.187" quick connect, rated 15A, for 1-3 pole relays	3.72	3.32	3.20	2.87
655-27E121	27E121	Screw terminal socket, rated 15A, for 1-3 pole relays	8.12	6.81	6.29	5.65
655-27E396	27E396	.187" quick connect socket, rated 15A, for 1-3 pole relays	3.82	3.33	3.02	2.38
655-27E667	27E867	Screw terminal socket, rated 15A, for 4 pole relays	22.06	19.30	17.45	13.79
655-27E893	27E893	Screw term., DIN rail snap-mnt socket, for 1-3 pole relays	9.66	8.05	7.44	6.77
655-20C228	20C228	Hold down spring with screw for 27E043 and 27E067	.67	.61	.56	.52
655-20C254	20C254	Snap-on hold down spring for 27E043 and 27E067	.24	.224	.217	.21
655-20C318	20C318	Hold down spring for 27E893	.33	.284	.25	.216
655-24A110	24A110	Aluminum DIN rail track, 36"	14.02	12.27	11.11	8.77

## MT SERIES: GENERAL PURPOSE MULTIMODE RELAYS

### Specifications:

- Expected mechanical life: 20 million operations min.
- Enclosure: clear polycarbonate cover
- Contact rating/material: 10A/AgNi (90/10)

- Mechanical indicator (test-button)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	P&B Part No.	Fig.	Coil Voltage	Contact Form	Number of Pins	Price Each			
						1	25	50	100
655-MT226024	MT226024	E7	24VAC	DPDT	8 pin	15.41	13.47	12.19	9.62
655-MT226115	MT226115	E7	115VAC	DPDT	8 pin	17.97	15.72	14.22	11.23
655-MT221012	MT221012	E7	12VDC	DPDT	8 pin	17.39	15.22	13.76	10.88
655-MT221024	MT221024	E7	24VDC	DPDT	8 pin	17.00	14.95	13.52	10.68
655-MT326115	MT326115	E8	115VAC	3PDT	11 pin	15.63	13.68	12.37	11.43
655-MT321024	MT321024	E8	24VDC	3PDT	11 pin	17.97	15.72	14.22	11.23

## V23047 SERIES: SAFETY RELAYS SR2M

### Specifications:

- Forbily guided contacts
- Current rating: 6A @ 250VAC
- Sealed case construction
- 6kV surge resistance between poles
- 2 Pole
- Ideal for emergency shut off, machine control, elevator & escalator control
- Contact material: Silver nickel alloy

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schrack Part No.	Fig.	Coil Voltage	Contact Form	Rated Coil Power	Price Each			
						1	25	50	100
655-V23047A1005A501	V23047-A1005-A501	F	5VDC	2 C/O	700mW	10.43	9.37	8.64	7.92
655-V23047A1012A501	V23047-A1012-A501	F	12VDC	2 C/O	699mW	13.58	11.05	10.05	7.45
655-V23047A1024A501	V23047-A1024-A501	F	24VDC	2 C/O	700mW	10.41	9.39	8.70	8.33
655-V23047A1024A511	V23047-A1024-A511	F	24VDC	1 N/O + 1 N/C	700mW	9.36	8.20	7.26	6.69
655-V23047A1012A511	V23047-A1012-A511	F	12VDC	1 N/O + 1 N/C	699mW	11.54	9.66	8.62	8.12

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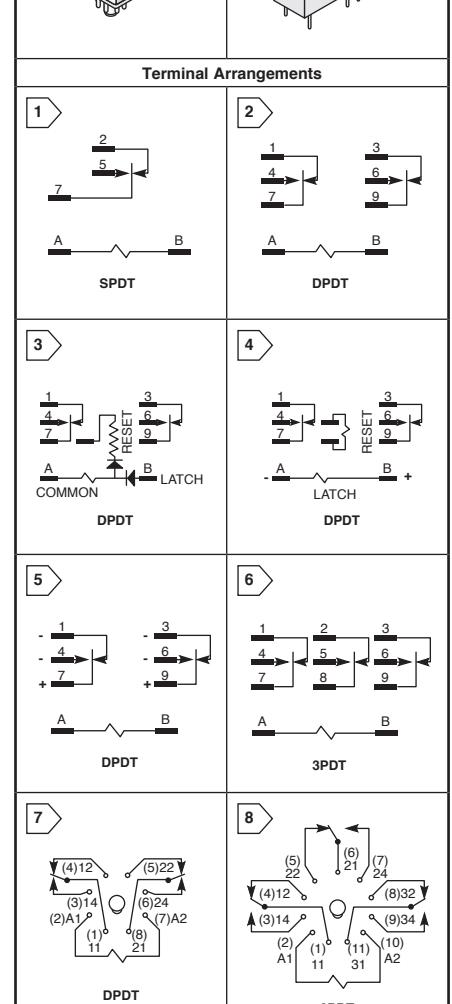
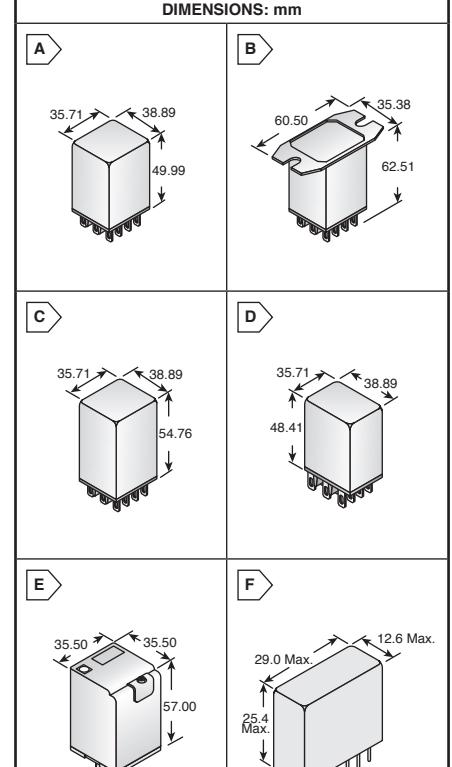
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# TE General Purpose Relays

**TE** Authorized  
connectivity Distributor

## K10 SERIES: 15 AMP GENERAL PURPOSE MINIATURE RELAYS

### Specifications:

- DPDT contact arrangement
- Contact Materials: AgCdO
- UL Class B insulation system
- Max. Coil Power: 2 Watts
- Continuous duty cycle
- Expected Mechanical life: 100,000 operations min.
- Cover: polycarbonate (smoke color)



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	P&B Part No.	Fig.	Coil Voltage	Mounting Type	Terminal Type	Price Each			
						1	25	50	100
655-K10P-11A15-6	K10P-11A15-6	A1	6VAC	Socket	.187" QC/Solder	11.69	10.21	9.25	7.30
655-K10P-11A15-12	K10P-11A15-12	A1	12VAC	Socket	.187" QC/Solder	11.69	10.21	9.25	7.27
655-K10P-11A15-24	K10P-11A15-24	A1	24VAC	Socket	.187" QC/Solder	11.69	10.21	9.25	7.30
655-K10P-11A15-120	K10P-11A15-120	A1	120VAC	Socket	.187" QC/Solder	11.68	10.21	9.24	7.29
655-K10P-11D15-6	K10P-11D15-6	A1	6VDC	Socket	.187" QC/Solder	11.26	9.84	8.91	7.03
655-K10P-11D15-12	K10P-11D15-12	A1	12VDC	Socket	.187" QC/Solder	8.96	7.97	7.36	6.83
655-K10P-11D15-24	K10P-11D15-24	A1	24VDC	Socket	.187" QC/Solder	9.57	7.97	7.36	6.83
655-K10P-11D15-110	K10P-11D15-110	A1	110VDC	Socket	.187" QC/Solder	11.69	10.21	9.25	7.27
655-K10P-11D55-12	K10P-11D55-12	B1	12VDC	PCB terminals	.160" length	10.84	9.04	8.34	7.75
655-K10P-11D55-24	K10P-11D55-24	B1	24VDC	PCB terminals	.160" length	11.69	10.21	9.25	7.30
655-K10P-11D55-110	K10P-11D55-110	B1	110VDC	PCB terminals	.160" length	11.69	10.21	9.25	7.30
655-K10P-11DT5-12	K10P-11DT5-12	C1	12VDC	Top Flange/Panel	.187" QC/Solder	9.89	8.25	7.61	7.07
655-K10P-11DT5-24	K10P-11DT5-24	C1	24VDC	Top Flange/Panel	.187" QC/Solder	26.12	22.88	20.72	16.53
655-K10P-11AT5-120	K10P-11AT5-120	C1	120VAC	Top Flange/Panel	.187" QC/Solder	12.07	10.59	9.58	7.56

### Sockets and Accessories

#### Description

655-27E487	27E487			Screw terminal socket, rated 10A	7.36	6.43	5.81	4.60	
655-27E488	27E488			Solder terminal socket, rated 10A	2.40	2.10	1.89	1.57	
655-27E489	27E489			PCB terminal socket, rated 10A	2.65	2.31	2.09	1.65	
655-27E895	27E895			DIN mount screw terminal, 10A	7.72	6.74	6.11	4.82	
655-20C217	20C217			Hold down spring for 27E488 and 27E489	.29	.27	.247	.195	
655-20C297	20C297			Hold down spring for 27E487	.42	.357	.323	.302	
655-24A110	24A110			Aluminum DIN rail track, 36"	14.02	12.27	11.11	8.77	

## KUP SERIES: ENCLOSED GENERAL PURPOSE RELAYS

### Specifications:

- UL Class B insulation system
- Clear polycarbonate dust cover
- Contact material: 5A - Silver; 10A - AgCdO
- Expected Mechanical life: 100,000 operations min.
- Plain case



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	P&B Part No.	Fig.	Coil Voltage	Terminal Type	Contact Form	Contact Rating	Price Each			
							1	25	50	100
655-KUP-11A11-120	KUP-11A11-120	D2	120VAC	.187" QC/Solder	DPDT	5A	13.85	12.11	10.95	9.57
655-KUP-11D11-24	KUP-11D11-24	D2	24VDC	.187" QC/Solder	DPDT	5A	9.74	9.64	9.46	9.39
655-KUP-11A15-24	KUP-11A15-24	D2	24VAC	.187" QC/Solder	DPDT	10A	10.26	9.66	9.37	9.36
655-KUP-11A15-120	KUP-11A15-120	D2	120VAC	.187" QC/Solder	DPDT	10A	12.77	10.64	9.82	9.12
655-KUP-11D15-12	KUP-11D15-12	D2	12VDC	.187" QC/Solder	DPDT	10A	10.26	9.66	9.37	9.36
655-KUP-11D15-24	KUP-11D15-24	D2	24VDC	.187" QC/Solder	DPDT	10A	15.62	13.66	12.36	9.77
655-KUP-11D15-120	KUP-11D15-120	D3	120VAC	.187" QC/Solder	3PDT	5A	15.38	13.22	12.17	11.17
655-KUP-14D11-24	KUP-14D11-24	D3	24VDC	.187" QC/Solder	3PDT	5A	10.68	10.05	9.75	9.45
655-KUP-14A15-12	KUP-14A15-12	D3	12VAC	.187" QC/Solder	3PDT	10A	18.87	16.41	14.94	11.44
655-KUP-14A15-24	KUP-14A15-24	D3	24VAC	.187" QC/Solder	3PDT	10A	18.25	15.97	14.45	11.41
655-KUP-14A15-120	KUP-14A15-120	D3	120VAC	.187" QC/Solder	3PDT	10A	18.25	15.97	14.45	11.41
655-KUP-14D15-12	KUP-14D15-12	D3	12VDC	.187" QC/Solder	3PDT	10A	13.10	11.09	10.30	9.97
655-KUP-14D15-24	KUP-14D15-24	D3	24VDC	.187" QC/Solder	3PDT	10A	13.19	12.02	11.16	8.96
655-KUP-14D15-48	KUP-14D15-48	D3	48VDC	.187" QC/Solder	3PDT	10A	15.70	13.72	12.42	11.35
655-KUP-5A15-24	KUP-5A15-24	D4	24VAC	.187" QC/Solder	SPDT	10A	18.40	15.50	14.25	13.39
655-KUP-5A15-120	KUP-5A15-120	D4	120VAC	.187" QC/Solder	SPDT	10A	16.55	14.49	13.10	11.92
655-KUP-5A15-240	KUP-5A15-240	D4	240VAC	.187" QC/Solder	SPDT	10A	19.50	17.06	15.43	12.18
655-KUP-5D15-12	KUP-5D15-12	D4	12VDC	.187" QC/Solder	SPDT	10A	14.51	12.10	11.17	10.22
655-KUP-17A19-120	KUP-17A19-120	D5	120VAC	.110" QC/Solder	4PDT	10A	73.86	64.63	58.43	51.08
655-KUP-17D19-24	KUP-17D19-24	D5	24VDC	.110" QC/Solder	4PDT	10A	50.05	41.71	38.50	32.24

### With Test Button

655-KUP-14A25-120	KUP-14A25-120	E3	120VAC	.187" QC/Solder	3PDT	10A	19.03	16.64	15.06	11.89
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### With Indicator Lamp

655-KUP-11A35-120	KUP-11A35-120	D2	120VAC	.187" QC/Solder	DPDT	10A	14.76	12.24	10.18	9.78
655-KUP-14A35-24	KUP-14A35-24	D3	24VAC	.187" QC/Solder	3PDT	10A	16.78	14.68	13.29	12.18
655-KUP-14A35-120	KUP-14A35-120	D3	120VAC	.187" QC/Solder	3PDT	10A	16.78	14.68	13.29	11.49

### With Test Button and Indicator Lamp

655-KUP-14A45-120	KUP-14A45-120	E3	120VAC	.187" QC/Solder	3PDT	10A	17.70	15.01	13.61	12.95
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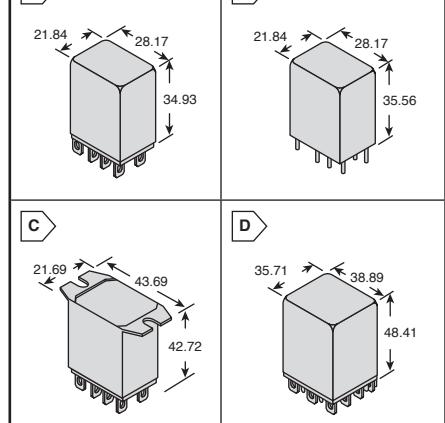
### Bracket Mount Case

655-KUP-11D55-12	KUP-11D55-12	F2	12VDC	.187" QC/Solder	DPDT	10A	14.96	13.09	11.84	9.35
655-KUP-11D55-24	KUP-11D55-24	F2	24VDC	.187" QC/Solder	DPDT	10A	14.96	13.09	11.84	9.35
655-KUP-11A55-24	KUP-11A55-24	F2	24VAC	.187" QC/Solder	DPDT	10A	13.36	10.06	9.55	9.20
655-KUP-11A55-120	KUP-11A55-120	F2	120VAC	.187" QC/Solder	DPDT	10A	16.31	14.27	12.91	10.10
655-KUP-14A55-24	KUP-14A55-24	F3	24VAC	.187" QC/Solder	3PDT	10A	18.87	16.41	14.94	11.80
655-KUP-14A55-120	KUP-14A55-120	F3	120VAC	.187" QC/Solder	3PDT	10A	18.87	16.41	14.94	11.80
655-KUP-14D55-12	KUP-14D55-12	F3	12VDC	.187" QC/Solder	3PDT	10A	17.59	15.38	13.91	10.41
655-KUP-14D55-24	KUP-14D55-24	F3	24VDC	.187" QC/Solder	3PDT	10A	14.08	13.41	12.61	10.99
655-KUP-5A55-120	KUP-5A55-120	F4	120VAC	.187" QC/Solder	SPDT	10A	15.63	14.21	13.29	12.15
655-KUP-5D55-24	KUP-5D55-24	F4	24VDC	.187" QC/Solder	SPDT	10A	13.32	12.21	11.27	10.47

### Sockets and Accessories

#### Description

655-27E043	27E043			Solder eyelet socket, rated 15A, for 1-3 pole relays	2.05	1.86	1.80	1.67		
655-27E067	27E067			PCB terminals socket, rated 15A, for 1-3 pole relays	3.72	3.32	3.20	2.87		
655-27E121	27E121			Screw terminal socket, rated 15A, for 1-3 pole relays	8.12	6.81	6.29	5.65		
655-27E396	27E396			.187" quick connect socket, rated 15A, for 1-3 pole relays	3.82	3.33	3.02	2.38		
655-27E867	27E867			Screw terminal, DIN rail snap-mnt socket, 1-3 pole relays	22.06	19.30	17.45	13.79		
655-27E893	27E893			Hold down spring w/ screw for 27E043, 27E067, 27E121	9.66	8.05	7.44	6.77		
655-20C228	20C228			Snap-on hold down spring for 1-4 pole sockets	.67	.61	.56	.52		
655-20C254	20C254			Hold down spring for 27E893	.24	.224	.217	.21		
655-20C318	20C318			Aluminum DIN rail track, 36"	.33	.284	.25	.216		
655-24A110	24A110				14.02	12.27	11.11	8.77		



# P&B General Purpose Relays and Contactors

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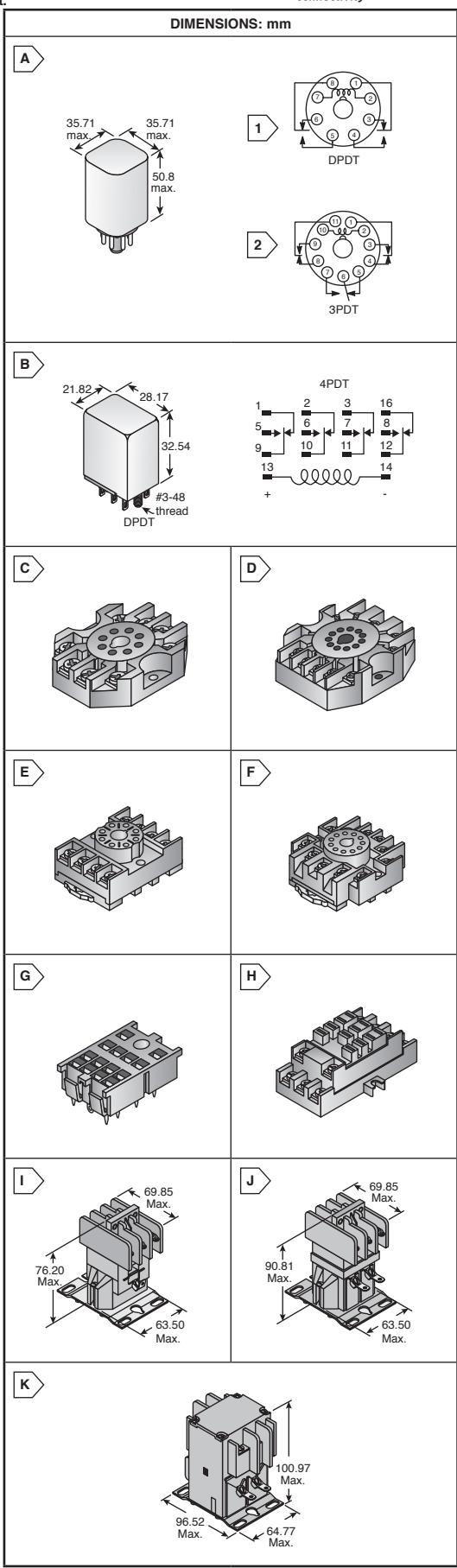
## KRPA SERIES: OCTAL-TYPE ENCLOSED GENERAL PURPOSE RELAYS

### Specifications:

- Enclosure: Clear polycarbonate cover
- Expected Mechanical life: 100,000 operations Min.
- 3W
- Contact material: 5A - Silver; 10A - AgCdO

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	P&B Part No.	Fig.	Coil Voltage	Contact Form	Contact Rating	Price Each			
						1	25	50	100
655-KRPA-11AG-12	KRPA-11AG-12	A1	12VAC	DPDT	10A	18.22	15.94	14.42	11.39
655-KRPA-11AG-24	KRPA-11AG-24	A1	24VAC	DPDT	10A	15.99	13.99	12.66	11.55
655-KRPA-11AG-120	KRPA-11AG-120	A1	120VAC	DPDT	10A	16.24	13.53	12.49	11.60
655-KRPA-11AG-240	KRPA-11AG-240	A1	240VAC	DPDT	10A	21.14	18.49	16.73	13.21
655-KRPA-11DG-12	KRPA-11DG-12	A1	12VDC	DPDT	10A	15.99	13.99	12.66	10.95
655-KRPA-11DG-24	KRPA-11DG-24	A1	24VDC	DPDT	10A	15.80	13.17	12.16	11.28
655-KRPA-11DG-48	KRPA-11DG-48	A1	48VDC	DPDT	10A	19.48	17.04	15.42	12.19
655-KRPA-11DG-110	KRPA-11DG-110	A1	110VDC	DPDT	10A	19.87	17.39	15.73	11.44
655-KRPA-11DN-12	KRPA-11DN-12	A1	12VDC	DPDT	10A	16.99	14.86	13.43	11.75
655-KRPA-11DN-24	KRPA-11DN-24	A1	24VDC	DPDT	10A	16.59	14.51	13.13	11.43
655-KRPA-11DN-110	KRPA-11DN-110	A1	110VDC	DPDT	10A	26.99	22.49	20.76	17.57
655-KRPA-11AN-24	KRPA-11AN-24	A1	24VAC	DPDT	10A	19.19	16.78	15.19	11.95
655-KRPA-11AN-120	KRPA-11AN-120	A1	120VAC	DPDT	10A	17.39	14.50	13.38	11.98
655-KRPA-11AN-240	KRPA-11AN-240	A1	240VAC	DPDT	10A	20.34	18.16	16.05	13.63
655-KRPA-11AY-24	KRPA-11AY-24	A1	24VAC	DPDT	5A	15.74	13.76	12.46	11.39
655-KRPA-11AY-120	KRPA-11AY-120	A1	120VAC	DPDT	5A	16.90	14.08	12.99	12.07
655-KRPA-11DY-12	KRPA-11DY-12	A1	12VDC	DPDT	5A	16.06	14.04	12.71	11.62
655-KRPA-11DY-24	KRPA-11DY-24	A1	24VDC	DPDT	5A	16.06	14.04	12.71	10.95
655-KRPA-14AG-12	KRPA-14AG-12	A2	12VAC	3PDT	10A	37.12	32.48	29.38	23.20
655-KRPA-14AG-24	KRPA-14AG-24	A2	24VAC	3PDT	10A	18.69	16.77	15.18	12.78
655-KRPA-14AG-120	KRPA-14AG-120	A2	120VAC	3PDT	10A	21.81	15.45	14.26	13.24
655-KRPA-14AG-240	KRPA-14AG-240	A2	240VAC	3PDT	10A	19.47	17.04	15.41	14.17
655-KRPA-14DG-12	KRPA-14DG-12	A2	12VDC	3PDT	10A	17.88	15.65	14.17	12.46
655-KRPA-14DG-24	KRPA-14DG-24	A2	24VDC	3PDT	10A	20.81	18.20	16.47	12.98
655-KRPA-14DG-48	KRPA-14DG-48	A2	48VDC	3PDT	10A	32.23	28.94	26.19	20.67
655-KRPA-14DG-110	KRPA-14DG-110	A2	110VDC	3PDT	10A	20.85	18.24	16.51	14.36
655-KRPA-14AN-24	KRPA-14AN-24	A2	24VAC	3PDT	10A	39.99	32.02	29.56	27.45
655-KRPA-14AN-120	KRPA-14AN-120	A2	120VAC	3PDT	10A	19.43	16.99	15.38	14.06
655-KRPA-14DN-24	KRPA-14DN-24	A2	24VDC	3PDT	10A	17.82	14.85	13.71	12.73
655-KRPA-14AY-24	KRPA-14AY-24	A2	24VAC	3PDT	5A	19.96	17.45	15.79	12.45
655-KRPA-14AY-120	KRPA-14AY-120	A2	120VAC	3PDT	5A	36.77	30.64	28.29	26.27
655-KRPA-14AY-240	KRPA-14AY-240	A2	240VAC	3PDT	5A	38.26	33.46	30.27	23.91
655-KRPA-14DY-24	KRPA-14DY-24	A2	24VDC	3PDT	5A	19.81	17.32	15.68	12.37



## KHAU SERIES: MULTICONTACT GENERAL PURPOSE RELAYS

### Specifications:

- Enclosure: Clear polycarbonate cover
- Expected life: 100,000 operations at rated load
- Socket mount, solder terminals
- Neon indicator

- Contact material: 1A - Bifurcated cross bar, Au over Ag; 3A - Ag; 5A-AgCdO

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	P&B Part No.	Fig.	Coil Voltage	Contact Form	Contact Rating	Price Each			
						1	25	50	100
655-KHUA-17A11-24	KHUA-17A11-24	B	24VAC	4PDT	3A	13.82	12.07	10.86	9.50
655-KHUA-17A11-120	KHUA-17A11-120	B	120VAC	4PDT	3A	16.46	14.39	13.03	10.28
* 655-KHUA-17A11N-120	KHUA-17A11N-120	B	120VAC	4PDT	3A	17.64	15.40	13.86	12.86
655-KHUA-17A12-120	KHUA-17A12-120	B	120VAC	4PDT	5A	16.65	14.56	13.14	10.40
655-KHUA-17D12-24	KHUA-17D12-24	B	24VDC	4PDT	5A	14.61	12.81	11.59	9.17
655-KHUA-17D11-12	KHUA-17D11-12	B	12VDC	4PDT	3A	14.48	12.67	11.46	9.05
655-KHUA-17D11-24	KHUA-17D11-24	B	24VDC	4PDT	3A	12.41	10.83	9.75	8.53
655-KHUA-17A16-24	KHUA-17A16-24	B	24VAC	4PDT	1A	60.28	52.93	52.01	49.92

## SOCKETS AND ACCESSORIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Description	Price Each			
				1	25	50	100
<b>KRPA Series</b>							
655-27E122	27E122	C	8-pin screw terminal socket, 10A, for KRPA11	5.80	4.75	4.19	4.08
655-27E123	27E123	D	11-pin screw terminal socket, 10A, for KRPA14	6.74	6.12	5.62	4.96
655-27E891	27E891	E	8-pin DIN rail snap mount socket, 10A, for KRPA11	5.39	4.88	4.50	4.18
655-27E892	27E892	F	11-pin DIN rail snap mount socket, 10A, for KRPA14	10.84	9.48	8.58	6.76
655-20C176	20C176	-	Hold down spring. Mounts to socket with socket screws	1.66	1.56	1.52	1.51
655-20C318	20C318	-	Hold down spring for use with 27E891, 27E892	.33	.284	.25	.216
655-24A110	24A110	-	Aluminum DIN rail track, 36"	14.02	12.27	11.11	8.77
655-24A071	24A071	-	Steel mounting clip with screw	2.27	2.08	1.90	1.53
655-24A072	24A072	-	Plastic twist mounting clip	.98	.888	.846	.794
655-40G432	40G432	-	Plastic insulator	1.76	1.49	1.38	1.18

MOUSER STOCK NO.	P&B Part No.	Fig.	Coil Voltage	Contact Arrangement	Contact Rating	Price Each			
						1	25	50	100
655-P25P42A22P1-120	P25P42A22P1-120	I	120VAC	3PST-NO-DM	25A	115.27	96.74	94.65	85.61
655-P25P42D22P1-24	P25P42D22P1-24	J	24VDC	3PST-NO-DM	25A	111.87	97.90	88.58	77.69
655-P30P42D12P1-24	P30P42D12P1-24	K	24VDC	3PST-NO-DM	30A	132.97	116.36	105.26	105.10
* 655-P40P42D12P1-24	P40P42D12P1-24	K	24VDC	3PST-NO-DM	40A	132.41	115.84	104.81	92.76

## PRD SERIES: HEAVY DUTY POWER RELAYS

### Specifications:

- Initial breakdown voltage: 2000Vrms between all elements and ground

- Expected mechanical life: 100,000 operations
- Screw terminal termination

\* With magnetic blow-out

MOUSER STOCK NO.	P&B Part No.	Fig.	Coil Voltage	Main Contact Arrangement	Contact Rating	Contact Material	For quantities greater than listed, call for quote.			
							1	25	50	100
655-PRD-3AY0-120	PRD-3AY0-120	A	120VAC	SPST-NO-DM	25A	Silver	28.66	23.95	22.12	20.52
655-PRD-5AY0-120	PRD-5AY0-120	A	120VAC	SPDT	25A	Silver	28.93	25.31	22.89	22.17
655-PRD-5DY0-12	PRD-5DY0-12	A	12VDC	SPDT	25A	Silver	24.96	22.54	22.07	21.40
655-PRD-7AG0-120	PRD-7AG0-120	B	120VAC	DPST-NO	30A	AgCdO	34.51	30.19	27.31	22.14
655-PRD-7AY0-120	PRD-7AY0-120	B	120VAC	DPST-NO	25A	Silver	31.50	27.12	26.15	24.46
655-PRD-7AY0-240	PRD-7AY0-240	B	240VAC	DPST-NO	25A	Silver	37.06	33.35	30.79	28.59
655-PRD-7DY0-12	PRD-7DY0-12	B	12VDC	DPST-NO	25A	Silver	33.37	30.46	27.55	23.61
655-PRD-7DY0-24	PRD-7DY0-24	B	24VDC	DPST-NO	25A	Silver	35.19	30.78	27.84	27.33
* 655-PRD-11AH0-120	PRD-11AH0-120	C	120VAC	DPDT	20A	Silver	43.28	37.87	34.26	33.29
655-PRD-11AY0-24	PRD-11AY0-24	C	24VAC	DPDT	25A	Silver	37.20	32.26	31.04	30.18
655-PRD-11AY0-120	PRD-11AY0-120	C	120VAC	DPDT	25A	Silver	37.98	31.65	30.25	29.78
655-PRD-11AG0-120	PRD-11AG0-120	C	120VAC	DPDT	30A	AgCdO	38.72	32.57	30.62	29.64
655-PRD-11AY0-240	PRD-11AY0-240	C	240VAC	DPDT	25A	Silver	44.72	42.95	42.09	39.44
655-PRD-11DH0-24	PRD-11DH0-24	C	24VDC	DPDT	20A	Silver	37.80	36.25	35.28	34.36
655-PRD-11DY0-24	PRD-11DY0-24	C	24VDC	DPDT	25A	Silver	42.79	37.44	33.87	30.02
655-PRD-11DY0-110	PRD-11DY0-110	C	110VDC	DPDT	25A	Silver	43.54	38.09	34.46	32.00
* 655-PRD-11DG0-24	PRD-11DG0-24	C	24VDC	DPDT	30A	AgCdO	35.64	31.92	30.55	29.50
* 655-PRD-11DH0-110	PRD-11DH0-110	C	110VDC	DPDT	20A	Silver	43.96	39.81	38.26	35.38

## S86R/S87R SERIES: LOW COST INDUSTRIAL RELAYS

### Specifications:

- UL Class B coil insulation system
- Coil terminal locations: S86 - Same side as switch terminals; S87 - Perpendicular to switch terminals
- 20 Amp

- Expected mechanical life: 1 million operations
- Applications include spa controls, vending machines, and HVAC

MOUSER STOCK NO.	P&B Part No.	Fig.	Coil Voltage	Contact Form	Contact Rating	Coil Current	For quantities greater than listed, call for quote.			
							1	25	50	100
655-S87R5A2B1D1-120	S87R5A2B1D1-120	D	120VAC	SPDT	20A	33mA	30.35	27.60	25.30	23.35
655-S87R11A2B1D1-120	S87R11A2B1D1-120	D	120VAC	DPDT	20A	33mA	37.02	32.39	29.30	28.09
655-S86R11A1B1D1-120	S86R11A1B1D1-120	E	120VAC	DPDT	20A	33mA	38.23	33.45	30.26	29.57

## S89R/S90R SERIES: BISTABLE IMPULSE RELAYS

### Specifications:

- Operates on 75ms min. pulse
- Expected mechanical life: 100,000 operations
- Continuous coil rating

- UL Class B coil insulation system
- Applications include garage door controls, motor reversing, and lighting controls

\* With dust cover and octal plug-in base

MOUSER STOCK NO.	P&B Part No.	Fig.	Coil Voltage	Contact Form	Contact Rating	Coil/Switch Terminals	For quantities greater than listed, call for quote.			
							1	25	50	100
* 655-S89R11APP1-120	S89R11APP1-120	F	120VAC	DPDT	15A	-	62.49	54.66	49.46	44.91
655-S89R11DAC1-12	S89R11DAC1-12	G	12VDC	DPDT	15A	.187"QC	61.80	54.87	49.64	39.18
655-S89R11DAC1-24	S89R11DAC1-24	G	24VDC	DPDT	15A	.187"QC	56.21	49.20	44.50	38.62
655-S89R5AAC1-120	S89R5AAC1-120	G	120VAC	SPDT	15A	.187"QC	46.65	33.93	30.30	28.63
655-S89R5AAC1-24	S89R5AAC1-24	G	24VDC	SPDT	15A	.187"QC	50.42	44.11	39.90	32.46
655-S90R5ABD1-120	S90R5ABD1-120	G	120VAC	SPDT	20A	.250"QC	56.05	49.02	44.38	43.69

## R10 SERIES: MULTICONTACT GENERAL PURPOSE RELAYS

- Enclosure: Clear, non-sealed polycarbonate cover
- Contact material: 3A - Fine Silver; 5A and 7.5A - AgCdO
- Solder/plug-in terminals with #3-48 mounting stud

- Expected Mechanical life: 3 and 5A rating - 100 million operations; 7.5A rating - 1 million operations

MOUSER STOCK NO.	P&B Part No.	Fig.	Coil Voltage	Contact Form	Contact Rating		For quantities greater than listed, call for quote.			
							1	25	50	100
655-R10-E1Y4-V52	R10-E1Y4-V52	H	6VDC	4PDT	3A		27.22	23.82	21.55	17.00
655-R10-E1Y4-V185	R10-E1Y4-V185	H	12VDC	4PDT	3A		27.92	24.43	22.10	17.44
655-R10-E1Y4-V25	R10-E1Y4-V25	H	48VDC	4PDT	3A		28.20	24.68	22.36	17.66
655-R10-E1Y2-V52	R10-E1Y2-V52	I	6VDC	DPDT	3A		20.82	18.22	16.48	13.01
655-R10-E1Y2-V185	R10-E1Y2-V185	I	12VDC	DPDT	3A		21.24	18.59	16.81	13.28
655-R10-E1Y2-V700	R10-E1Y2-V700	I	24VDC	DPDT	3A		21.25	18.59	16.81	13.28
655-R10-E1Y2-V2.5K	R10-E1Y2-V2.5K	I	48VDC	DPDT	3A		21.25	18.59	16.81	13.27
655-R10-E1X4-V700	R10-E1X4-V700	H	24VDC	4PDT	5A		29.53	25.83	23.37	18.44
655-R10-E1X4-V2.5K	R10-E1X4-V2.5K	H	48VDC	4PDT	5A		29.75	26.02	23.55	18.58
655-R10-E1X2-V52	R10-E1X2-V52	I	6VDC	DPDT	5A		20.39	17.83	16.13	12.74
655-R10-E1X2-V185	R10-E1X2-V185	I	12VDC	DPDT	5A		20.79	18.19	16.45	12.99
655-R10-E1X2-V700	R10-E1X2-V700	I	24VDC	DPDT	5A		20.79	18.19	16.45	12.99
655-R10-E1X2-V2.5K	R10-E1X2-V2.5K	I	48VDC	DPDT	5A		20.79	18.19	16.45	12.99
655-R10-E1W2-V700	R10-E1W2-V700	I	24VDC	DPDT	7.5A		22.46	19.64	17.78	14.03

### Sockets for R10 Series

#### Description

655-27E125	27E125	Solder socket with grounding strip, rated 10A, for 2 pole relays	1.73	1.51	1.37	1.07
655-27E126	27E126	Solder socket with grounding strip, rated 10A, for 4 pole relays	2.08	1.82	1.65	1.30
655-27E128	27E128	PCB terminals (stag.) socket w/ grounding strip or 2 pole relays	1.77	1.55	1.39	1.11
655-27E129	27E129	PCB terminals (stag.) socket w/ grounding strip for 4 pole relays	1.90	1.66	1.50	1.30
655-27E193	27E193	PCB terminals (stag.) socket w/ grounding terminal for 2 pole relays	1.65	1.44	1.30	1.03
655-27E194	27E194	PCB terminals (stag.) socket w/ grounding terminal for 4 pole relays	1.86	1.62	1.47	1.28
655-27E629	27E629	PCB terminals (in-line) socket w/o grounding for 4 pole relays	2.20	1.92	1.74	1.37
655-20C249	20C249	Hold down spring for 2 pole sockets	.33	.284	.25	.216
655-20C250	20C250	Hold down spring for 4 pole sockets	.24	.224	.217	.216
655-20C259	20C259	Hold down strap for PCB terminal sockets	.33	.285	.251	.208
655-24A110	24A110	Aluminum DIN rail track, 36"	14.02	12.27	11.11	8.77
655-24A071	24A071	Steel mounting clip with screw	2.27	2.08	1.90	1.53
655-40G432	40G432	Plastic insulator	1.76	1.49	1.38	1.18

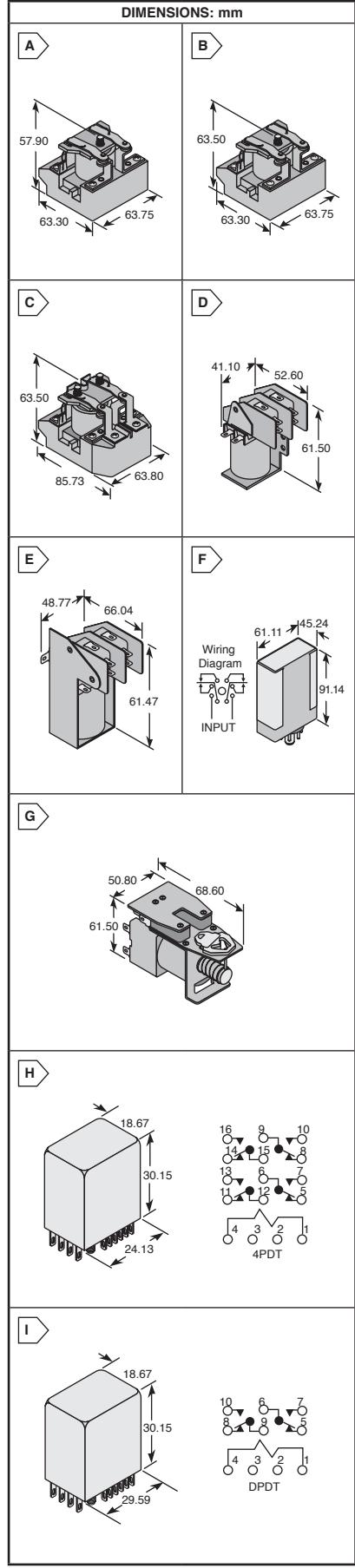
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(800) 346-6873

2021



# TE High Performance Relays

**TE** Authorized  
connectivity Distributor

## HIGH VOLTAGE PRE-CHARGE RELAY MINI K HV

### Features:

- Safe - magnetic arc suppression
- Prevents contact welds
- Form X (NO DM) contact arrangement
- Suitable for voltage levels up to 450 VDC
- Pre-charge currents up to 20A
- Limiting break currents up to 20A
- Small package size - low profile
- Light weight
- Available with PCB mount and plug-in terminals
- Base product, Mini K relay, has been in the market for approx. 20 years
- UL94-HB
- IEC 60068

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Coil Current (A)	Coil Res. (Ω)	Coil Voltage (V)	Contact Arrangement	Termination	Mounting Type	Price Each				
									1	5	10	25	
655-V23700-C0001-A408	V23700-C0001-A408	A	20	50	12	1 Form X, SPST-NO-DM	Solder Terminal	Thru-hole	2900	78.55	73.76	65.63	56.30

## HIGH CURRENT RELAY (HCR) 200

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Coil Voltage (VDC)	Current Rating (A)	Coil Res. (Ω)	Contact Arrangement	Enclosure	Price Each			
								1	5		
655-V23230-D2001-B200	1414995-0	B	12	175	43	1 Form B, 1NC	IP64	75.11	65.41		

## 1/5 SIZE LOW SIGNAL RELAY

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Input Voltage (VDC)	Current Rating (A)	Coil Res. (Ω)	Contact Arrangement	Mounting Type	Approved Standards	Price Each	
									1	5
655-3SBC2002A2	1-1617073-4	C	26.5	2	1350	2 Form C, DPDT, 2 C/O	PC	P	184.66	165.55

## 1/2 SIZE CRYSTAL CAN RELAYS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Input Voltage (VDC)	Current Rating (A)	Coil Res. (Ω)	Contact Arrangement	Mounting Type	Approved Standards	Price Each	
									1	5
655-HFW1131K04M	3-1617029-3	D	26.5	2	700	2 Form C, DPDT, 2 C/O	Chassis	-	117.51	113.69
655-HFW1201G01M	2-1617030-7	D	12	2	900	2 Form C, DPDT, 2 C/O	PC	L	118.67	114.81
655-HFW1201K45	2-1617031-0	D	26.5	2	700	2 Form C, DPDT, 2 C/O	PC	M	179.05	173.22
655-HFW1201K45M	2-1617031-1	D	26.5	2	700	2 Form C, DPDT, 2 C/O	PC	M	119.86	115.96
655-HFW1201K45P	2-1617031-2	D	26.5	2	700	2 Form C, DPDT, 2 C/O	PC	P	131.06	126.79
655-HFW1201K46	2-1617031-3	D	26.5	2	700	2 Form C, DPDT, 2 C/O	PC	L	118.68	114.81
655-HFW1201K46M	2-1617031-4	D	26.5	2	700	2 Form C, DPDT, 2 C/O	PC	M	123.44	119.43
655-HFW5A1201K00	1617037-9	D	26.5	5	700	2 Form C, DPDT, 2 C/O	PC	-	248.93	240.86

## FULL SIZE CRYSTAL CAN RELAYS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Input Voltage (VDC)	Current Rating (A)	Coil Res. (Ω)	Contact Arrangement	Mounting Type	Price Each	
								1	5
655-B07D634BC2-0051	2-1617004-8	E	26.5	10	300	2 Form C, DPDT, 2 C/O	Socket	187.22	167.84
655-B07D692BZ2-0011	3-1617004-2	E	26.5	10	300	2 Form C, DPDT, 2 C/O	Chassis	287.10	277.78

## FCA STANDARD MID-RANGE RELAYS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Coil Voltage (VDC)	Current Rating (A)	Terminal Configuration	Contact Arrangement	Mounting Type	Price Each	
								1	5
*655-FCA-210-1027M	2-1617749-5	E	28	10	Solder Pins	2 Form C, DPDT, 2 C/O	Side	160.69	155.42
*655-FCA-410-1622M	2-1617754-1	E	28	10	Socket Pins	4 Form C, 4PDT, 4 C/O	Bottom	182.41	176.47

## FCB COMPACT MID-RANGE RELAYS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Coil Voltage (VDC)	Current Rating (A)	Terminal Configuration	Contact Arrangement	Mounting Type	Price Each	
								1	5
655-FCB-205-0224M	5-1617758-0	E	28	5	Socket Pins	2 Form C, DPDT, 2 C/O	Bottom	149.78	139.09
655-FCB-205-0228M	5-1617758-4	E	28	5	Socket Pins	2 Form C, DPDT, 2 C/O	Track	164.88	159.52
655-FCB-405-0622M	8-1617760-3	E	28	5	Socket Pins	4 Form C, 4PDT, 4 C/O	Bottom	193.87	187.54

## TO-5 LOW SIGNAL RELAY

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Input Voltage (VDC)	Current Rating (A)	Coil Res. (Ω)	Contact Arrangement	Mounting Type	Price Each		
								1	5	
655-JMAC-26XP	1-1617121-1	F	26.5	1	1560	2 Form C, DPDT, 2 C/O	PC	P	149.96	145.13

## HIGH PERFORMANCE CONTACTORS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Fig.	Coil Voltage (VDC)	Current Rating (A)	Contact Arrangement	Mounting Type	Price Each	
							1	5
655-LEV100A5ANG	9-1618389-8	G	24	100	1 Form X, SPST-NO-DM	Bottom	110.56	100.83
655-LEV200A4ANA	1618387-3	G	12	500	1 Form A, SPST-NO	Bottom	154.91	141.28
655-LEV200A5ANA	7-1618387-1	G	24	500	1 Form X, SPST-NO-DM	Bottom	108.23	104.07
655-EV200HAANA	1-1618002-8	G	9-36	500	1 Form A, SPST-NO, 1 N/O	Panel	240.27	237.56

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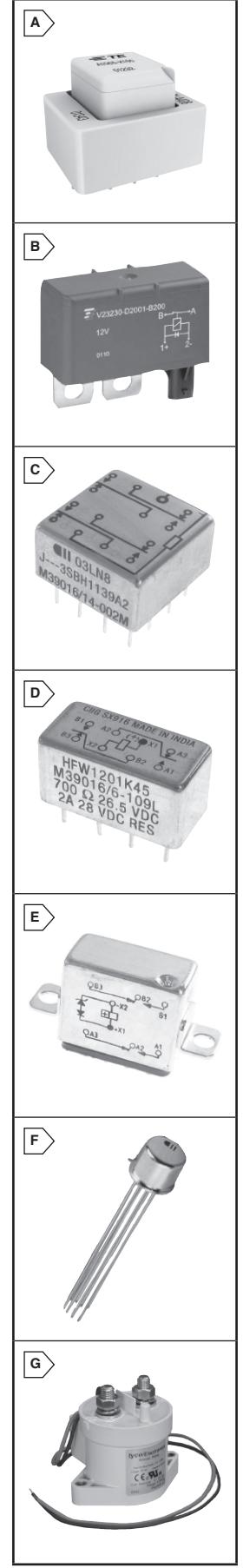
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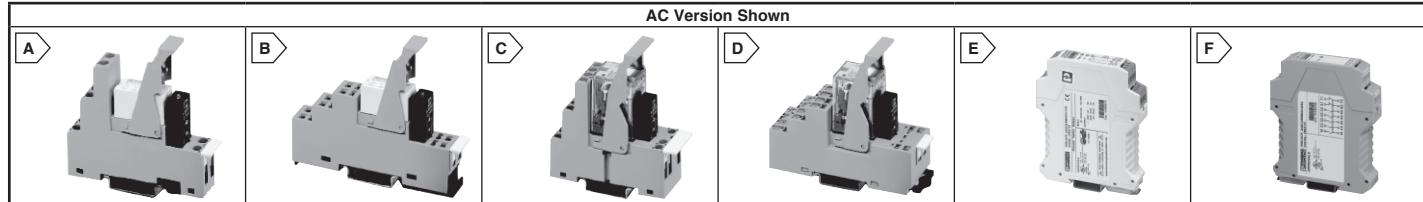
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# PHOENIX CONTACT DIN Rail Relays

**PHOENIX  
CONTACT**  
INSPIRING INNOVATIONS



## PR1 SERIES DIN RAIL RELAYS

### Features:

- Fully assembled relays: includes relay, base, protection circuit, locking/ejection lever
- Connection type: Screw or Spring
- Solid State Relays
- Service friendly pluggable components
- LED indication

For quantities greater than listed, call for quote.								Protective Circuit Type			Price Each		
MOUSER STOCK NO.		Fig.	Phoenix Type	Input Voltage	Continuous Current	Contact Type	Max Switching Voltage	Protective Circuit Type			Price Each		
Mfr.	Mfr. Part No.							1	10	100	1	10	100
<b>Screw Cage Connection</b>													
651-2834326	A	PRI-RSC3-LDP-24DC/21	24V DC	12A	SPDT	250V AC/DC	status LED and free-wheeling diode	19.73	18.64	16.99	31.03	28.05	25.92
651-2834339	A	PRI-RSC3-LV-24AC/21	24V AC	12A	SPDT	250V AC/DC	status LED and varistor	22.47	19.32	17.85	33.71	28.98	26.78
651-2834342	A	PRI-RSC3-LV-120AC/21	120V AC	12A	SPDT	250V AC/DC	status LED and varistor	24.42	22.37	20.39	26.75	23.00	21.25
651-2834481	A	PRI-RSC3-LDP-24DC/2X21	24V DC	8A	DPDT	250V AC/DC	status LED and free-wheeling diode	19.73	18.64	16.99	20.35	18.39	16.99
651-2834494	A	PRI-RSC3-LV-24AC/2X21	24V AC	8A	DPDT	250V AC/DC	status LED and varistor	24.42	22.07	20.39	23.40	21.15	19.54
651-2834504	A	PRI-RSC3-LV-120AC/2X21	120V AC	8A	DPDT	250V AC/DC	status LED and varistor	24.42	22.07	20.39	25.33	24.47	22.97
651-2834517	A	PRI-RSC3-LV-230AC/2X21	230V AC	8A	DPDT	250V AC/DC	status LED and varistor	38.15	34.49	31.87	38.15	34.49	31.87
<b>Screw Cage Connection - Gold Plated Contact</b>													
651-2834368	A	PRI-RSC3-LDP-24DC/21AU	24V DC	50mA	SPDT	30V AC/36V DC	status LED and free-wheeling diode	21.36	19.31	17.84	30.35	28.05	25.92
651-2834520	A	PRI-RSC3-LDP-24DC/2X21AU	24V DC	50mA	DPDT	30V AC/36V DC	status LED and free-wheeling diode	25.43	22.99	21.24	33.71	28.98	26.78
651-2834533	A	PRI-RSC3-LV-24AC/2X21AU	24V AC	50mA	DPDT	30V AC/36V DC	status LED and varistor	25.33	24.47	22.97	34.38	29.56	27.32
<b>Spring Cage Connection</b>													
651-2834407	B	PRI-RSP3-LDP-24DC/21	24V DC	10A	SPDT	250V AC/DC	status LED and free-wheeling diode	22.83	20.23	18.69	26.75	23.00	21.25
651-2834410	B	PRI-RSP3-LV-24AC/21	24V AC	10A	SPDT	250V AC/DC	status LED and varistor	24.42	22.37	20.39	25.43	22.99	21.24
651-2834423	B	PRI-RSP3-LV-120AC/21	120V AC	10A	SPDT	250V AC/DC	status LED and varistor	24.42	22.37	20.39	25.43	22.99	21.24
651-2834436	B	PRI-RSP3-LV-230AC/21	230V AC	10A	SPDT	250V AC/DC	status LED and varistor	24.42	22.37	20.39	25.43	22.99	21.24
651-2834562	B	PRI-RSP3-LDP-24DC/2X21	24V DC	8A	DPDT	250V AC/DC	status LED and free-wheeling diode	22.83	20.23	18.69	24.42	22.37	20.39
651-2834591	B	PRI-RSP3-LV-230AC/2X21	230V AC	8A	DPDT	250V AC/DC	status LED and varistor	22.83	20.23	18.69	24.42	22.37	20.39
<b>Spring Cage Connection - Gold Plated Contact</b>													
651-2834465	B	PRI-RSP3-LV-120AC/21AU	120V AC	50mA	SPDT	30V AC/36V DC	status LED and varistor	39.95	35.41	32.72	34.38	29.56	27.32
651-2834601	B	PRI-RSP3-LDP-24DC/2X21AU	24V DC	50mA	DPDT	30V AC/36V DC	status LED and free-wheeling diode	34.38	29.56	27.32	34.38	29.56	27.32

## PR2 SERIES DIN RAIL RELAYS

### Features:

- Fully assembled relays: includes relay, base, protection circuit, locking/ejection lever
- Connection type: Screw or Spring
- Industrial "ice cube" style relay
- Manual test button
- Service friendly pluggable components
- LED indication

For quantities greater than listed, call for quote.								Protective Circuit Type			Price Each		
MOUSER STOCK NO.		Fig.	Phoenix Type	Input Voltage	Continuous Current	Contact Type	Max Switching Voltage	Protective Circuit Type			Price Each		
Mfr.	Mfr. Part No.							1	10	100	1	10	100
<b>Screw Cage Connection</b>													
651-2834643	C	PR2-RSC3-LDP-24DC/2X21	24V DC	10A	DPDT	250V AC/125V DC	status LED and free-wheeling diode	20.71	19.58	17.84	31.03	28.05	25.92
651-2834669	C	PR2-RSC3-LV-120AC/2X21	120V AC	10A	DPDT	250V AC/125V DC	status LED and varistor	25.43	22.99	21.24	33.71	28.98	26.78
<b>Screw Cage Connection - Gold Plated Contacts</b>													
651-2834724	C	PR2-RSC3-LDP-24DC/4X21AU	24V DC	5A	4PDT	250V AC/125V DC	status LED and free-wheeling diode	25.94	23.45	21.67	34.38	30.56	28.77
651-2834737	C	PR2-RSC3-LV-24AC/4X21AU	24V AC	5A	4PDT	250V AC/125V DC	status LED and varistor	30.52	27.59	25.49	34.38	30.56	28.77
651-2834740	C	PR2-RSC3-LV-120AC/4X21AU	120V AC	5A	4PDT	250V AC/125V DC	status LED and varistor	29.50	26.67	24.64	34.38	30.56	28.77
<b>Spring Cage Connection</b>													
651-2834685	D	PR2-RSP3-LDP-24DC/2X21	24V DC	10A	DPDT	250V AC/125V DC	status LED and free-wheeling diode	28.36	24.70	22.53	34.38	30.56	28.77
651-2834698	D	PR2-RSP3-LV-24AC/2X21	24V AC	10A	DPDT	250V AC/125V DC	status LED and varistor	32.69	28.97	26.77	34.38	30.56	28.77
651-2834708	D	PR2-RSP3-LV-120AC/2X21	120V AC	10A	DPDT	250V AC/125V DC	status LED and varistor	33.71	28.98	26.78	34.38	30.56	28.77

## PSR DIN RAIL SAFETY RELAYS

For quantities greater than listed, call for quote.								Price Each				
MOUSER STOCK NO.		Fig.	Phoenix Type	Input Voltage	Continuous Current	Contact Type	Description	Price Each				
Mfr.	Mfr. Part No.							1	10	100		
651-2986960	E	PSR-SCP-24DC/FSP/2X1/1x2	Cat 4. (EN 13849-1)	2 N/O, 1 NC	-	Safe coupling relay for SIL3 high and low demand applications	186.00	166.00	147.00	234.00	216.95	198.05
651-2986957	E	PSR-SPP-24DC/FSP/2X1/1x2	Cat 4. (EN 13849-1)	2 N/O, 1 NC	-	Safe coupling relay for SIL3 high and low demand applications	186.00	166.00	147.00	234.00	216.95	198.05
651-2986575	E	PSR-SCP-24DC/FSP/2X2/1x2	Cat 4. (EN 13849-1)	2 N/O, 1 NC	-	Safe coupling relay for SIL2 high and low demand applications	147.00	127.00	108.00	188.00	168.00	150.00
651-2963718	E	PSR-SCP-24UC/ESM4/2X1/1X2	Cat. 4 (EN 954-1)	2 N/O, 1 N/C	Manual	1 or 2-channel for normally closed emergency stop and safety doors	234.00	214.00	195.00	314.00	294.00	275.00
651-2963750	E	PSR-SCP-24UC/ESA4/2X1/1X2	Cat. 4 (EN 954-1)	2 N/O, 1 N/C	Manual/Auto	1 or 2-channel for normally closed emergency stop and safety doors	234.00	214.00	195.00	314.00	294.00	275.00
651-2963776	E	PSR-SCP-24UC/ESM4/3X1/1X2/B	Cat. 4 (EN 954-1)	3 N/O, 1 N/C	Manual	1 or 2-channel for normally closed emergency stop and safety doors	280.00	260.00	241.00	400.00	380.00	360.00
651-2963763	E	PSR-SCP-24UC/ESA4/3X1/1X2/B	Cat. 4 (EN 954-1)	3 N/O, 1 N/C	Manual/Auto	1 or 2-channel for normally closed emergency stop and safety doors	254.85	234.85	215.85	394.85	374.85	354.85
651-2963802	E	PSR-SCP-24UC/ESA4/2X1/1X2/B	Cat. 2 (EN 954-1)	4 N/O, 1 N/C	Manual/Auto	1 channel for normally closed emergency stop and safety doors, and solid state	261.95	241.95	222.95	421.95	391.95	371.95
651-2981114	E	PSR-SCP-24-230UC/ESAM4/3X1/1X2	Cat. 4 (EN 954-1)	3 NO, 1 NC	Manual/Auto	2 channel emergency stop, safety door, solid state	342.40	322.40	303.40	522.40	492.40	472.40
651-2981428	E	PSR-SCP-24UC/ESD/5X1/1X2/300	Cat. 3/4 (EN 954-1)	3 NO, 2 NC, 1 NC	Manual/Auto	1 channel 24V expansion module	424.00	404.00	384.00	604.00	574.00	554.00
651-2981033	E	PSR-SCP-24UC/URM/5X1/2X2B	Cat. 4 (EN 954-1)	5 N/O, 2 N/C	-	Force guided relay, green housing	234.00	214.00	195.00	394.00	374.00	354.00
651-2963747	F	PSR-SCP-24UC/URM/5X1/2X2	Type A (EN50-205)	5 N/O, 2 N/C	-	Force guided relay, green housing	131.31	111.31	92.31	211.31	191.31	171.31
651-2981363	F	PSR-SCP-24UC/URM/2X21	Type C (EN50-205)	DPDT	-	24V Force guided relay	63.99	51.99	44.99	103.99	91.99	83.99
651-2981444	F	PSR-SCP-24UC/URM/4X1/2X2	Type A (EN50-205)	4 N/O, 2 N/C	-	24V Force guided relay, 24V coil	99.00	87.00	79.00	177.00	165.00	157.00

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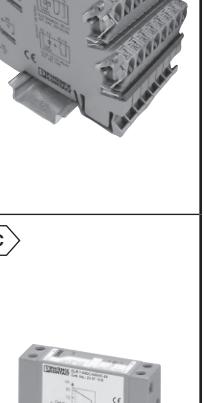
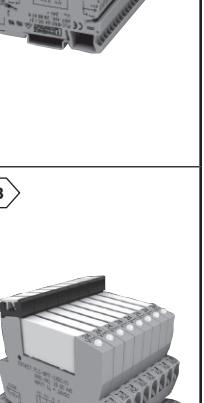
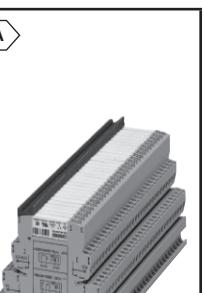
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# PHOENIX CONTACT DIN Rail Relays

**PHOENIX  
CONTACT**  
INSPIRING INNOVATIONS

## PLC SERIES DIN RAIL RELAYS

MOUSER STOCK NO.	Fig.	Phoenix Type	Input Voltage	Contact Type	Contact Material	Description	For quantities greater than listed, call for quote.	
							1	10
<b>Universal PLC Series with Pluggable Relay</b>								
651-2966906	A	PLC-RSC-12DC/21	12VDC	SPDT	AgSnO	Standard Power Contact	21.94	20.50
651-2966171	A	PLC-RSC-24DC/21	24VDC	SPDT	AgSnO	Standard Power Contact	20.16	19.11
651-2966184	A	PLC-RSC-24UC/21	24V AC/DC	SPDT	AgSnO	Standard Power Contact	25.15	23.50
651-2966197	A	PLC-RSC-120UC/21	120VAC	SPDT	AgSnO	Standard Power Contact	23.01	21.50
651-2967060	A	PLC-RSC-24DC/21-21	24VDC	DPDT	AgNi	Standard Power Contact	28.36	26.50
651-2967073	A	PLC-RSC-24UC/21-21	24V AC/DC	DPDT	AgNi	Standard Power Contact	39.06	36.50
651-2967086	A	PLC-RSC-120UC/21-21	120VAC	DPDT	AgNi	Standard Power Contact	34.78	32.50
651-2966265	A	PLC-RSC-24DC/21AU	24VDC	SPDT	Ag+Au	Multi-Layer Contact	28.36	26.50
651-2966278	A	PLC-RSC-24UC/21AU	24V AC/DC	SPDT	Ag+Au	Multi-Layer Contact	28.36	26.50
651-2966281	A	PLC-RSC-120UC/21AU	120VAC	SPDT	Ag+Au	Multi-Layer Contact	32.64	30.50
651-2967125	A	PLC-RSC-24DC/21-21AU	24VDC	DPDT	AgNi+Au	Multi-Layer Contact	33.71	31.50
651-2967604	A	PLC-RSC-24DC/11C/ACT	24VDC	1 N/O	AgSnO	High Inrush Current (80A)	39.06	36.50
651-2967617	A	PLC-RSC-12DC/21HC	12VDC	SPDT	AgNi	High Continuous Current (10A)	39.06	36.50
651-2967620	A	PLC-RSC-24DC/21HC	24V	SPDT	AgNi	High Continuous Current (10A)	29.00	27.50
651-2966210	A	PLC-RSC-24DC/I/ACT	24VDC	1 N/O	AgSnO	Actuator Type (6A)	18.73	17.50
651-2967109	A	PLC-RSC-24DC/I-1/ACT	24VDC	2 N/O	AgNi	Actuator Type (6A)	24.15	20.97
651-5603154	A	PLC-RSC-24DC/21 C1D2	24VDC	SPDT	AgSnO	Class 1, Division 2 Rated	28.36	26.50
651-5603157	A	PLC-RSC-120UC/21 C1D2	120VAC	SPDT	AgSnO	Class 1, Division 2 Rated	33.71	31.50
<b>Universal PLC Series with Pluggable Optocoupler</b>								
651-2966634	A	PLC-OSC-24DC/24DC/2	24VDC	OPTO	-	33 VDC Max Switching (3A)	44.41	41.50
651-2966676	A	PLC-OSC-24DC/24DC/2/ACT	24VDC	OPTO	-	33 VDC Max Switching, Actuator	47.62	44.50
651-2966728	A	PLC-OSC-24DC/48DC/100	24VDC	OPTO	-	48 VDC Max Switching (100mA)	32.64	30.50
<b>Universal PLC Series with Push-In Relay</b>								
651-2900316	B	PLC-RPT- 12DC/21	12VDC	DPDT	AgSnO	Standard Power Contact	18.50	17.02
651-2900299	B	PLC-RPT- 24DC/21	24VDC	SPDT	AgSnO	Standard Power Contact	20.87	19.50
651-2900300	B	PLC-RPT- 24UC/21	24VAC/DC	SPDT	AgSnO	Standard Power Contact	21.19	18.40
651-2900301	B	PLC-RPT- 48DC/21	48VDC	SPDT	AgSnO	Standard Power Contact	23.01	21.50
651-2900303	B	PLC-RPT- 60DC/21	60VDC	SPDT	AgSnO	Standard Power Contact	31.57	29.50
651-2900304	B	PLC-RPT-120UC/21	120VAC	SPDT	AgSnO	Standard Power Contact	27.29	25.50
651-2900305	B	PLC-RPT-230UC/21	230VAC	SPDT	AgSnO	Standard Power Contact	28.36	26.50
651-2900317	B	PLC-RPT- 12DC/21AU	12VDC	DPDT	AgSnO+Au	Multi-Layer Contact	29.43	27.50
651-2900306	B	PLC-RPT- 24DC/21AU	24VDC	SPDT	AgSnO+Au	Multi-Layer Contact	26.22	24.50
651-2900307	B	PLC-RPT- 24UC/21AU	24VAC/DC	SPDT	AgSnO+Au	Multi-Layer Contact	26.22	24.50
651-2900308	B	PLC-RPT- 48DC/21AU	48VDC	SPDT	AgSnO+Au	Multi-Layer Contact	29.43	27.50
651-2900309	B	PLC-RPT- 60DC/21AU	60VDC	SPDT	AgSnO+Au	Multi-Layer Contact	32.64	30.50
651-2900310	B	PLC-RPT-120UC/21AU	120VAC	SPDT	AgSnO+Au	Multi-Layer Contact	32.64	30.50
651-2900311	B	PLC-RPT-230UC/21AU	230VAC	SPDT	AgSnO+Au	Multi-Layer Contact	32.64	30.50
651-2900312	B	PLC-RPT- 24DC/ 1/ACT	24VDC	1 N/O	AgSnO	Actuator Type (6A)	16.49	15.18
651-2900313	B	PLC-RPT- 24DC/ 1AU/SEN	24VDC	1 N/O	AgSnO+Au	Sensor Interface	19.80	18.50
651-2900314	B	PLC-RPT-120UC/ 1AU/SEN	120VAC	1 N/O	AgSnO+Au	Sensor Interface	26.22	24.50
651-2900315	B	PLC-RPT-230UC/ 1AU/SEN	230VAC	1 N/O	AgSnO+Au	Sensor Interface	26.01	23.85
<b>Universal PLC Series with Push-In Optocoupler</b>								
651-2900364	B	PLC-OPT- 24DC/ 24DC/2	24VDC	OPTO	-	33VDC Max Switching (3A)	39.50	36.34
651-2900365	B	PLC-OPT- 48DC/ 24DC/2	48VDC	OPTO	-	33VDC Max Switching (3A)	36.92	34.50
651-2900366	B	PLC-OPT- 60DC/ 24DC/2	60VDC	OPTO	-	33VDC Max Switching (3A)	33.15	30.40
651-2900367	B	PLC-OPT-120UC/ 24DC/2	120VAC	OPTO	-	33VDC Max Switching (3A)	44.41	41.50
651-2900368	B	PLC-OPT-230UC/ 24DC/2	230VAC	OPTO	-	33VDC Max Switching (3A)	38.25	35.08
651-2900352	B	PLC-OPT- 24DC/ 48DC/100	24VDC	OPTO	-	48VDC Max Switching (100mA)	29.43	27.50
651-2900353	B	PLC-OPT- 48DC/ 48DC/100	48VDC	OPTO	-	48VDC Max Switching (100mA)	27.29	25.50
651-2900354	B	PLC-OPT- 60DC/ 48DC/100	60VDC	OPTO	-	48VDC Max Switching (100mA)	27.29	25.50
651-2900355	B	PLC-OPT-120UC/ 48DC/100	120VAC	OPTO	-	48VDC Max Switching (100mA)	34.78	32.50
651-2900356	B	PLC-OPT-230UC/ 48DC/100	230VAC	OPTO	-	48VDC Max Switching (100mA)	30.09	27.59
651-2900369	B	PLC-OPT- 24DC/ 230AC/1	24VDC	OPTO	-	24-253VAC Max Switching (0.75A)	44.41	41.50
651-2900370	B	PLC-OPT- 48DC/ 230AC/1	48VDC	OPTO	-	24-253VAC Max Switching (0.75A)	37.23	34.14
651-2900371	B	PLC-OPT- 60DC/ 230AC/1	60VDC	OPTO	-	24-253VAC Max Switching (0.75A)	35.85	33.50
651-2900372	B	PLC-OPT-120UC/ 230AC/1	120VAC	OPTO	-	24-253VAC Max Switching (0.75A)	38.25	35.08
651-2900374	B	PLC-OPT-230UC/ 230AC/1	230VAC	OPTO	-	24-253VAC Max Switching (0.75A)	39.06	36.50
651-2900375	B	PLC-OPT- 5DC/ 24DC/2/ACT	5VDC	OPTO	-	33VDC Max Switching Actuator	39.06	36.50
651-2900376	B	PLC-OPT- 24DC/ 24DC/2/ACT	24VDC	OPTO	-	33VDC Max Switching Actuator	41.20	38.50
651-2900358	B	PLC-OPT- 24DC/ 48DC/100/SEN	24VDC	OPTO	-	48VDC Max Switching Sensor	29.43	27.50
651-2900359	B	PLC-OPT-120UC/ 48DC/100/SEN	24VDC	OPTO	-	48VDC Max Switching Sensor	31.57	29.50
651-2900361	B	PLC-OPT-230UC/ 48DC/100/SEN	24VDC	OPTO	-	48VDC Max Switching Sensor	31.57	29.50
<b>PLC Series DIN Rail Relay Accessories</b>								
651-2966508	-	PLC-ESK GY	-	-	-	Gray Power Feed Thru Terminal Block (32A)	22.81	19.79
651-2966841	-	PLC-ATP BK	-	-	-	Black Separation Plate	4.95	4.82
651-2295554	-	PLC-V8/FLK 14/OUT	-	-	-	Rapid Output Plug Adapter to 14 Pin Ribbon Connection	49.77	43.23
651-2966692	-	FBST 500-PLC BU	-	-	-	Blue Continuous Plug-In Bridge (500mm Long)	22.18	20.48
651-2966786	-	FBST 500-PLC RD	-	-	-	Red Continuous Plug-In Bridge (500mm Long)	22.18	20.48
651-2966838	-	FBST 500-PLC GY	-	-	-	Gray Continuous Plug-In Bridge (500mm Long)	23.19	21.40
651-1051003	-	ZB 6-UNBEDRUCKT	-	-	-	ZB 6 Unprinted Marker Strip 10 section	1.27	1.19



## ELR SOLID STATE CONTACTORS

For quantities greater than listed, call for quote.							
MOUSER STOCK NO.	Fig.	Phoenix Type	Input Voltage	Contact Type	Cont. Current	Description	Price Each
Mfr. Mfr. Part No.							
651-2297138	C	ELR 1-24DC/600AC/20	24VDC	20A	20A	Single phase	127.96
651-2297154	C	ELR 1-24DC/600AC/30	24VDC	30A	30A	Single phase	151.50

## EMB-BL COMPACT MONITORING RELAYS

- Features:**
- Push-in technology for fast, simple wiring without tools
  - UL and cUL approval
  - DIN Rail Mounted

MOUSER STOCK NO.	Fig.	Phoenix Type	Contact Type	Monitoring Function	Voltage or Current Range	Price Each
Mfr. Mfr. Part No.						
651-2903522	D	EMD-BL-C-10-PT	SPDT	Single Phase Current	0-5A AC or 0-10A AC	109.00 99.24
651-2903524	D	EMD-BL-V-230-PT	SPDT	Single Phase Voltage	24V AC/DC or 230V AC	101.07 92.02
651-2903528	D	EMD-BL-PH-480-PT	SPDT	3 Phase Sequence and Asymmetry	208-480V AC or 120-277V AC	66.39 60.45
651-2903526	D	EMD-BL-3V-400-PT	SPDT	3 Phase Voltage	400V AC ±30%	98.09 89.32

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# SONG CHUAN General Purpose and Automotive Relays

RoHS Compliant This page of product is RoHS compliant.



## MINI ISO HIGH POWER AUTOMOTIVE RELAYS

DIMENSIONS: mm

Socket Terminal

MOUSER STOCK NO.	Song Chuan Part No.	Fig.	Contact Form	Contact Rating	Coil Voltage	For quantities greater than listed, call for quote.			
						Price Each			
						1	25	50	100
893-896H1AHD112VDC	896H-1AH-D1-12VDC	A	SPNO	20/50A	12VDC	2.88	2.16	1.94	1.61
893-896H1AHD12VDC	896H-1AH-D-12VDC	A	SPNO	20/50A	12VDC	3.60	2.70	2.42	2.01
893-896H1AHD1R112VDC	896H-1AH-D1-R1-12VDC	A	SPNO	20/50A	12VDC	3.11	2.33	2.10	1.76
893-896H1AHSR112VDC	896H-1AH-S-R1-12VDC	A	SPNO	20/50A	12VDC	3.24	2.43	2.19	1.71
893-896H1CHC0012	896H-1CH-C-001-12VDC	A	SPDT	30/50A	12VDC	2.40	2.20	2.00	1.80
893-896H1CHC00124	896H-1CH-C-001-24VDC	A	SPDT	30/50A	24VDC	3.11	2.85	2.58	2.33
893-896H1CHC112VDC	896H-1CH-C1-12VDC	A	SPDT	30/50A	12VDC	3.93	2.94	2.64	2.19
893-896H1CHCHR1U312VD	896H-1CH-C-R1-U03-12VDC	A	SPDT	30/50A	12VDC	3.24	2.43	2.19	1.71
893-896H1CHD00112VDC	896H-1CH-D-001-12VDC	A	SPDT	30/50A	12VDC	3.06	2.29	2.07	1.74
893-896H1CHD00124VDC	896H-1CH-D-001-24VDC	A	SPDT	30/50A	24VDC	3.75	2.80	2.53	2.13
893-896H1CHD10124VDC	896H-1CH-D-001-24VDC	A	SPDT	30/50A	24VDC	5.75	4.31	3.88	3.24
893-896H1CHD112VDC	896H-1CH-D1-12VDC	A	SPDT	30/50A	12VDC	2.88	2.52	2.24	2.13
893-896H1CHD124VDC	896H-1CH-D1-24VDC	A	SPDT	30/50A	24VDC	5.06	3.79	3.41	2.82
893-896H1CHD12VDC	896H-1CH-D-12VDC	A	SPDT	30/50A	12VDC	3.44	2.91	2.58	2.45
893-896H1CHD1R112VDC	896H-1CH-D1-R1-12VDC	A	SPDT	30/50A	12VDC	3.93	2.94	2.64	2.19
893-896H1CHD1S12VDC	896H-1CH-D1S-12VDC	A	SPDT	30/50A	12VDC	3.86	2.89	2.61	2.19
893-896H1CHD1S24VDC	896H-1CH-D1S-24VDC	A	SPDT	30/50A	24VDC	4.53	3.40	3.06	2.57
893-896H1CHD1SW12VDC	896H-1CH-D1SW-R1-12VDC	A	SPDT	30/50A	12VDC	4.06	3.77	3.39	3.02
893-896H1CHD1SW24VDC	896H-1CH-D1SW-R1-24VDC	A	SPDT	30/50A	24VDC	3.92	2.94	2.65	2.22
893-896H1CHD24VDC	896H-1CH-D-24VDC	A	SPDT	30/50A	24VDC	2.89	2.52	2.24	2.14
893-896H1CHDR112VDC	896H-1CH-D-R1-12VDC	A	SPDT	30/50A	12VDC	4.05	3.03	2.75	2.29
893-896H1CHDR124VDC	896H-1CH-D-R1-24VDC	A	SPDT	30/50A	24VDC	4.03	3.02	2.73	2.28
893-896H1CHS12VDC	896H-1CH-S-12VDC	A	SPDT	30/50A	12VDC	3.66	2.74	2.47	2.06
893-896H1CHC1S24VDC	896H-1CH-C1S-24VDC	A	SPDT	30/50A	24VDC	2.61	2.40	1.96	1.74
893-896H1CHD1SW12VDC	896H-1CH-D1SW-R1-12VDC	A	SPDT	30/50A	12VDC	4.06	3.77	3.39	3.02
893-896H1CHD1SW24VDC	896H-1CH-D1SW-R1-24VDC	A	SPDT	30/50A	24VDC	3.92	2.94	2.65	2.22
893-896H1CHC0012	896H-1CH-C-001-12VDC	A	SPDT	30/50A	12VDC	2.40	2.20	2.00	1.80
893-896H1CHC00124	896H-1CH-C-001-24VDC	A	SPDT	30/50A	24VDC	3.11	2.85	2.58	2.33
893-896H1CHC12VDC	896H-1CH-C-12VDC	A	SPDT	30/50A	12VDC	2.88	2.16	2.02	1.92

PCB Terminal

MOUSER STOCK NO.	Song Chuan Part No.	Fig.	Contact Form	Contact Rating	Coil Voltage	For quantities greater than listed, call for quote.			
						Price Each			
						1	25	50	100
893-896HP1AHD12VDC	896HP-1AH-D-12VDC	A	SPNO	20/50A	12VDC	3.81	2.86	2.56	2.13
893-896HP1AHS12VDC	896HP-1AH-S-12VDC	A	SPNO	20/50A	12VDC	2.97	2.68	2.40	2.26
893-896HP1CHD12VDC	896HP-1CH-D-12VDC	A	SPDT	30/50A	12VDC	4.31	3.23	2.89	2.41
893-896HP1CHD24VDC	896HP-1CH-D-24VDC	A	SPDT	30/50A	24VDC	3.57	3.12	2.77	2.70
893-896HP1CHS12VDC	896HP-1CH-S-12VDC	A	SPDT	30/50A	12VDC	3.28	2.64	2.34	2.24
893-896HP1CHS12VDC	896HP-1CH-S-12VDC	A	SPDT	30/50A	12VDC	3.28	2.64	2.34	2.24
893-896HP1CHC12VDC	896HP-1CH-C-12VDC	A	SPDT	30/50A	12VDC	4.01	3.01	2.70	2.23

## GENERAL PURPOSE RELAYS

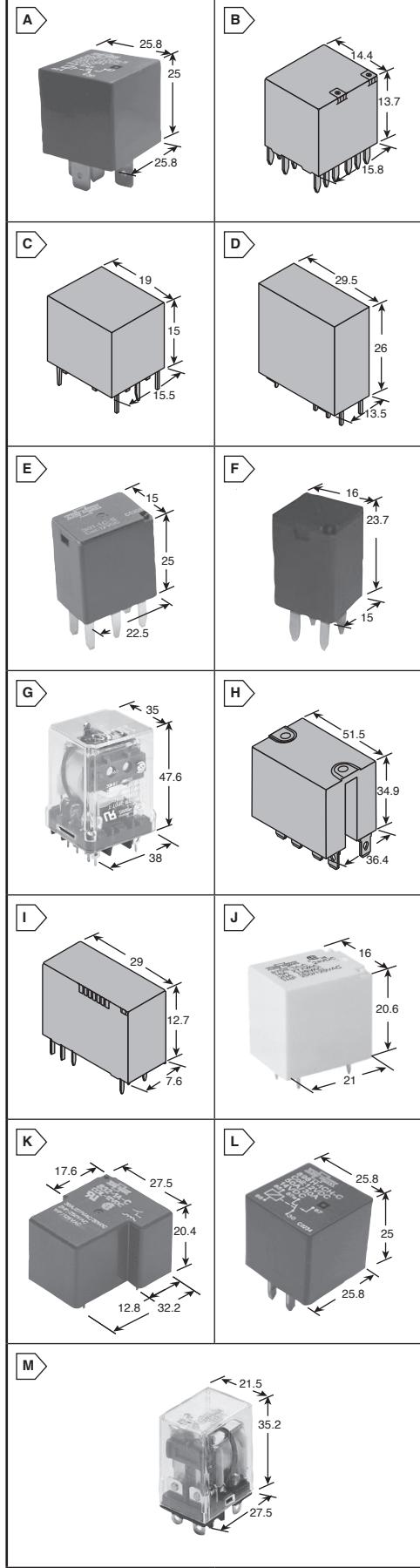
### Applications:

- Appliance controls
- Automotive controls
- Spa and Pool controls
- Industrial controls
- Power supply controls
- Lighting controls

MOUSER STOCK NO.	Song Chuan Part No.	Fig.	Contact Form	Contact Rating	Coil Voltage	For quantities greater than listed, call for quote.			
						Price Each			
						1	25	50	100
893-103T1CHS12VDC	103T-1CH-S-12VDC	B	SPDT	20A	12VDC	3.56	3.26	2.97	2.67
893-8991CF512VDC	899-1CF-S-12VDC	C	SPDT	10A	12VDC	1.03	.804	.727	.68
893-793P1AS12VDC	793P-1A-S-12VDC	D	SPNO	16A	12VDC	2.25	2.06	1.89	1.69
893-793P1CS24VDC	793P-1C-S-24VDC	D	SPDT	16A	24VDC	2.25	2.06	1.88	1.69
893-793P1CS12VDC	793P-1C-S-12VDC	D	SPDT	16A	12VDC	2.28	2.05	1.82	1.73
893-3011CCR124VDC	301-1C-C-R1-24VDC	E	SPDT	35A	24VDC	3.19	2.92	2.66	2.39
893-3011CCD124VDC	301-1C-C-D1-24VDC	E	SPDT	35A	24VDC	2.78	2.51	2.23	2.11
893-3031AHCR124VDC	303-1AH-C-R1-24VDC	F	SPNO	20A	24VDC	2.88	2.64	2.40	2.16
893-7353CF51240VAC	735-3C-F-C1-240VAC	G	TPDT	20A/25A	24VDC	24.24	22.21	20.20	18.16
893-841P2AC12VDC	841P-2A-C-12VDC	H	DPDM	30A	12VDC	10.85	9.94	9.05	8.14
893-841S2AC112VDC	841S-2A-C-112VDC	H	DPDM	30A	12VDC	11.97	10.96	9.97	8.97
893-845HN2CS24VDC	845HN-2C-S-24VDC	I	DPDT	12A	24VDC	2.90	2.65	2.42	2.18
893-845N2CS24VDC	845N-2C-S-24VDC	I	DPDT	12A	24VDC	2.19	2.01	1.83	1.64
893-875B1CHFS24VDC	875B-1CH-F-S-24VDC	J	SPDT	16A	24VDC	2.53	2.32	2.11	1.90
893-832AWP1CF512VDC	832AWP-1C-F-S-12VDC	K	SPDT	30A	12VDC	3.71	3.40	3.10	2.78
893-898H1CHCR1U0224	898H-1CH-C-R1-U02-24VDC	L	SPDT	50A	24VDC	3.14	2.88	2.62	2.36
893-SCL1DPDT12VDC	SCL-1-DPDT-12VDC	M	DPDT	12A	12VDC	4.61	4.23	3.84	3.46
893-SCL1DPDT24VDC	SCL-1-DPDT-24VDC	M	DPDT	12A	24VDC	4.80	4.40	4.00	3.60

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2025

# WHITE RODGERS Power Contactors and Thermostats

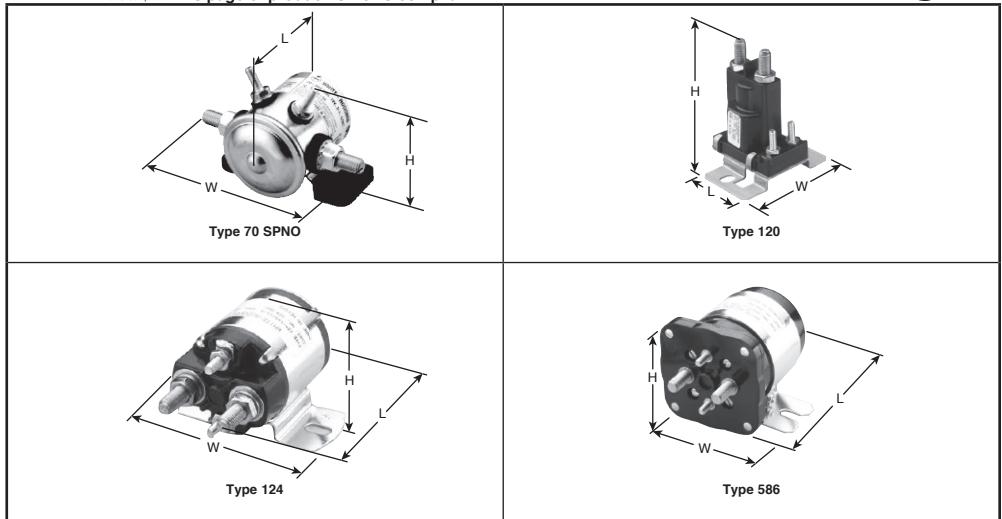
White  
Rodgers™

## DC POWER CONTACTORS

### Features:

- Industry benchmark designs
- Superior quality and materials
- Broad range of coil voltages and contact ratings
- Long operating life
- Versatile mounting and termination
- Heavy duty mounting brackets
- Robust 5/16" .24 studs
- Rated for Continuous Duty or Intermittent Duty
- Isolated, grounded, and common coil configurations available
- Dust and splash proof designs available

 This page of product is RoHS compliant.



### Specifications:

- Contact Pole Forms:
  - Single Pole Normally Open (SPNO)
  - Single Pole Double Throw (SPDT)
- Coil Voltages:
  - Ranging from 6VDC to 96VDC
- Operating Temperatures:
  - Ranging from -20°F to 150°F (Ambient)
- Contact Ratings:
  - Normally Open: Ranging from 50A to 500A Continuous  
Ranging from 200A to 1200A Inrush
  - Normally Closed: Ranging from 30A to 100A Continuous  
Ranging from 30A to 300A Inrush
- Duty Cycle: Continuous

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	White Rodgers Part No.	Pole Form	Bracket Style	Coil Volt DC	Coil Resistance (Ω) @ 25°C	Contact Material	Contact Rating (Amps)			Inductive Load		Dimensions: in.			Weight (lbs.)	Price Each			
							Volt DC	Norm. Open		Norm. Closed		Dimensions: in.				1	10	50	
								Cont.	Inrush	Cont.	Inrush	L	W	H					
<b>Type 70</b>																			
802-70-901	70 108224	SPNO	Standard	6	4	Copper	6	80	300	-	-	2.47	3.48	2.40	0.78	22.48	20.49	18.54	
802-70-902	70 111224	SPNO	Standard	12	16	Copper	12	80	150	-	-	2.47	3.48	2.40	0.78	19.00	17.67	16.52	
802-70-915	70 111225	SPNO	Standard	24	60	Copper	24	50	50	-	-	2.47	3.48	2.40	0.78	24.72	22.76	20.45	
802-70-903	70 117224	SPNO	Standard	24	60	Copper	24	50	50	-	-	2.47	3.48	2.40	0.78	24.00	22.00	20.09	
802-70-904	70 120224	SPNO	Standard	36	114	Copper	36	50	50	-	-	2.47	3.48	2.40	0.78	24.00	22.00	20.09	
<b>Type 120</b>																			
802-120-901	120 105751	SPNO	Standard	12	16	Silver Alloy	12	100	400	-	-	2.13	2.88	3.25	0.38	21.78	20.15	18.13	
802-120-907	120-907	SPNO	L	12	16	Silver Alloy	12	100	400	-	-	2.50	3.00	3.25	0.38	21.67	20.07	18.13	
802-120-904	120 114751	SPNO	Standard	24	64	Silver Alloy	24	100	400	-	-	2.13	2.88	3.25	0.38	18.34	16.97	15.59	
<b>Type 124</b>																			
802-124-906	124 105211	SPNO	Standard	12	13.2	Silver Alloy	12	100	400	-	-	3.56	3.13	2.19	1.00	41.06	36.50	33.13	
802-124-902	124 105111	SPNO	Standard	12	13.2	Silver Alloy	12	100	400	-	-	3.56	3.13	2.19	1.00	41.06	36.50	33.13	
802-124-910	124 305111	SPDT	Standard	12	13.2	Silver Alloy	12	200	600	50	200	4.69	3.13	2.19	1.19	63.39	58.30	52.49	
802-124-903	124 114111	SPNO	Standard	24	53	Silver Alloy	24	100	400	-	-	3.56	3.13	2.19	1.00	41.06	36.50	33.13	
802-124-911	124 314111	SPDT	Standard	24	53	Silver Alloy	24	200	600	50	100	4.69	3.13	2.19	1.19	63.38	58.29	52.47	
802-124-904	124 117111	SPNO	Standard	36	120	Silver Alloy	36	100	400	-	-	3.56	3.13	2.19	1.00	41.06	36.50	33.13	
<b>Type 586</b>																			
802-586-902	586 105111	SPNO	Standard	12	21	Silver Alloy	12	200	600	-	-	3.69	3.30	2.90	1.50	56.55	51.85	47.13	
802-586-905	586 114111	SPNO	Standard	24	84	Silver Alloy	24	200	600	-	-	3.69	3.30	2.90	1.50	62.64	57.37	51.86	
802-586-906	586 117111	SPNO	Standard	36	189	Silver Alloy	36	200	600	-	-	3.69	3.30	2.90	1.50	62.63	57.36	51.87	
802-586-907	586 120111	SPNO	Standard	48	336	Silver Alloy	36	200	600	-	-	3.69	3.30	2.90	1.50	62.63	57.36	51.87	
802-586-911	586 305111	SPDT	Standard	12	13.2	Silver Alloy	12	200	600	100	300	4.61	3.30	2.90	1.63	87.63	80.30	72.63	
802-586-914	586 314111	SPDT	Standard	24	53	Silver Alloy	24	200	600	100	200	4.61	3.30	2.90	1.63	87.61	80.31	72.64	

## SNAP ACTION DISC THERMOSTATS

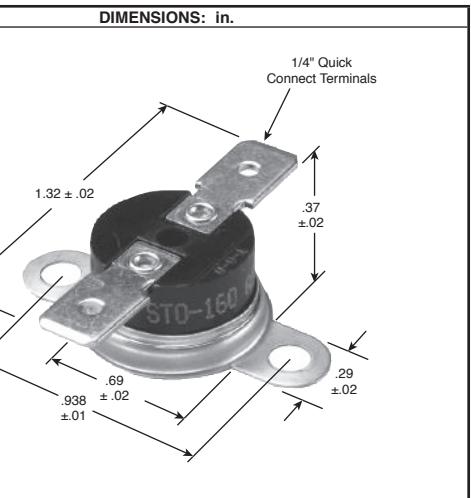
### Features:

- Loose ring, stainless steel mounting brackets
- 1/4" quick connect termination
- Automatic reset
- Enclosed Disc
- Aluminum Disc Cup

### Specifications:

- Single Pole, Single Throw
- Available in either open or close on temperature rise
- Consult factory for D.C. rating
- General Electrical Ratings

Resistive: 15A @ 120VAC, 10A @ 240VAC  
Inductive: 3.0FLA-12.0LRA @ 120VAC,  
1.5FLA-6.0LRA @ 240VAC  
Pilot Duty: 125VA



MOUSER STOCK NO.	White Rodgers Part No.	Operating Range †		Function ‡‡‡	Price Each			
		°F	°C		1	10	50	
802-STO-60	3L11-60	55 to 65	13 to 18	Opens	20°F 12°C	7.36	7.11	6.97
802-STO-85	3L11-85	80 to 90	27 to 32	Opens	15°F 8°C	7.36	7.11	6.97
802-STC-100	3F11-100	93 to 107	34 to 42	Closes	30°F 17°C	7.36	7.11	6.97
802-STO-110	3F11-110	105 to 115	41 to 46	Opens	30°F 17°C	7.36	7.11	6.97
802-STC-120	3F11-120	113 to 127	45 to 53	Closes	30°F 17°C	7.36	7.11	6.97
802-STO-120	3L11-120	115 to 125	46 to 52	Opens	30°F 17°C	7.36	7.11	6.97
802-STC-140	3L11-140	133 to 147	56 to 64	Closes	30°F 17°C	7.36	7.11	6.97
802-STO-140	3L11-140	135 to 145	57 to 63	Opens	30°F 17°C	7.36	7.11	6.97
802-STO-150	3L11-150	145 to 155	63 to 68	Opens	30°F 17°C	7.36	7.11	6.97
802-STO-160	3L11-160	155 to 165	68 to 74	Opens	30°F 17°C	7.36	7.11	6.97
802-STO-170	3L11-170	165 to 175	74 to 79	Opens	30°F 17°C	7.36	7.11	6.97
802-STC-170	3F11-170	162 to 178	72 to 81	Closes	30°F 17°C	7.36	7.11	6.97
802-STO-175	3L11-175	170 to 180	77 to 82	Opens	15°F 8°C	7.36	7.11	6.97
802-STC-180	3F11-180	172 to 188	78 to 87	Closes	30°F 17°C	5.12	4.75	4.29
802-STO-180	3L11-180	175 to 185	79 to 85	Opens	30°F 17°C	7.36	7.11	6.97
802-STO-190	3L11-190	185 to 195	85 to 91	Opens	30°F 17°C	7.36	7.11	6.97
802-STO-210	3L11-210	204 to 216	96 to 102	Opens	30°F 17°C	7.36	7.11	6.97
802-STO-220	3L11-175	214 to 226	101 to 108	Opens	30°F 17°C	7.36	7.11	6.97
802-STC225	3L11-175	217 to 232	103 to 111	Closes	30°F 17°C	7.36	7.11	6.97
802-STO-230	3L11-175	224 to 236	107 to 113	Opens	30°F 17°C	5.36	4.98	4.49
802-STO-250	3L11-250	244 to 256	118 to 124	Opens	30°F 17°C	7.36	7.11	6.97
802-STO-325	3L11-325	315 to 335	157 to 169	Opens	50°F 28°C	6.94	6.46	6.04

† Operating Range: Range of temperature at which disc thermostat performs switching function.  
‡ Function: Opens - Normally closed circuit - opens within specified temperature range.  
Closes - Normally open circuit - closes within specified temperature range.  
†† Differential: Temperature drop below operating range minimum necessary for disc to reset.

## VOLTAGE, CURRENT CONTROL RELAYS, ALTERNATING RELAYS AND PHASE MONITORS

Our C-Lynx measurement and control relays are dedicated to monitoring and detecting abnormal electrical (voltage, current, phase, frequency) physical (level, temperature, speed, etc.) operating values.

These products are used in applications such as heating/air conditioning, access control, heat pumps, water and air treatment, waste treatment, lifting and handling, medical equipment, pump management, and more.

### Current Relays

#### Features:

- Control of AC and DC currents
- Measurement ranges from 2mA to 10A
- Automatic recognition of AC/DC
- Choice between over and undercurrent
- True RMS measurement
- Selectable latching (memory) function

For quantities greater than listed, call for a quote.

MOUSER STOCK NO.	Crouzet Part No.	Fig.	Supply Voltage	Mounting	Price Each
<b>EI Series Current Control Relay</b>					
874-84871033	84871033	A	120VAC	Din-Rail	<b>107.63</b>
<b>HIL &amp; HIH Series Current Control Relay</b>					
874-84871120	84871120	B	24-240VAC	Din-Rail	<b>150.68</b>
874-84871130	84871130	C	24-240VAC	Din-Rail	<b>170.03</b>

### MIC Series Current Control Relay

- Choice of output relay action
- True RMS measurement
- Built-in current transformer

For quantities greater than listed, call for a quote.

MOUSER STOCK NO.	Crouzet Part No.	Fig.	Supply Voltage	Mounting	Price Each
<b>MIC Series Current Control Relay</b>					
874-84871122	84871122	D	24-240VAC	Din-Rail	<b>140.03</b>
<b>IR.T Series Current Control Relay</b>					
874-DIRT110A	DIRT110A	E	110VAC	Din rail	<b>108.75</b>
874-LIRT110A	LIRT110A	E	110VAC	11 pin plug-in	<b>95.17</b>

### 3-Phase Controls

- Control of 3-phase networks: phase sequence, total phase failure
- Controls its own supply voltage
- Multi-voltage from 3x208 to 3x480VAC
- LED status indication

For quantities greater than listed, call for a quote.

MOUSER STOCK NO.	Crouzet Part No.	Fig.	Supply Voltage	Mounting	Price Each
<b>MWA SERIES 3-Phase Control</b>					
874-84873023	84873023	F	208-480V	Din-Rail	<b>106.99</b>
<b>HWUA Series 3-Phase Control</b>					
874-84873024	84873024	F	220-480V	Din-Rail	<b>139.83</b>
874-84873026	84873026	G	220-480V	Din-Rail	<b>161.16</b>

### HSV Speed Control Relay

- Measurement via discrete sensors - 3-wire PNP or NPN, Namur, voltage 0-30V or volt-free contact type
- Control of overspeed, underspeed, operating rate, stopping
- Works with either NO or NC sensors

For quantities greater than listed, call for a quote.

874-84874320	84874320	H	24-240VAC under-over speed mount	Din-Rail	<b>152.95</b>
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### Voltage Relays

- Control relays monitoring their own power supply
- Over/undervoltage control
- Adjustable time delays
- Selectable latching (memory) function
- Over/undervoltage control
- Control in 50Hz, 60Hz or DC

For quantities greater than listed, call for a quote.

MOUSER STOCK NO.	Crouzet Part No.	Fig.	Supply Voltage	Mounting	Price Each
<b>EU Series Voltage Control Relay</b>					
874-84872033	84872033	I	16-600V 120VAC	Din-Rail	<b>101.95</b>
<b>HUL Series Voltage Control Relay</b>					
874-84872120	84872120	B	24-240VAC under-over	Din-Rail	<b>147.81</b>
<b>HUH Series 35mm Voltage Control Relay</b>					
874-84872130	84872130	B	208-480V under-over	Din-Rail	<b>146.69</b>
<b>MUS260 Series Voltage Control</b>					
874-84872142	84872142	J	65-260VAC under-over 110-240VAC	Din-Rail	<b>107.80</b>

### HNM Series 35mm Level Control

- Control of one or two levels
- Filling or emptying function
- HNM: Control by a resistive level probe
- HNE: Control by a discrete sensor

For quantities greater than listed, call for a quote.

MOUSER STOCK NO.	Crouzet Part No.	Fig.	Supply Voltage	Mounting	Price Each
<b>HNM Series 35mm Level Control</b>					
874-84870700	84870700	K	24-240V	Din-Rail	<b>150.32</b>
<b>ENRM Series Level Control</b>					
874-PNR110A	PNR110A	L	110VAC	PCB	<b>60.05</b>
874-PNRU110A	PNRU110A	L	110VAC	PCB	<b>57.78</b>

## ALTERNATING RELAYS

#### Features:

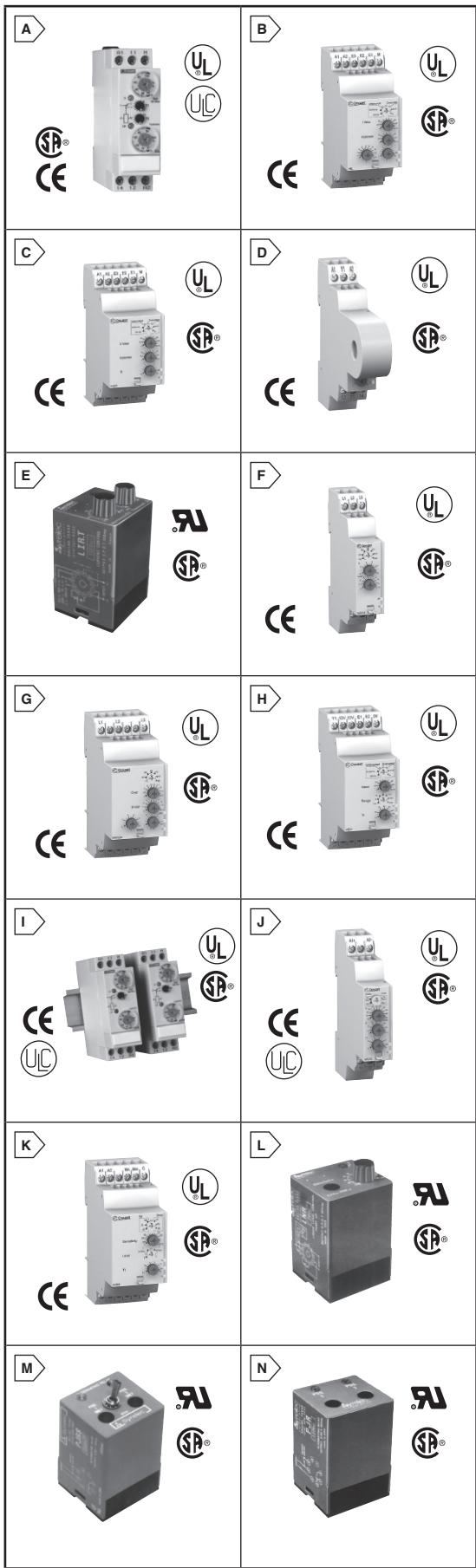
- Selection of Lead or Lag Load
- SPDT or DPDT Control Relay
- Externally Controlled
- Duplex Alternating Control
- 10A Rated

For quantities greater than listed, call for a quote.

MOUSER STOCK NO.	Crouzet Part No.	Fig.	Mounting	Contact Rating	Power Consumption	Price Each
<b>JRS Series Alternating Relay with Selector Switch</b>						
874-LJRS2110A	LJRS2110A	M	11-pin plug-in	10A	80W	<b>74.77</b>
<b>JR Series Alternating Relay</b>						
874-PJR110A	PJR110A	M	8-pin plug-in	10A	80W	<b>49.85</b>
<b>JRS Series Alternating Relay with Selector Switch</b>						
874-PJRS110A	PJRS110A	N	8-pin plug-in	10A	80W	<b>77.03</b>

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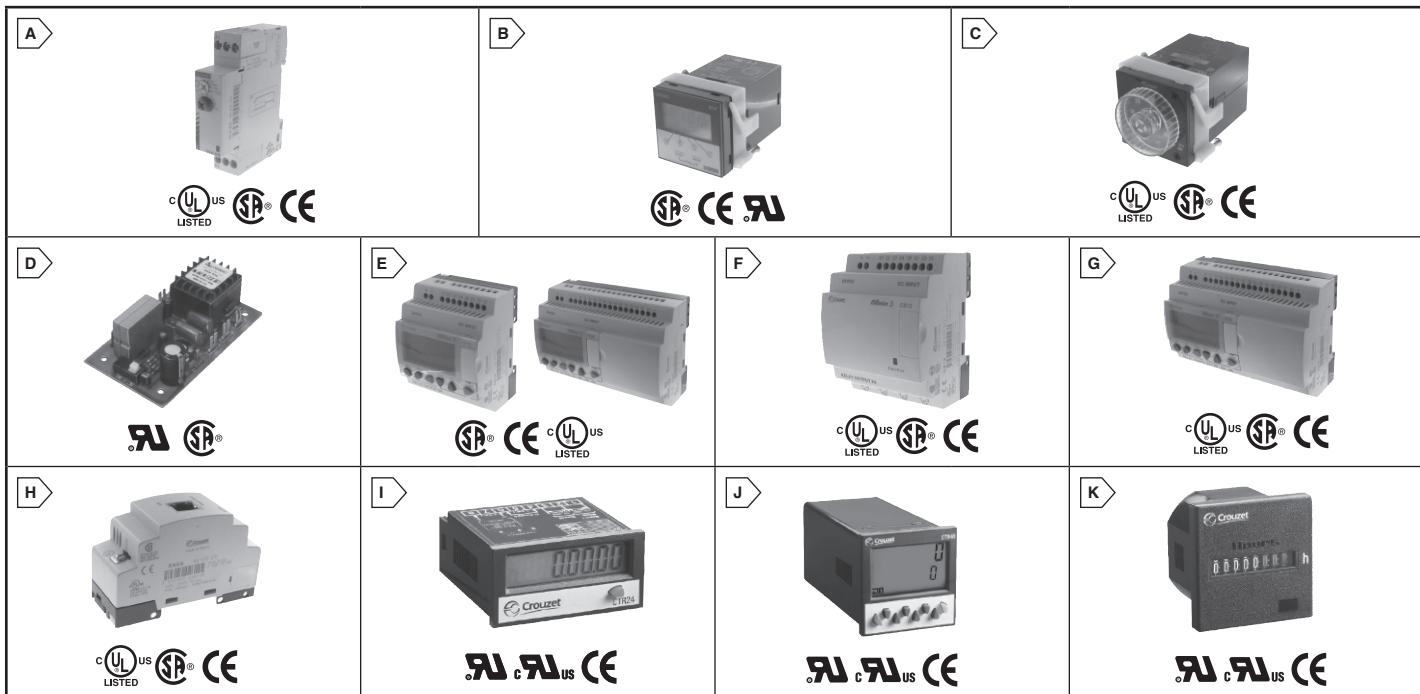


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# CROUZET Timers, Controllers and Counters



## DIN-RAIL MOUNTED TIMERS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crouzet Part No.	Fig.	Supply Voltage	Termination Style	Price Each
874-88827100	88827100	A	12V	Screw	59.40
874-88827103	88827103	A	12-240VAC/DC	Screw	68.90
874-88827004	88827004	A	24VDC, 24-240VAC	Screw	51.15
874-88827044	88827044	A	24VDC, 24-240VAC	Screw	40.92
874-88827014	88827014	A	24VDC, 24-240VAC	Screw	51.15
874-88827105	88827105	A	24VDC, 24-240VAC	Screw	56.70
874-88827115	88827115	A	24VDC, 24-240VAC	Screw	49.28
874-88827125	88827125	A	24VDC, 24-240VAC	Screw	46.45
874-88827135	88827135	A	24VDC, 24-240VAC	Screw	46.45
874-88827155	88827155	A	24VDC, 24-240VAC	Screw	57.37
874-88867100	88867100	A	24VDC, 24-240VAC	Plug-in	69.91
874-88867105	88867105	A	24VDC, 24-240VAC	Plug-in	62.67
874-88867135	88867135	A	24VDC, 24-240VAC	Plug-in	64.38
874-88867155	88867155	A	24VDC, 24-240VAC	Plug-in	77.79
874-88867215	88867215	A	24VDC, 24-240VAC	Plug-in	70.70
874-88867305	88867305	A	24VDC, 24-240VAC	Plug-in	88.20
874-88867455	88867455	A	24VDC, 24-240VAC	Plug-in	82.39
874-88867801	88867801	A	24VDC, 24-240VAC	Plug-in	84.75
874-88867145	88867145	A	24VDC, 24-240VAC	Screw	41.67
874-88827185	88827185	A	24VDC, 24-240VAC	Screw	54.00

## PANEL MOUNTED TIMERS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crouzet Part No.	Fig.	Supply Voltage	Termination Style	Price Each
874-88857005	88857005	B	24VDC, 240VAC	Plug-in	169.18
874-88857105	88857105	B	24VDC, 240VAC	Plug-in	169.18
874-88857406	88857406	B	110VAC	Plug-in	186.93
874-88857607	88857607	B	110VAC/24V	Plug-in	204.20

## TMR 48 ANALOG TIMERS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crouzet Part No.	Fig.	Supply Voltage	Termination Style	Price Each
874-88886016	88886016	C	12-240VDC, 24-240VAC	5A	76.91
874-88886116	88886116	C	12-240VDC, 24-240VAC	5A	81.90

## NNR SERIES LIQUID LEVEL CONTROL PUMP

### UP OR DOWN SWITCH SELECTABLE

• Sensitivity Adjustment 4.7kΩ to 47kΩ • 10A SPDT Rated

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crouzet Part No.	Fig.	Supply Voltage	Termination Style	Price Each
874-NNR110A	NNR110A	D	24-220VAC	Open PC board	36.23

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For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Crouzet Part No.	Fig.	Supply Voltage	Termination Style	Price Each
874-99772715	99772715	K	100-130VAC	Panel	21.61
<b>Accessories for Counters</b>					Description
874-26546842	26546842				Adaptor for 72x72mm cut-out
874-26546845	26546845				DIN rail adapter
874-26546846	26546846				Adaptor for 55x55mm cut-out

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Controllers

# OMRON Controllers, Counters, Modules and Safety Relays

 This page of product is RoHS compliant.

ELECTRONIC COMPONENTS

## ZEN PROGRAMMABLE NANO CONTROLLERS

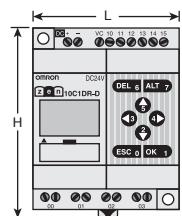
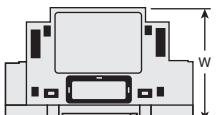
Nano sized controller has the features and functions of both a programmable controller and smart relay to allow simple yet powerful control. Apply the ZEN to small-scale control applications where simple functionality and low cost are critical. Provides an economical alternative to discrete timers, counters and general purpose relays. Control programs can be created using the 32-bit, Windows-based ZEN support software or using the operation buttons on the front panel. The ZEN is also flexible with five CPU types, multiple expansion options, and a wide selection of accessories.

### Features:

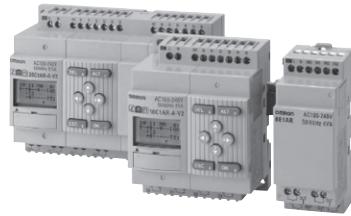
- Starter Kit: CPU Unit, Cable, Software, Manual
- For Use With/Related Products: ZEN Series
- Ingress Protection: IP20
- Mechanical Life: 10,000,000 Cycles
- Number of Inputs and Type: 4~12
- Number of Outputs and Type: 4-Relay ~ 8-Relay
- Software: ZEN-SOFT01-V4

### Specifications:

- Accessory Type: I/O Module
- Communications: RS-485



DIMENSIONS: mm			
	L	W	H
ZEN-10	70.0	56.0	90.0
ZEN-20	122.5	56.0	90.0



\*Cannot be connected to a CPU unit with DC power supply

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Type	No. of I/O Points	Input Voltage	No. of Inputs	No. of Outputs	LCD and Buttons	Calendar and Clock	Analog Input	Price Each			
										1	2	5	10
<b>CPU</b>													
653-ZEN-10C1AR-A	ZEN-10C1AR-A-V2	LCD	10	100-240VAC	6	4	Yes	Yes	No	147.98	135.67	125.23	116.29
653-ZEN-10C1DR-D2	ZEN-10C1DR-D-V2	LCD	10	12-24VDC	6	4	Yes	Yes	Yes	147.98	135.67	125.23	116.29
653-ZEN-20C1AR-A	ZEN-20C1AR-A-V2	LCD	20	100-240VAC	12	8	Yes	Yes	No	199.05	195.05	191.05	187.73
653-ZEN-20C1DR-D2	ZEN-20C1DR-D-V2	LCD	20	12-24VDC	12	8	Yes	Yes	Yes	222.80	218.45	214.10	209.07
<b>Expansion I/O</b>													
653-ZEN-8E1DR	ZEN-8E1DR			12-24VDC		4				84.54	83.50	82.30	80.15
* 653-ZEN-8E1AR	ZEN-8E1AR			100-240VAC		4				103.08	94.51	87.20	80.96
<b>Supporting Materials</b>													
653-ZEN-ME01	ZEN-ME01				Description					40.90	39.83	38.78	37.29
653-ZEN-CIF01	ZEN-CIF01				Memory cassette, copy program to multiple units					135.65	132.14	128.61	123.65
653-ZEN-BAT01	ZEN-BAT01				2m RS-323C connecting cable					56.57	51.87	47.89	44.45
653-ZEN-SOFT01-V4	ZEN-SOFT01-V4				Battery unit, memory back-up					62.57	58.70	54.46	50.59
ZEN STARTER KIT													

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Description			Price Each
653-ZENSTARTER2-V2	ZEN-STARTER-02-V2	CPU unit for DC (ZEN-10C1DR-D-V2), connecting cable, ZEN support software, and manual			350.57

## DIGITAL TEMPERATURE CONTROLLERS

### E5CN Series 1/16 DIN

MOUSER STOCK NO.	Omron Part No.	Fig.	Power Supply Voltage	Heater Burnout Alarm	Output Type	Price Each		
						1	5	10
653-E5CN-Q2MT-5AC1	E5CN-Q2MT-500-AC100-240	A	100-240VAC	No	Voltage	223.20	218.24	215.76
653-E5CN-R2MT-5AC1	E5CN-R2MT-500-AC100-240	A	100-240VAC	No	Relay	239.97	225.77	219.00
653-E5CN-C2MT-5AC1	E5CN-C2MT-500-AC100-240	A	100-240VAC	No	Current	363.59	324.90	311.07
653-E5CN-R2MTD500-24	E5CN-R2MTD-500-AC/DC24	A	24VAC/VDC	No	Relay	282.54	266.03	257.77

### E5CC Series 1-16 DIN

MOUSER STOCK NO.	Omron Part No.	Fig.	Power Supply Voltage	Heater Burnout Alarm	Output Type	Price Each		
						1	5	10
653-E5CC-CX3A5M-000	E5CC-CX3A5M-000	B	100-240VAC	Yes	Current	279.85	270.28	260.71
653-E5CC-CX3A5M-004	E5CC-CX3A5M-004	B	100-240VAC	Yes	Current	400.00	340.20	323.06
653-E5CC-CX3A5M-007	E5CC-CX3A5M-007	B	100-240VAC	Yes	Current	352.80	340.20	323.06
653-E5CC-CX3D5M-000	E5CC-CX3D5M-000	B	24V VAC/VDC	Yes	Current	279.85	270.28	260.71
653-E5CC-CX3D5M-004	E5CC-CX3D5M-004	B	24V VAC/VDC	Yes	Current	400.00	379.80	359.60
653-E5CC-QQ3A5M-000	E5CC-QQ3A5M-000	B	100-240VAC	Yes	Voltage	227.85	224.05	220.25
653-E5CC-QQ3A5M-001	E5CC-QQ3A5M-001	B	100-240VAC	Yes	Voltage	264.60	255.15	242.29
653-E5CC-QX3A5M-001	E5CC-QX3A5M-001	B	100-240VAC	Yes	Voltage	251.37	242.39	230.18
653-E5CC-QX3A5M-003	E5CC-QX3A5M-003	B	100-240VAC	Yes	Voltage	291.06	280.66	266.52
653-E5CC-QX3A5M-006	E5CC-QX3A5M-006	B	100-240VAC	Yes	Voltage	320.00	272.16	258.45
653-E5CC-QX3D5M-000	E5CC-QX3D5M-000	B	24V VAC/VDC	Yes	Voltage	221.95	214.36	206.77
653-E5CC-RX3A5M-000	E5CC-RX3A5M-000	B	100-240VAC	Yes	Relay	217.12	209.70	202.27
653-E5CC-QX3A5M-000	E5CC-QX3A5M-000	B	100-240VAC	Yes	Voltage	221.95	214.36	206.77

### E5EC Series 1/8 DIN

MOUSER STOCK NO.	Omron Part No.	Fig.	Power Supply Voltage	Heater Burnout Alarm	Output Type	Price Each
						1
653-E5EC-RR4A5M-000	E5EC-RR4A5M-000	C	100-240VAC	Yes	Control	353.40

## H7AN SERIES: SOLID STATE DIGITAL COUNTERS

### Specifications:

- Power supply voltage: 100-240VAC, 50/60Hz
- Max. counting speed: 30Hz or 5kHz

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Counting Method	Preset	Memory Backup	Display Zone	Price Each		
							1	2	5
653-H7AN-4DM-AC1	H7AN-4DM-AC100-240	D	UP or DOWN (selectable)	Single	Provided	4-digit LED	532.85	496.28	465.43

## H7BX SERIES: MULTIFUNCTION COUNTERS

### Specifications:

- External power supply: 12VDC
- Input modes: Increment, decrement, command (UP/DOWN A) Individual (UP/DOWN B) Quadrature (UP/DOWN C)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Supply Voltage	Output Type	Type	Price Each
						1
653-H7BX-AWAC100240	H7BX-AW AC100240	E	100-240VAC	Contact and NPN transistor output	2-Stage	438.56

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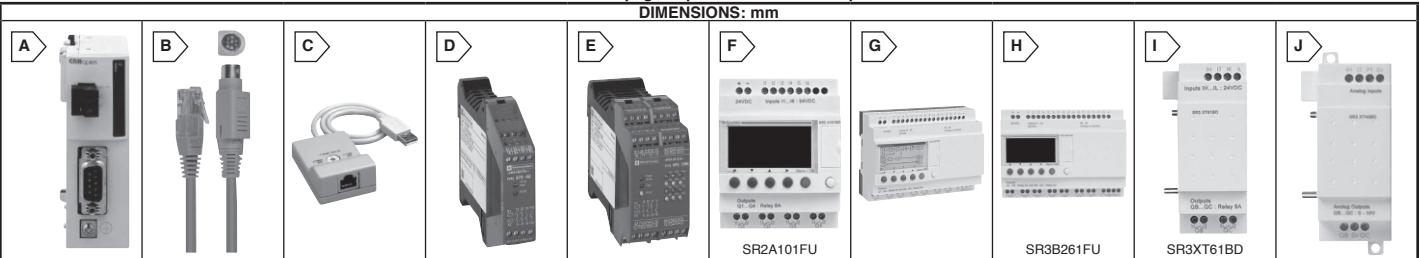
2029

# SCHNEIDER ELECTRIC Modules, Relays, and Controllers

**Schneider**  
Electric

RoHS Compliant This page of product is RoHS compliant.

DIMENSIONS: mm



## CANOPEN MODULES

### Specifications:

- Macros integrated in the TwidoSuite software to simplify programming
- "Hot SWAP" system to simplify maintenance: replace a CANopen slave without breaking the controller supply
- IP20



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schneider Electric Part No.	Fig.	Description	Price Each	
				1	5
996-TWDNCO1M	TWDNCO1M	A	CANopen bus master module - for PLC Twido - 9 way SUB-D Connector	288.91	283.78
996-TSXCRJMD25	TSXCRJMD25	B	Connection cord set for PC terminal - for Premium/Quantum - 2.5m	122.56	115.74
996-TXCUSB485	TXCUSB485	C	USB RS485 Converter	269.59	252.28
996-TWDBTFU10M	TWDBTFU10M	-	Twidosuite V2.0 DVD	195.61	133.79

## PREVENTA XPS SAFETY RELAYS

### Specifications:

- Rating: IP 40
- \* Suitable for solid state output light curtains
- \*\* Safety Approvals: BIA



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schneider Electric Part No.	Fig.	Contact Form	Voltage	Signaling LEDs	Price Each		
						1	10	50
996-XPSAC3421P	XPSAC3421P	D	1 NC / 3 NO	115VAC	2	353.91	297.80	241.69
996-XPSAC5121P	XPSAC5121P	D	1 NC / 3 NO	24VAC/DC	2	353.91	297.80	241.69
* 996-XPSAFL5130P	XPSAFL5130P	D	3 NO	24VAC/DC	3	370.77	334.08	297.38
996-XPSAF5130P	XPSAF5130P	D	3 NO	24VAC/DC	3	368.51	310.77	252.86
* 996-XPSAK311144P	XPSAK311144P	E	1 NC / 3 NO	24VAC/DC	4	573.01	516.30	459.59
996-XPSAV11113P	XPSAV11113P	E	3 NO	24VDC	11	761.92	696.11	630.28
*** 996-XPSDMB1132P	XPSDMB1132P	D	2 NO	24VDC	3	370.77	311.99	253.21
*** 996-XPSDME1132P	XPSDME1132P	E	2 NO	24VDC	15	657.29	592.24	527.19

## ZELIO LOGIC PROGRAMMABLE RELAYS

### Specifications:

- Network communication extension modules
- Modem communication interface RTC & GSM
- Bluetooth® wireless connection interface
- Fast and reliable programming
- Monitor and control your installations remotely
- Cost effective
- Easy installation



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schneider Electric Part No.	Fig.	No. of I/O	Discrete Inputs	Analog	Outputs	Clock	Price Each			
								1	5	10	25
<b>Supply Voltage: 24VDC, LADDER programming only</b>											
996-SR2A201BD	SR2A201BD	F	20	12	2	8	No	357.41	343.47	329.54	315.60
<b>Supply Voltage: 100-240VAC, LADDER programming only</b>											
996-SR2A101FU	SR2A101FU	F	10	6	-	4	No	271.28	242.51	236.81	226.90
996-SR2B121FU	SR2B121FU	F	12	8	-	4	Yes	282.92	275.68	261.81	253.30
<b>Supply Voltage: 24VDC</b>											
996-SR3B261BD	SR3B261BD	G	26	16	6	10	Yes	453.96	444.79	431.73	396.83
<b>Supply Voltage: 100-240VAC</b>											
996-SR3B101FU	SR3B101FU	H	10	6	-	4	Yes	251.03	244.73	238.42	232.12
996-SR3B261FU	SR3B261FU	H	26	16	-	10	Yes	451.96	446.59	440.97	435.35

## I/O EXPANSION AND COMMUNICATION MODULES



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schneider Electric Part No.	Fig.	No. of I/O	Discrete Inputs	Outputs	Connection Type	Price Each			
							1	5	10	25
<b>Supply Voltage: 24VAC</b>										
996-SR3XT61B	SR3XT61B	I	6	4	2	Screw	91.16	88.82	86.54	84.25
996-SR3XT61BD	SR3XT61BD	I	6	4	2	Screw	91.16	88.82	86.54	84.25
996-SR3XT101FU	SR3XT101FU	I	10	6	4	Screw	108.34	105.63	102.90	100.18
<b>Supply Voltage: 24VDC</b>										
996-SR3XT43BD	SR3XT43BD	J	2	0	2	Screw	189.20	184.45	179.71	174.85

## KITS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schneider Electric Part No.	Description	Price Each
996-VJDSTKSTOSR2	VJDSTKSTOSR2	HMISTO and Zelio Logic Starter Kit, Panel, Mod., Software, USB, Cable, PS	656.85

## ACCESSORIES FOR PROGRAMMABLE RELAYS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schneider Electric Part No.	Description	Price Each			
			1	5	10	25
996-SR3MBU01BD	SR3MBU01BD	Communication Module for Modbus Networks, 24VDC	171.89	167.58	163.27	158.95
996-SR2COM01	SR2COM01	Communication Interface, Allows Remote Control/Maintenance	197.80	192.72	187.76	182.80
996-SR2MEM02	SR2MEM02	EEPROM for Version ≥3.0 (Includes pre-loaded ZelioSoft software)	32.66	30.32	28.31	26.39
996-SR2SFT01	SR2SFT01	ZelioSoft Software on CD-ROM for Windows®	67.91	64.37	62.66	60.83
996-SR2USB01	SR2USB01	Connecting Cable, PC USB Port to Zelio Relay	156.72	156.14	155.66	152.14
996-SR2CBL09	SR2CBL09	Magelis small panel connecting cable - for smart relay Zelio Logic	80.60	75.43	66.67	63.83

## ACCESSORIES FOR TEMPERATURE CONTROLLERS

For quantities greater than listed, call for quote.

Description			Price Each			
			1	5	10	25
996-REG24PSOC	REG24PSOC	Bracket for Mounting on DIN Rail (24x48 Controller)	25.96	25.05	24.94	23.35
996-REG48PCOV	REG48PCOV	Terminal Block Cover (48x48 Controller)	35.91	34.72	33.54	32.35
996-REG96PCOV	REG96PCOV	Terminal Block Cover (96x48 Controller)	52.98	47.68	42.15	39.46

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(800) 346-6873

# OMRON Counters

OMRON

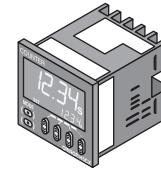
## H7CX-N SERIES: MULTIFUNCTION COUNTER/TACHOMETER

### Specifications:

- Body depth: 58mm on 12 to 24VDC  
78mm on 100 to 240VAC
- Socket models: 63.7mm
- Operating mode: Up/Down key for 4-digit and Up key for 6-digit
- Max. counting speed: 30Hz or 5kHz (switchable)
- Digits: 4-digit (-999 to 9999) / 6-digit (-99999 to 999999)
- UL508 Type 4X and IP66

### Features:

- Ultra short body
- Isolated power supply and input circuits for safety and reliability (except 12 to 24VDC models)
- Set value limit to prevent unexpected operation of output devices caused by setting mistakes
- Easy to read with 12mm values on 4-digit models (10mm for 6-digit)
- Present value display characters can be switched between red, green, and orange in most models.

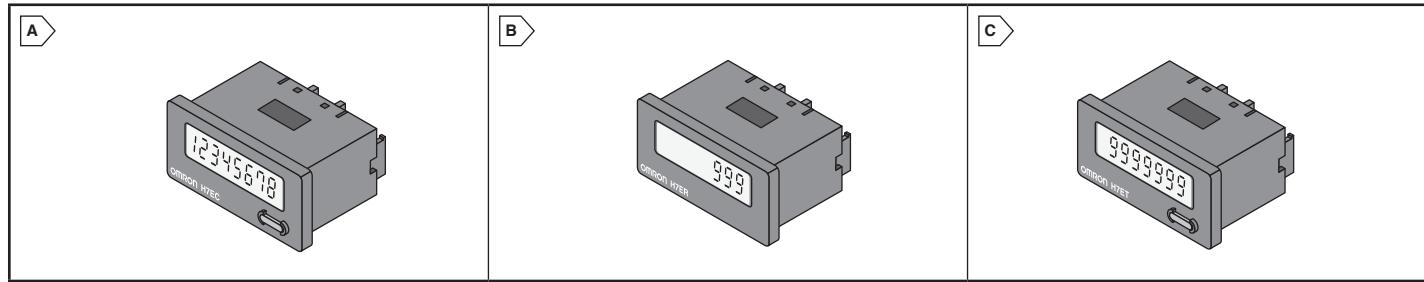


cUL us cF us CE

MOUSER STOCK NO.	Omron Part No.	External Connections	Display Digits	Configuration	Power Supply Voltage	For quantities greater than listed, call for quote.		
						1	5	10
<b>Standard Type, 1-Stage Setting, Contact Output (SPDT)</b>								
* 653-H7CXA114NA100240	H7CX-A114-N-AC100-240	11-pin socket	4	1-stage and total preset counter	100 to 240VAC	209.80	203.50	197.40
* 653-H7CXA114D1ND14A4	H7CX-A114D1-N-DC12-24/AC24	11-pin socket	4	1-stage and total preset counter	12 to 24VDC	229.86	222.96	216.27
* 653-H7CXA11NAC100240	H7CX-A11-N AC100/240	11-pin socket	6	1-stage and total preset counter	100 to 240VAC	218.25	218.07	202.27
* 653-H7CXA11D1ND14A24	H7CX-A11D1-N DC12-24/AC24	11-pin socket	4	1-stage and total preset counter	12 to 24VDC/24VAC	209.25	202.97	202.27
653-H7CXA4NAC100240	H7CX-A4-N-AC100-240	Screw terminals	4	1-stage and total preset counter	100 to 240VAC	198.85	194.34	184.29
653-H7CXA4NDNC1224	H7CX-A4D-N-DC12-24	Screw terminals	4	1-stage and total preset counter	12 to 24VDC	179.78	178.31	173.30
653-H7CX-ANAC100240	H7CX-A-N AC100-240	Screw terminals	6	1-stage and total preset counter	100 to 240VAC	207.19	201.79	196.40
653-H7CXA4NDNC1224	H7CX AD-N DC12-24	Screw terminals	6	1-stage and total preset counter	12 to 24VDC	168.17	163.12	161.82
<b>Standard Type, 1-Stage Setting, Transistor Output (SPST)</b>								
653-H7CXA4NAC100240	H7CX-AS-N-AC100-240	Screw terminals	6	1-stage and total preset counter	100 to 240VAC	195.30	190.71	188.79
<b>Standard Type, 2-Stage Settings, Contact Output (SPST + SPDT)</b>								
653-H7CXA4WNAC100240	H7CX-A4W-N-AC100-240	Screw terminals	4	1- or 2-stage, total and preset counter/batch, dual and twin counter	100 to 240VAC	279.29	261.09	259.95
653-H7CXA4WNAC100240	H7CX-AW-N-AC100-240	Screw terminals	6	1- or 2-stage, total and preset counter/batch, dual and twin counter, tachometer	100 to 240VAC	241.49	234.24	224.75
653-H7XAWD1NDA14	H7CX-AWD1-N DC12-24 AC24	Screw terminals	6	1- or 2-stage, total and preset counter/batch, dual and twin counter, tachometer	12 to 24VDC/24VAC	243.91	234.33	224.75
<b>Accessories</b>								
653-Y92F-30	Y92F-30			Flush mounting adapter		9.64	9.31	9.14
653-P2CF-11	P2CF-11			11-pin socket, track mounting/front connecting		12.46	12.09	11.49
653-P2CF-11-E	P2CF-11-E			Front-connecting socket (finger-safe type)		11.60	11.26	10.70
653-P3GA-11	P3GA-11			11-pin track mounting back connecting socket		15.95	15.16	14.66
653-PFP-100N	PFP-100N			DIN rail 1m x 7.3mm		6.46	6.28	6.18
653-PFP-M	PFP-M			DIN rail end plate		.68	.658	.605

\* Has only red present value display characters

## H7E SERIES: SELF-POWERED TOTALIZERS



Omron

Counters

### Specifications:

- Input: DC Voltage 4.5 to 30VDC  
AC Voltage 24 to 240VAC/VDC
- Mounting method: Flush mounting
- External connections: Screw terminals
- Reset: External/Manual

### Features:

- Large display with 8.6mm (0.338in) height
- Replaceable battery
- NEMA 4/IP66 front
- Key-protect switch to prevent front resetting
- Short body, all models have a depth of 48.5mm

### H7EC - Total Counters

- Operating mode: Up type
- Eight-digits, counting range 0 to 99999999

### H7ER - Tachometers

- Operating mode: Up type
- Revolutions display up to five digits

### H7ET - Time Counters

- Operating mode: Accumulating
- Seven digits, time range 0 to 39999d23.9h

CE

MOUSER STOCK NO.	Omron Part No.	Fig.	Count Input	Display	Case Color	For quantities greater than listed, call for quote.			
						1	5	10	25
<b>H7EC Total Counters, Max. Counting Speed: 30Hz ↔ 1kHz</b>									
653-H7EC-N	H7EC-N	A	No-voltage	7-segment LCD	Light gray	88.77	79.30	73.01	62.12
653-H7EC-N-B	H7EC-N-B	A	No-voltage	7-segment LCD	Black	64.66	63.64	62.23	59.42
653-H7EC-NV-B	H7EC-NV-B	A	PNP/NPN universal DC voltage	7-segment LCD	Black	78.96	74.54	71.20	65.31
653-H7EC-NVBH	H7EC-NV-BH	A	PNP/NPN universal DC voltage	7-segment LCD with backlight	Black	78.96	74.54	71.19	65.30
<b>H7EC Total Counters, Max. Counting Speed: 20Hz</b>									
653-H7EC-NFV-B	H7EC-NFV-B	A	AC/DC multi-voltage	7-segment LCD	Black	80.02	76.45	72.82	69.14
<b>H7ER Tachometers, Max. Revolutions Displayed: 1000s-1 (10 pulse/rev.), 1000.0m-1 (600 pulse/rev.) ↔ 10000m-1 (60 pulse/rev.) (Switchable)</b>									
653-H7ER-NV1-B	H7ER-NV1-B	B	PNP/NPN universal DC voltage	7-segment LCD	Black	81.44	79.01	75.62	73.50
<b>H7ET Counters, Time Range: 99999.9h ↔ 3999d23.9h (Switchable)</b>									
653-H7ET-N-B	H7ET-N-B	C	No-voltage	7-segment LCD	Black	82.74	80.70	78.13	72.92
653-H7ET-NFV-B	H7ET-NFV-B	C	AC/DC multi-voltage	7-segment LCD	Black	93.98	89.89	87.32	84.88
653-H7ET-NV-B	H7ET-NV-B	C	PNP/NPN universal DC voltage	7-segment LCD	Black	83.28	79.01	77.77	77.10
<b>H7ET Counters, Time Range: 9999h59m59s ↔ 9999d23.9h (Switchable)</b>									
653-H7ET-NFV1-B	H7ET-NFV1-B	C	AC/DC multi-voltage	7-segment LCD	Black	102.17	99.72	94.77	91.29
653-H7ET-NV1-B	H7ET-NV1-B	C	PNP/NPN universal DC voltage	7-segment LCD	Black	79.25	73.38	68.48	65.57
<b>Accessories</b>									
653-Y92F-75	Y92F-75	-	Panel adapter (26x45mm) used with mounting bracket provided with counter			1	10	50	100
614-CR2477N	CR2477NTS	-	Replacement battery, 3V lithium button cell			4.52	4.18	3.90	3.62
						3.32	3.17	2.88	2.80

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# OMRON Solid State Timers

**OMRON**

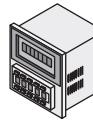
## H3CA SERIES: 1/16 DIN DIGITAL-SET, SOLID STATE TIMERS

### Specifications:

- Minimum applicable load:  
H3CA-A 10mA @ 5VDC  
H3CA-BH 100mA @ 5VDC
- Mounting: Surface/track or flush
- Service life:  
Mechanical 10,000,000 operations min.  
Electrical 100,000 operations min.
- Time limit contact: SPDT

### Features:

- Dual power supplies for free AC/DC
- Eight operation modes selectable with one unit
- Any desired time can be set digitally within a range from 0.1 seconds to 9,990 hours
- Four external signal inputs
- ON/OFF indicator for control output and bar indicator for remaining time



Operating Modes	
A: ON-delay	E: Interval
B: Repeat cycle	F: One shot flicker
C: Signal ON/OFF-delay	G: Signal ON/OFF-delay
D: Signal OFF-delay	H: Signal OFF-delay



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Rated Supply Voltage	Terminal Form	Operating Modes (See table above)	Price Each		
					1	5	10
653-H3CA-8H-AC100	H3CA-8H-AC100/110/120	100/110/120VAC 50/60Hz	8-pin round	A	131.65	130.04	124.34
653-H3CA-A	H3CA-A	24-240VAC 50/60Hz, 12-240VDC	11-pin round	A, B, C, D, E, F, G, H	131.90	127.57	122.12

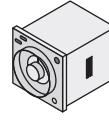
## H3CR SERIES: SOLID STATE TIMERS

### Specifications:

- Dimensions: 48x48mm
- Mounting: DIN
- Relay output: DPDT
- Input type:  
H3CR-A No-voltage (NPN type)  
H3CR-AP Voltage (PNP type)  
H3CR-H/F Without reset

### Features:

- H3CR-A
  - Ecological design with reduced current consumption
- H3CR-H
  - Long power OFF-delay times
- H3CR-F8
  - Easy sequence check with instantaneous outputs for a zero set value



Operating Modes	
A: ON-delay	D: Signal OFF-delay
B: Flicker OFF start	E: Interval
B2: Flicker ON start	J: One-shot
C: Signal ON/OFF-delay	
K: Power OFF delay	



RoHS Compliant

\* Relay output (SPDT) with instantaneous relay output (SPDT) and time-limit contact and instantaneous contact

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Supply Voltage	Terminal Form	Time Range	Operating Modes (See table above)	Price Each		
						1	10	25
<b>Multi-Function</b>								
653-H3CRA8-AC2448	H3CR-A8AC24-48/DC12-48	24-48VAC/12-48VDC	8-pin round	0.05s-300h	A, B2, E, J	72.25	63.00	58.92
653-H3CRA8-AC1	H3CR-A8-AC100-240/DC100-125	100-240VAC/100-125VDC	8-pin round	0.05s-300h	A, B2, E, J	71.43	63.36	59.59
* 653-H3CRA8EAC	H3CR-A8E-AC100-240/DC100-125	100-240VAC/100-125VDC	8-pin round	0.05s-300h	A, B2, E, J	135.27	124.75	116.51
653-H3CRA-24	H3CR-A-AC24-48/DC12-48	24-48VAC/12-48VDC	11-pin round	0.05s-300h	A, B, B2, C, D, E	95.81	88.84	83.02
653-H3CRA-AC1	H3CR-A-AC100-240/DC100-125	100-240VAC/100-125VDC	11-pin round	0.05s-300h	A, B, B2, C, D, E	71.66	66.22	62.13
653-H3CRAA2448D1248	H3CR-AP-AC24-48/DC12-48	24-48VAC/12-48VDC	11-pin round	0.05s-300h	A, B, B2, C, D, E	89.97	83.53	78.97
653-H3A100240D100125	H3CR-AP-AC100-240/DC100-125	100-240VAC/100-125VDC	11-pin round	0.05s-300h	A, B, B2, C, D, E	87.25	72.86	71.29
<b>Power OFF-Delay</b>								
653-H3CR-H8LAC/DC24S	H3CR-H8L-AC/DC24(S)	24VAC/DC 200-240VAC	8-pin round	0.05-12s	K	104.13	95.02	92.18
653-H3CRH8LAC200240M	H3CR-H8L AC200-240 M		8-pin round	0.05-12m	K	95.86	85.12	65.26

## H3DS SERIES: ANALOG-SET, ULTRA-SLIM TIMERS

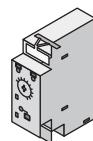
Timers

### Specifications:

- Rated supply voltage: 24 to 230VAC (50/60 Hz) 24 to 48VDC
- Control output: 5A at 250VAC with resistive load ( $\cos\phi = 1$ ); 5A at 30VDC with resistive
- Service life:  
Mechanical 10,000,000 operations min.  
Electrical 100,000 operations min.
- Output type: Relay SPDT
- Terminal type: Screw

### Features:

- Analog set multi-function
- Ultra-slim 17.5mm timers for track mounting
- Wide AC/DC power supply range
- Smart Dial/Selector-Locking Mechanism prevents the dials and selectors on the timer's front panel from being operated without authorization (lock can only be unlocked and locked with an optional pen-type lock key)



Operating Modes	
A: ON-delay	D: Signal OFF-delay
B: Repeat cycle	E: Interval
B2: Repeat-cycle ON-start	G: Signal ON/OFF-delay
C: Signal ON/OFF-delay	J: One-shot



RoHS Compliant

For quantities greater than listed, call for quote.		
MOUSER STOCK NO.	Omron Part No.	Input
		Operating Modes (See table above)
		1
		5
		10
<b>Multi-Function</b>		
653-H3DMLAC24202448	H3DS-ML AC24-230/DC24-48	Voltage
Standard		A, B, B2, C, D, E, G, J
653-H3DSL24230D2448	H3DS-SL AC24-230/DC24-48	No input available
Single-Function		A, B2, E, J
653-H3DALAC242302448	H3DS-AL AC24-230/DC24-48	No input available
		A (fixed)

## H3DK SERIES: MULTI-RANGE, MULTI-MODE TIMERS

### Specifications:

- Supply voltage: 24-240VAC/DC
- Terminal block:  
H3DK-S1 6 terminals  
H3DK-M1(2) 9 terminals
- Mounting: DIN
- Service life:  
Mechanical 10,000,000 operations min.  
Electrical 100,000 operations min.

### Features:

- Multiple time ranges and operating modes let you cover a wide range of applications
- The time-limit DPDT output contacts can be changed to time-limit SPDT and instantaneous SPDT output contacts using a switch
- Sequence checks are easily performed by setting an instantaneous output to 0
- Start signal control for the H3DK-M



Operating Modes	
A: ON-delay	D: Signal OFF-delay
B: Flicker OFF-start	E: Interval
B2: Flicker ON-start	G: Signal ON/OFF-delay
C: Signal ON/OFF-delay	J: One-shot Output



RoHS Compliant

For quantities greater than listed, call for quote.		
MOUSER STOCK NO.	Omron Part No.	Contact Output
		Operating Modes (See table above)
		1
		5
		10
653-H3DKS1ACDC24240	H3DK-S1 AC/DC24-240	SPDT
653-H3DKM1ACDC24240	H3DK-M1 AC/DC24-240	SPDT
653-H3DKM2ACDC24240	H3DK-M2 AC/DC24-240	DPDT

## ACCESSORIES FOR TIMERS



For quantities greater than listed, call for quote.		
MOUSER STOCK NO.	Omron Part No.	Description
		Price Each
		1
		5
		10
<b>Sockets and Adaptors (for use with H3CA and H3CR Series)</b>		
653-P2CF-08	P2CF-08	8-pin round socket, bottom surface or track mounting, top screw terminals
653-P2CF-11	P2CF-11	11-pin round socket, bottom surface or track mounting, top screw terminals
653-P3G-08	P3G-08	8-pin socket, back mounting, for use with Y92F-30, bottom screw terminals
653-P3GA-11	P3GA-11	11-pin socket, back mounting, for use with Y92F-30, bottom screw terminals
653-Y92F-30	Y92F-30	Panel mount adapter, ideal for side by side installation, use with P3G sockets
<b>DIN Rails and Accessories</b>		
653-PFP-50N	PFP-50N	DIN rail mounting track, 50cm (l) x 7.3mm (t)
653-PFP-100N	PFP-100N	DIN rail mounting track, 1m (l) x 7.3mm (t)
653-PFP-100N2	PFP-100N2	DIN rail mounting track, 1m (l) x 16mm (t)
653-PFP-M	PFP-M	DIN rail stop plate
653-PFP-S	PFP-S	DIN rail spacer

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# OMRON Timers

RoHS Compliant This page of product is RoHS compliant.

## H3JA SERIES: ECONOMICAL, COMPACT SOLID STATE TIMERS

### Specifications:

- Time-limit contact: DPDT
- Operation/Resetting system: Time-limit/self-resetting
- Supply voltage: 100-120VAC
- Power consumption: 3VA (1.3W)

### Features:

- Dual LED indication for power and output status
- Large transparent knob
- DIN size 36x36mm fits 8-pin sockets

MOUSER STOCK NO.	Omron Part No.	Time Range	For quantities greater than listed, call for quote.		
			1	5	10
653-H3JA-8C-10S	H3JA-8C-AC100-120-10S	1 to 10 seconds	55.01	53.32	51.74
653-H3JA-8C-5M	H3JA-8C-AC100-120-5M	0.5 to 5 minutes	67.72	63.84	62.08
<b>Accessories</b>					
653-P3G-08	P3G-08	8-pin socket, back mounting, for use with Y92F-31, bottom screw terminals	22.23	15.83	15.14
653-Y92F-31	Y92F-31	Panel mount adapter, ideal for side-by-side installation, use with P3G sockets	7.18	6.53	5.98
653-PFP-100N	PFP-100N	DIN rail, 1m in length	6.46	6.07	5.73
653-PFP-M	PFP-M	DIN rail spacer	.68	.542	.531

## H3YN SERIES: MINIATURE SOLID STATE TIMERS

### Specifications:

- Insulation resistance: 100MΩ min. (@ 500VDC)
- Service life: Mechanical 10,000,000 operations min. Electrical DPDT 500,000 / 4PDT 200,000 operations

- Timing functions: ON-delay, interval, repeat cycle, ON-start/OFF start (DIP switch selectable)

### Features:

- Ultra-slim package 21.5mm max.
- Simplifies ordering and inventory by combining multiple functions and time ranges in one unit
- LED power-ON and time-UP indicators

MOUSER STOCK NO.	Omron Part No.	Time Limit Contact	Supply Voltage	Time Range	For quantities greater than listed, call for quote.		
					1	2	5
<b>Short-Time Range</b>							
653-H3YN-2-AC1	H3YN-2-AC100-120	DPDT	100-120VAC	0.1s-10m	56.86	56.00	54.81
653-H3YN-2-DC24	H3YN-2-DC24	DPDT	24VAC	0.1s-10m	59.80	58.01	56.27
653-H3YN-4-AC1	H3YN-4 AC100-120	4PDT	100-120VAC	0.1s-10m	56.87	55.16	53.52
653-H3YN-4-DC125	H3YN-4 DC125	4PDT	125VDC	0.1s-10m	72.92	68.13	65.97
<b>Long-Time Range</b>							
653-H3YN-21DC24	H3YN-21 DC24	DPDT	24VAC	0.1m-10h	74.34	68.57	62.22
653-H3YN-41AC100-120	H3YN-41 AC100-120	4PDT	100-120VAC	0.1m-10h	60.21	58.39	56.64
<b>Accessories</b>							
653-PYF08A-E	PYF08A-E	Track mount/front connect socket for DPDT time (H3YN-2, H3YN-21)			5.23	4.91	4.64
653-PYF14A-E	PYF14A-E	Track mount/front connect socket for 4PDT time (H3YN-4)			6.71	6.56	6.27
653-PY08	PY08	Back connect, solder terminal socket for DPDT (H3YN-2, H3YN-21)			1.25	1.18	1.11
653-PY14	PY14	Back connect, solder terminal socket for 4PDT (H3YN-4)			1.79	1.71	1.53
653-PY08-02	PY08-02	Back connect, PC terminal socket for DPDT (H3YN-2, H3YN-21)			1.23	1.16	1.10
653-PY14-02	PY14-02	Back connect, PC terminal socket for 4PDT (H3YN-4)			1.71	1.61	1.53
653-Y92H-4	Y92H-4	Hold down clip for sockets PY08, PY08-02, PY14, PY14-02			2.25	2.05	1.87

## H5CX-N SERIES: 1/16 DIN MULTI-FUNCTION DIGITAL TIMERS

### Specifications:

- Number of display digits: 4
- Time specifications:
  - 0.001-9.999s; 0.01-99.99s; 0.1-999.9s
  - 1-9999s; 1s-99min59s; 0.1-999.9min
  - 1-9999min; 1min-99h59min;
  - 0.1-999.9h; 1-9999h

- Timer mode: 11
- Signal ON-delay I, II; Power ON-delay I, II; Repeat cycle 1, 2; Signal OFF-delay Interval; Cumulative; Stopwatch
- ON/OFF-duty-adjustable flicker
- Twin timer mode: 4
- Flicker OFF start 1, 2; Flicker ON start 1, 2

MOUSER STOCK NO.	Omron Part No.	Connection	Supply Voltage 50/60Hz	Display Character Color	Output	For quantities greater than listed, call for quote.		
						1	5	10
<b>Economy Type, NPN Input</b>								
653-H5CX-L8NAC100240	H5CX-L8-N AC100240	8-pin socket	100-240VAC	Red	Contact (Time-limit SPDT)	149.99	145.49	141.10
653-H5CLX8DND1224A24	H5CX-L8-DN DC12-24/AC24	8-pin socket	12-24VDC/24VAC	Red	Contact (Time-limit SPDT)	149.99	143.64	139.54
<b>Standard Type, NPN/PNP Input, DIP Switch Settings Provided</b>								
653-H5CXA11NAC100240	H5CX-A11-N AC100-240	11-pin socket	100-240VAC	Red	Contact (Time-limit SPDT)	171.86	167.05	164.55
653-H5CXA1DND1224A24	H5CX-A11-DN DC12-24/AC24	11-pin socket	12-24VDC/24VAC	Red	Contact (Time-limit SPDT)	175.74	170.46	165.35
653-H5CXASDND1224A24	H5CX-ASD-N-DC12-24/AC24	Screw terminals	12-24VDC/24VAC	Red, green, or orange	Transistor (SPST)	190.96	184.99	179.02
653-H5CXANAC100240	H5CX-A-N AC100-240	Screw terminals	100-240VAC	Red, green, or orange	Contact (Time-limit SPDT)	193.62	187.76	181.91
653-H5CXADNA24D1224	H5CX-AD-N AC24/DC12-24	Screw terminals	12-24VDC/24VAC	Red, green, or orange	Contact (Time-limit SPDT)	187.44	183.24	179.02
<b>Accessories</b>								
653-P2CF-08-E	P2CF-08-E	Front connecting socket, 8-pin, finger-safe type			12.60	11.56	10.66	
653-Y92P-CXT4S	Y92P-CXT4S	Front panel replacement, white			4.54	4.03	3.95	

## H5CN-X SERIES: MINIATURE, DIN QUARTZ DIGITAL TIMERS

### Specifications:

- Contact output: SPDT
- Output mode: Power ON-delay

### Features:

- Selection of elapsed time indication, remaining time indication, contact output, and solid-state output types to suit requirements

MOUSER STOCK NO.	Omron Part No.	Connection	Supply Voltage	Display	Rated Time	For quantities greater than listed, call for quote.		
						1	5	10
653-H5CN-XBN	H5CN-XBN AC100-240	8-pin socket	100-240VAC	UP	0.1-999.9s	227.25	224.81	218.01
653-H5CNXCNAC100240	H5CN-XCN AC100-240	8-pin socket	100-240VAC	UP	1s-99m59s	287.50	236.29	218.01

## H5L SERIES: 1/4 DIN SIZE WEEKLY TIMERS

### Specifications:

- Rated supply voltage: 100-240VAC
- Terminal type: Screw
- Number of program steps: 24

### Features:

- Easy programming with large display and interactive functions
- Memory protection during power failure for up to 10 years
- Easy operation with five keys

MOUSER STOCK NO.	Omron Part No.	Rated Time	Time Setting Range	Time Division	For quantities greater than listed, call for quote.		
					1	2	5
653-H5L-A	H5L-A	24 hours x 7 days	00:00-23:59	1 minute	271.08	262.22	255.39
<b>Accessories</b>							
653-PFP-100N	PFP-100N	DIN rail, 1m in length			6.46	6.28	6.18
653-PFP-M	PFP-M	DIN rail spacer			.68	.658	.605

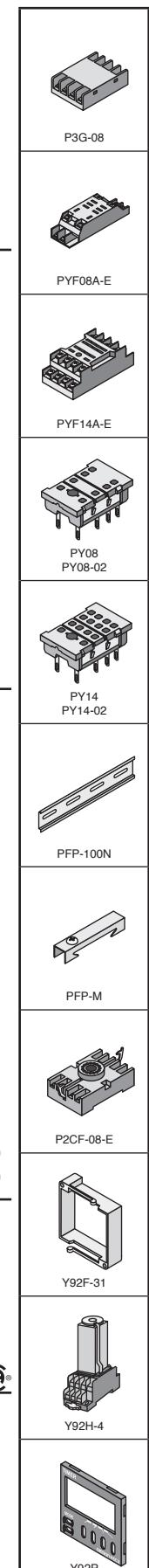
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2033



Omron  
Timers

# APPLIED MOTION Stepper Motors



## STEP MOTORS

### Size 14

#### Specifications:

- Operating Temp: -20°C to 50°C
- Lead wire gauge: 26AWG
- Insulation Class: 130°C Class B
- Radial Play: .004 Max. @ 1 Lb.
- No. of Leads: 4
- Step Angle: 1.8

For quantities greater than listed, call for quote.											
MOUSER STOCK NO.	Applied Motion Part No.	Fig.	Motor Connection	Motor Length (in.)	Min. Holding Torque (oz.-in.)	Volts (DC)	Amps	Ohms	mH	Rotor Inertia (oz-in <sup>2</sup> /G-CM <sup>2</sup> )	Price Each
										1	5
834-5014-820	5014-820	A	Parallel	1.00	8.0	3.2	.35	8.5	8.0	0.051/9.3	66.05 60.94
834-5014-842	5014-842	A	Parallel	1.57	26.0	4.8	1.00	4.3	5.5	0.109/20	84.07 77.57
* 834-5014-842D	5014-842D	A	Parallel	1.57	26.0	4.8	1.00	4.3	5.5	0.109/20	75.06 69.26

\*Features a double shaft

### Size 23

#### Specifications:

- Operating Temp: -20°C to 50°C
- Lead wire gauge: 22AWG
- Insulation Class: 130°C Class B
- Radial Play: .001 Max. @ 1Lb.
- No. of Leads: 6
- Step Angle: 1.8
- Motor Connections: Series, Parallel and Unipolar (Series specifications listed below)

For quantities greater than listed, call for quote.											
MOUSER STOCK NO.	Applied Motion Part No.	Fig.	Motor Connection	Motor Length (in.)	Min. Holding Torque (oz.-in.)	Volts (DC)	Amps	Ohms	mH	Rotor Inertia (oz-in <sup>2</sup> /G-CM <sup>2</sup> )	Price Each
										1	5
834-4023-820	4023-820	B	Series	2.00	74.9	1.8	2.76	.7	1.4	0.547/100	90.09 60.27
* 834-4023-820D	4023-820D	B	Series	2.00	74.9	1.8	2.76	.7	1.4	0.547/100	119.80 110.53

\*Features a double shaft

## HIGH-TORQUE STEP MOTORS

### Size HT08

#### Specifications:

- Operating Temp: -20°C to 50°C
- Lead wire gauge: 26AWG
- Insulation Class: 130°C Class B (HT08-020)
- Step Angle: 1.8
- Radial Play: .001 Max. @ 1.1 Lb.
- No. of Leads: 4

For quantities greater than listed, call for quote.											
MOUSER STOCK NO.	Applied Motion Part No.	Fig.	Motor Connection	Motor Length (in.)	Min. Holding Torque (oz.-in.)	Volts (DC)	Amps	Ohms	mH	Rotor Inertia (oz-in <sup>2</sup> /G-CM <sup>2</sup> )	Price Each
										1	5
834-HT08-020	HT08-020	C	Bi-polar	1.18	2.4	2.8	.35	8.5	3.4	0.01/1.9	94.08 86.80

### Size HT11

#### Specifications:

- Operating Temp: -20°C to 50°C
- Lead wire gauge: 26AWG
- Insulation Class: 130°C Class B
- Step Angle: 1.8
- Radial Play: .001 Max. @ 1.1 Lb.
- No. of Leads: 4

For quantities greater than listed, call for quote.											
MOUSER STOCK NO.	Applied Motion Part No.	Fig.	Motor Connection	Motor Length (in.)	Min. Holding Torque (oz.-in.)	Volts (DC)	Amps	Ohms	mH	Rotor Inertia (oz-in <sup>2</sup> /G-CM <sup>2</sup> )	Price Each
										1	5
834-HT11-012	HT11-012	C	Parallel	1.32	7.0	1.4	1.00	1.4	1.4	.044/8	92.07 84.95
* 834-HT11-013	HT11-013	C	Parallel	1.87	15.0	2.0	1.00	2.0	2.6	.098/18	109.09 100.65

### Size HT17

#### Specifications:

- Operating Temp: -20°C to 50°C
- Lead wire gauge: 22AWG
- Insulation Class: 130°C Class B
- Step Angle: 1.8
- No. of Leads: 8
- Radial Play: .001 Max. @ 1.1 Lb.
- Motor connections: Series, Parallel, and Unipolar (Series specifications listed below)

For quantities greater than listed, call for quote.											
MOUSER STOCK NO.	Applied Motion Part No.	Fig.	Motor Connection	Motor Length (in.)	Min. Holding Torque (oz.-in.)	Volts (DC)	Amps	Ohms	mH	Rotor Inertia (oz-in <sup>2</sup> /G-CM <sup>2</sup> )	Price Each
										1	5
834-HT17-275	HT17-275	D	Series	1.90	62.3	5.6	.85	6.6	10.0	.44/82.0	49.04 45.25
* 834-HT17-275D	HT17-275D	D	Series	1.90	62.3	5.6	.85	6.6	10.0	.44/82.0	53.04 48.94

\*Features a double shaft

### Size HT23

#### Specifications:

- Operating Temp: -20°C to 50°C
- Lead wire gauge: 22AWG
- Insulation Class: 130°C Class B
- Step Angle: 1.8
- No. of Leads: 8
- Radial Play: .001 Max. @ 1.1 Lb.
- Motor connections: Series, Parallel, and Unipolar (Series specifications listed below)

For quantities greater than listed, call for quote.											
MOUSER STOCK NO.	Applied Motion Part No.	Fig.	Motor Connection	Motor Length (in.)	Min. Holding Torque (oz.-in.)	Volts (DC)	Amps	Ohms	mH	Rotor Inertia (oz-in <sup>2</sup> /G-CM <sup>2</sup> )	Price Each
										1	5
834-HT23-393	HT23-393	E	Series	1.54	76.6	7.4	.71	10.4	21.6	0.66/120	90.07 83.11
834-HT23-397	HT23-397	E	Series	2.13	177.0	5.1	1.40	3.6	10.0	1.64/300	102.08 94.19
* 834-HT23-397D	HT23-397D	E	Series	2.13	177.0	5.1	1.40	3.6	10.0	1.64/300	102.08 94.19
834-HT23-398	HT23-398	E	Series	2.13	177.0	3.3	2.12	1.5	4.8	1.64/300	102.08 94.19
834-HT23-400	HT23-400	F	Series	2.99	264.0	6.4	1.41	4.5	14.4	2.62/480	132.11 121.89
* 834-HT23-400D	HT23-400D	F	Series	2.99	264.0	6.4	1.41	4.5	14.4	2.62/480	132.11 121.89
834-HT23-601	HT23-601	F	Series	2.99	264.0	4.2	2.12	2.0	6.4	2.62/480	74.05 68.33
* 834-HT23-601D	HT23-601D	F	Series	2.99	264.0	4.2	2.12	2.0	6.4	2.62/480	84.89 82.35

\*Features a double shaft

### SIZE HT34

#### Specifications:

- Operating Temp: -20°C to 50°C
- Lead wire gauge: 18AWG
- Insulation Class: 130°C Class B
- Step Angle: 1.8
- Radial Play: .001 Max. @ 1Lb.
- No. of Leads: 8

For quantities greater than listed, call for quote.											
MOUSER STOCK NO.	Applied Motion Part No.	Fig.	Motor Connection	Motor Length (in.)	Min. Holding Torque (oz.-in.)	Volts (DC)	Amps	Ohms	mH	Rotor Inertia (oz-in <sup>2</sup> /G-CM <sup>2</sup> )	Price Each
										1	5
834-HT34-476	HT34-476	G	Series	3.78	855	3.92	3.15	1.32	12.0	14.8/2700	292.23 269.63
834-HT34-478	HT34-478	G	Series	4.96	1284	5.3	2.80	1.94	22.0	27.9/4000	345.28 318.57
834-HT34-486	HT34-486	G	Series	4.63	1200	4.4	4.10	1.08	8.8	14.6/2680	351.28 324.11

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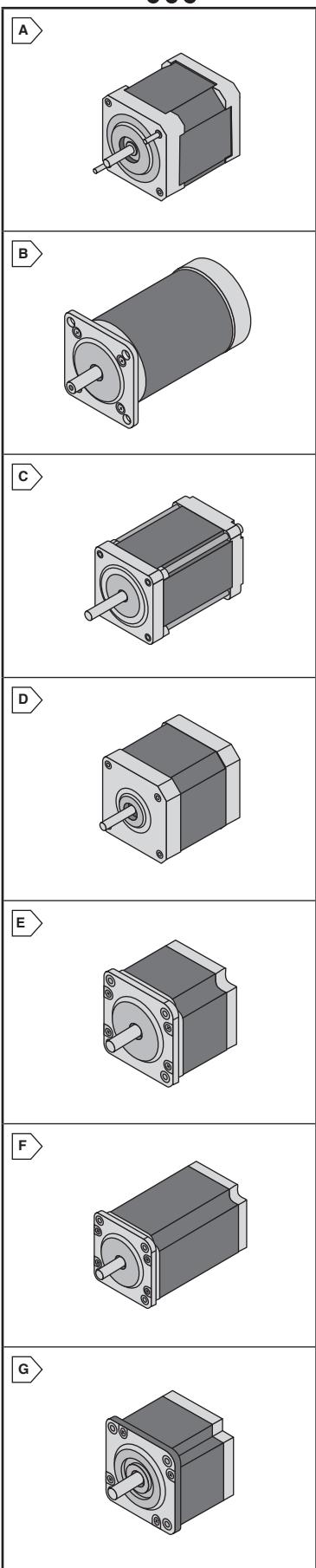
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# APPLIED MOTION Drives



## STEP MOTOR DRIVES

### 2035

- Full or Half drive
- 70W of usable power
- 2.0A
- Drives 4, 6, or 8 lead size 11, 14, 17 and 23 step motors
- Screw terminal connectors
- Dual H-bridge, inaudible PWM amplifier



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Applied Motion Part No.	Fig.	Motor Current (Amps)	Voltage Range	Step Resolution per Revolution	Construction Type	Price Each	
							1	5
834-2035	2035	A	0.125-2.0	12-35VDC	200/400	Open Frame	175.82	162.24
834-2035O	2035O	A	0.125-2.0	12-35VDC	200/400	With Oscillator	229.18	211.45
834-2035XD	2035XD	A	0.1-2.0	12-35VDC	200-50,800	2 Axis w/Oscillator	290.23	267.79

### 3535

- Full and Half Stepping
- 122W of usable power
- 3.5A
- Drives 4, 6, or 8 lead size 11, 14, 17, and 23 step motors
- MOSFET, dual H-bridge, inaudible PWM amplifier



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Applied Motion Part No.	Fig.	Motor Current (Amps)	Voltage Range	Step Resolution per Revolution	Construction Type	Price Each	
							1	5
834-3535	3535	B	0.4-3.5	12-35VDC	200/400	Open Frame	225.18	207.77

### 3540M & 7080

- Microstepping
- Drives 4, 6, or 8 lead size 11, 14, 17, 23, and 34 step motors
- MOSFET, dual H-bridge, inaudible PWM amplifier



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Applied Motion Part No.	Fig.	Motor Current (Amps)	Voltage Range	Step Resolution per Revolution	Usable Power	Price Each	
							1	5
834-3540M	3540M	C	0.4-3.5	12-42VDC	400-12,800	140 watts	264.21	243.77
* 834-3540MO	3540MO	C	0.4-3.5	12-42VDC	12,800	140 watts	323.27	298.27

\*With Digital Oscillator

## PROGRAMMABLE STEP MOTOR DRIVES

### 1240i

The 1240i is a programmable step motor driver suited for a wide range of motion control applications. It includes a sophisticated controller integrated with a 48 watt microstepping amplifier.



- Software and programming cable included
- Built-in Indexer

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Applied Motion Part No.	Fig.	Motor Current (Amps)	Voltage Range	Step Resolution per Revolution	Construction Type	Price Each	
							1	5
834-1240	1240i	D	0.2-1.2	12-42VDC	2,000-50,800	Open Frame	441.58	407.43

### 3540i

The 3540i is a programmable step motor driver suited for a wide range of motion control applications. It includes a sophisticated controller integrated with a 140 watt microstepping amplifier.



- Software and programming cable included
- Built-in Indexer
- TUV Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Applied Motion Part No.	Fig.	Motor Current (Amps)	Voltage Range	Step Resolution per Revolution	Construction Type	Price Each	
							1	5
834-3540	3540i	E	0.2-3.5	12-42VDC	2,000-50,800	Open Frame	427.34	394.30

## SI 2035 EVALUATION STARTER KIT

A complete motion control solution in one box.

### Kit Includes:

- Si2035 step motor driver with integrated Si controller
- NEMA 23 step motor
- Power Cable
- Programming Cable
- Programming Software

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Applied Motion Part No.	Fig.	Description	Price Each
834-SI2035KIT	Si2035KIT-1	F	Programmable Stepper Drive Evaluation Kit	525.42

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# SCHNEIDER ELECTRIC Motor Drives

RoHS Compliant

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**Schneider**  
Electric

## ALTIVAR® 12 MOTOR DRIVES

### Features:

- Advanced functions for increased productivity (integrated PID, multi-speed, etc.)
- Easy communication with all other machine components via integrated universal Modbus serial link
- Smaller footprint, notably in terms of the depth of equipment, as the baseplate mounted version dissipates heat into the machine frame
- The factory settings, which provide a high quality drive from the very first time the power is turned on
- The integration of Standard (Ui), Performance (sensorless flux vector control, or SVC) and Pump/Fan (quadratic profile Kn²) control profiles
- High dynamic performance on acceleration as well as on braking
- Excellent speed regulation on machine load surges
- Reduced noise and maintenance
- Easy access angles
- Numerous, easy to identify markings
- Fast detection and protection against motor current peaks (common in motor switching and catch on the fly applications)
- Perfect integration of single-phase 240 V model into the electrical network thanks to its built-in EMC filter

### Applications:

- Food Industry: Ventilation, Bagging, Kneading
- Small Handling Systems: Car Washes, Conveyors, Packaging
- Medical and Health Sector: Hospital Beds, Fitness Machines
- Machines with Single Phase Socket: Wood Working, Surface Polishing, Irrigation Pumps
- Renewable Energy: Solar Panels, Wind Turbines, Geothermal
- Simple Machine Controls: 2-Speed Motors, Mechanical Drives



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schneider Electric Part No.	Voltage Rating	Motor Power (kW)	Motor Power (HP)	Current Rating (A)	Network No. Phase	Price Each	
							1	5
996-ATV12H018F1	ATV12H018F1	230V	0.18	0.25	1.4	1 phase	225.77	219.46
996-ATV12H018M2	ATV12H018M2	230V	0.18	0.25	1.4	1 phase	225.77	219.46
996-ATV12H018M3	ATV12H018M3	230V	0.18	0.25	1.4	3 phase	201.15	195.99
996-ATV12H037F1	ATV12H037F1	230V	0.37	0.55	2.4	1 with heat sink	232.09	225.82
996-ATV12H037M2	ATV12H037M2	230V	0.37	0.55	2.4	1 with heat sink	234.52	227.96
996-ATV12H037M3	ATV12H037M3	230V	0.37	0.55	2.4	3 with heat sink	213.57	207.80
996-ATV12H055M2	ATV12H055M2	230V	0.55	0.75	3.5	1 with heat sink	248.19	241.44
996-ATV12H075F1	ATV12H075F1	230V	0.75	1	4.2	1 with heat sink	274.43	266.76
996-ATV12H075M2	ATV12H075M2	230V	0.75	1	4.2	1 with heat sink	276.77	263.93
996-ATV12H075M3	ATV12H075M3	230V	0.75	1	4.2	3 phase	251.98	244.93
996-ATV12HU15M2	ATV12HU15M2	230V	1.5	2	7.5	1 with heat sink	345.36	336.51
996-ATV12HU15M3	ATV12HU15M3	230V	1.5	2	7.5	1 with heat sink	317.41	309.66
996-ATV12HU22M2	ATV12HU22M2	230V	2.2	3	10.0	1 with heat sink	414.44	403.81
996-ATV12HU22M3	ATV12HU22M3	230V	2.2	3	10.0	3 phase	387.65	377.18
996-ATV12HU40M3	ATV12HU40M3	230V	4	3	16.7	3 phase	527.16	512.92

## ALTIVAR® 312 MOTOR DRIVES

The Altivar 312 drive is designed to make industrial and commercial machines more energy efficient, while at the same time simplifying its integration into a single control system architecture. With the highest overtorque and the only drive with a remote graphic keypad in its class, the Altivar 312 drive is ideally suited to the needs of material handling, packaging, food & beverage, pump & fan, and other OEM machines. It also comes standard with integrated communications port for Modbus and CANopen networks, and optional cards for CANopen Daisy Chain, DeviceNet and Profibus DP.

Schneider Electric

Motors & Drives

### Features:

- A single, standard tool
- Less wiring
- Local controls on the front panel
- Side-by-side mounting capability
- Rapid programming in just a few clicks using the navigation button
- Remote graphic display terminal for remote configuration
- Multi Loader for storing configurations and loading them quickly
- Simple Loader for duplicating and loading a configuration
- Auto-tuning: Shorter setup time and optimum performance levels

### Specifications:

- Input voltage: 200V -15% to 240V +10%, 380V -15% to 500V +10%
- Input frequency: 50Hz -5% to 60Hz +5%
- Output frequency: 0.5 to 500Hz
- Functions: 50
- Preset speeds: 16
- Analog inputs: 3
- Analog outputs: 1
- Operating temperature: -10°C to +50°C
- Enclosure rating: IP20 rating with optional conduit kits for UL Type 1

### Applications:

- Handling and packing
- Packaging
- Textile machines
- Special machines
- Pumps and fans



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schneider Electric Part No.	Voltage Rating	Motor Power (kW)	Motor Power (HP)	Current Rating (A)	Network No. Phase	Price Each	
							1	5
996-ATV312H018M2	ATV312H018M2	240V	0.18	0.25	1.5	1 phase	366.18	355.23
996-ATV312H018M3	ATV312H018M3	240V	0.18	0.25	1.5	3 phase	398.70	341.97
996-ATV312H037M2	ATV312H037M2	240V	0.37	0.5	3.3	1 phase	392.14	380.42
996-ATV312H037M3	ATV312H037M3	240V	0.37	0.5	3.3	3 phase	392.14	380.42
996-ATV312H037N4	ATV312H037N4	480V	0.37	0.5	3.3	3 phase	495.99	481.16
996-ATV312H055M2	ATV312H055M2	240V	0.55	0.75	3.7	1 phase	418.11	405.61
996-ATV312H055M3	ATV312H055M3	240V	0.55	0.75	3.7	3 phase	418.11	405.61
996-ATV312H055N4	ATV312H055N4	480V	0.55	0.75	3.7	3 phase	535.62	519.60
996-ATV312H075M2	ATV312H075M2	240V	0.75	1	4.8	1 phase	457.72	444.03
996-ATV312H075M3	ATV312H075M3	240V	0.75	1	4.8	3 phase	444.08	430.80
996-ATV312H075N4	ATV312H075N4	480V	0.75	1	4.8	3 phase	581.80	564.28
996-ATV312HU11M3	ATV312HU11M3	240V	1.1	1.5	6.9	3 phase	495.99	481.16
996-ATV312HU11N4	ATV312HU11N4	480V	1.1	1.5	6.9	3 phase	613.50	595.16
996-ATV312HU15M2	ATV312HU15M2	240V	1.5	2	8.0	1 phase	549.38	532.95
996-ATV312HU15M3	ATV312HU15M3	240V	1.5	2	8.0	3 phase	575.23	558.03
996-ATV312HU15N4	ATV312HU15N4	480V	1.5	2	8.0	3 phase	686.88	666.16
996-ATV312HU22M2	ATV312HU22M2	240V	2.2	3	11.0	1 phase	646.74	627.28
996-ATV312HU22M3	ATV312HU22M3	240V	2.2	3	11.0	3 phase	653.12	633.58
996-ATV312HU22N4	ATV312HU22N4	480V	2.2	3	11.0	3 phase	793.30	769.37
996-ATV312HU40M3	ATV312HU40M3	240V	4	5	17.5	3 phase	888.14	861.58
996-ATV312HU40N4	ATV312HU40N4	480V	4	5	17.5	3 phase	950.78	922.15

## ACCESSORIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schneider Electric Part No.	Description	Price Each		
			1	5	10
996-TCSMCNAM3M002P	TCSMCNAM3M002P	USB to RS485 Cordset (RJ45 plug)	61.12	59.28	58.49

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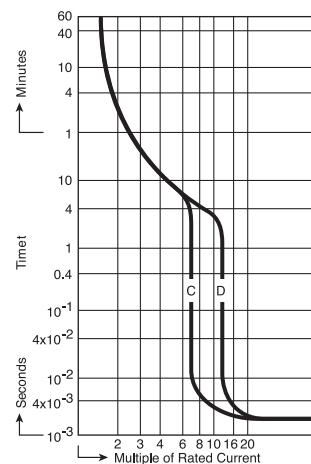
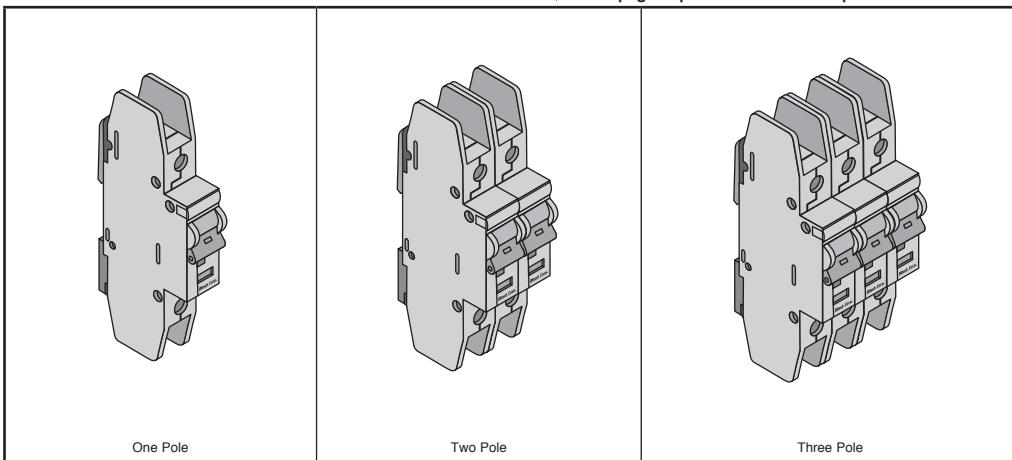
(800) 346-6873

# ALTECH UL489 Circuit Breakers



This page of product is RoHS compliant.

**Altech Corp.**®



## L-SERIES CIRCUIT BREAKERS

### Specifications:

- UL489 Listed
- DIN Rail Mounted
- 17.5mm width
- Thermal Magnetic
- 0.2-63A/240VAC, 50/60Hz
- 0.2-32A/480Y/277VAC, 50/60Hz
- Short Circuit Interrupt Capacity 10kA
- HACR Type 40°C
- Positive Trip Indicator (Green - off/tripped, Red-on)
- Line/Load reversible
- DC versions available:  
• 125V (1 pole) and 250V (2 pole)



### C\*- Characteristic

Thermal one-hour trip zone 1.05-1.3 times rated current (RC): magnetic 100ms trip boundary 5 to 10 times RC.

Rated Current	One Pole					Two Pole					Three Pole							
	MOUSER STOCK NO.	Altech Part No.	Price Each				MOUSER STOCK NO.	Altech Part No.	Price Each				MOUSER STOCK NO.	Altech Part No.	Price Each			
			1	10	50	100			1	10	50	100			1	10	50	100
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	845-1CU2L	1CU2L	30.97	29.83	27.11	15.29	845-2CU1L	2CU1L	61.94	59.65	54.22	30.00	-	-	-	-	-	-
3	845-1CU3L	1CU3L	30.97	29.83	27.11	15.29	845-2CU2L	2CU2L	61.94	59.65	54.22	30.00	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	845-1CU5L	1CU5L	30.97	29.83	27.11	15.29	845-2CU4L	2CU4L	61.94	59.65	54.22	30.00	-	-	-	-	-	-
6	845-1CU6L	1CU6L	30.97	29.83	27.11	15.29	-	-	-	-	-	-	-	-	-	-	-	-
10	845-1CU10L	1CU10L	30.97	29.83	27.11	15.29	-	-	-	-	-	-	-	-	-	-	-	-
12	845-1CU12L	1CU12L	30.97	29.83	27.12	15.29	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	845-2CU13L	2CU13L	61.96	59.66	54.24	30.00	-	-	-	-	-	-
15	-	-	-	-	-	-	845-2CU15L	2CU15L	61.96	59.66	54.24	30.00	-	-	-	-	-	-
20	845-1CU20L	1CU20L	30.97	29.83	27.11	15.29	845-2CU20L	2CU20L	-	-	-	-	845-3CU20L	3CU20L	92.92	86.29	81.34	45.00
25	845-1CU25L	1CU25L	30.97	29.83	27.11	15.29	845-2CU25L	2CU25L	61.94	59.65	54.22	30.00	-	-	-	-	-	-
30	-	-	-	-	-	-	845-2CU30L	2CU30L	61.94	59.65	54.22	30.00	845-3CU30L	3CU30L	92.88	86.25	81.30	45.00
40	845-1CU40L	1CU40L	30.98	29.83	27.11	16.56	845-2CU40L	2CU40L	-	-	-	-	845-3CU40L	3CU40L	92.91	86.26	81.31	48.75
50	-	-	-	-	-	-	845-2CU50L	2CU50L	61.94	57.51	54.22	32.50	845-3CU50L	3CU50L	92.90	86.26	81.31	48.75

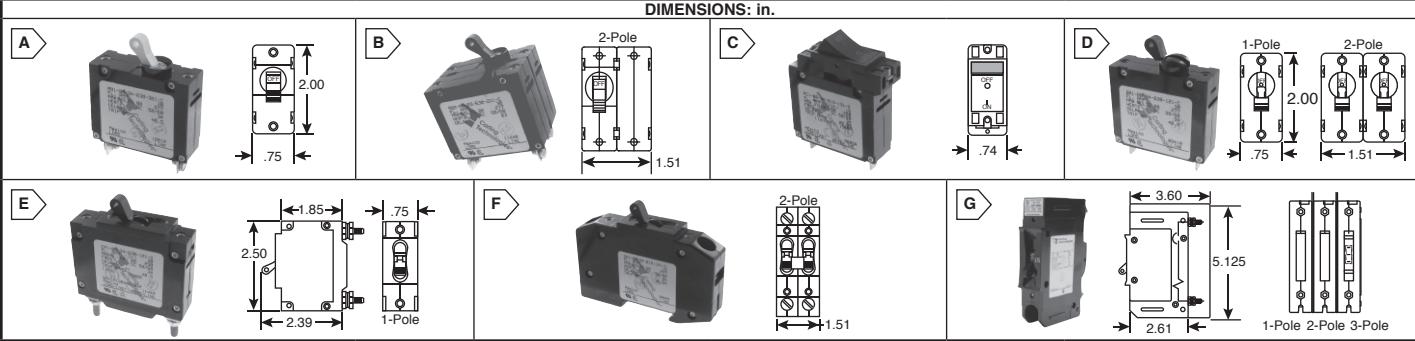
### D\*- Characteristic

Thermal one-hour trip zone 1.05-1.3 times rated current (RC): magnetic 100ms trip boundary 10 to 16 times RC.

Rated Current	One Pole					Two Pole					Three Pole							
	MOUSER STOCK NO.	Altech Part No.	Price Each				MOUSER STOCK NO.	Altech Part No.	Price Each				MOUSER STOCK NO.	Altech Part No.	Price Each			
			1	10	50	100			1	10	50	100			1	10	50	100
1	845-1DU1L	1DU1L	30.97	29.83	27.11	15.29	845-2DU1L	2DU1L	61.94	57.51	54.22	30.00	-	-	-	-	-	-
2	845-1DU2L	1DU2L	30.97	29.83	27.11	15.29	845-2DU2L	2DU2L	61.94	57.51	54.22	30.00	-	-	-	-	-	-
3	845-1DU3L	1DU3L	30.97	29.83	27.11	15.29	845-2DU3L	2DU3L	61.94	57.51	54.22	30.00	845-3DU3L	3DU3L	92.91	89.46	81.33	45.00
4	845-1DU4L	1DU4L	30.97	29.83	27.11	15.29	845-2DU4L	2DU4L	61.96	57.54	54.24	30.00	-	-	-	-	-	-
5	845-1DU5L	1DU5L	30.97	29.83	27.11	15.29	845-2DU5L	2DU5L	61.94	57.51	54.22	30.00	845-3DU5L	3DU5L	92.94	86.30	81.35	45.00
6	-	-	-	-	-	-	845-2DU6L	2DU6L	61.94	57.51	54.22	30.00	-	-	-	-	-	-
10	845-1DU10L	1DU10L	30.97	29.83	27.11	15.29	845-2DU10L	2DU10L	61.94	59.65	54.22	30.00	845-3DU10L	3DU10L	92.92	86.29	81.34	45.00
13	-	-	-	-	-	-	845-2DU13L	2DU13L	61.94	59.65	54.22	30.00	-	-	-	-	-	-
15	845-1DU15L	1DU15L	30.98	28.77	27.12	15.29	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	845-2DU16L	2DU16L	40.00	33.34	30.57	30.00	-	-	-	-	-	-
20	845-1DU20L	1DU20L	30.97	29.83	27.11	15.29	845-2DU20L	2DU20L	61.94	57.51	54.22	30.00	-	-	-	-	-	-
25	-	-	-	-	-	-	845-2DU25L	2DU25L	61.94	57.51	54.22	30.00	-	-	-	-	-	-
30	845-1DU30L	1DU30L	23.08	21.44	20.20	15.29	845-2DU30L	2DU30L	61.94	57.51	54.22	30.00	-	-	-	-	-	-
32	-	-	-	-	-	-	-	-	-	-	-	-	845-3DU32L	3DU32L	92.91	86.25	81.31	45.00
40	-	-	-	-	-	-	-	-	-	-	-	-	845-3DU40L	3DU40L	92.91	86.26	81.31	48.75
50	-	-	-	-	-	-	845-2DU50L	2DU50L	79.58	69.93	62.01	32.50	845-3DU50L	3DU50L	92.91	86.27	81.31	48.75
60	845-1DU60L	1DU60L	25.00	23.22	21.88	16.56	-	-	-	-	-	-	-	-	-	-	-	-

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**DIMENSIONS: in.**

**A SERIES: CIRCUIT BREAKERS WITH HANDLE ACTUATOR**

- Type: Hydraulic/Magnetic
- Circuit: Series Trip (Current)
- Poles: One
- Frequency and Delay: DC, 50/60Hz Medium
- Actuator/Legend color: Black/White
- Terminal: 10-30A rating - Screw 8-32 (bus type); 50A rating - Screw 10-32 (bus type)
- Mounting: Threaded insert 6-32 x 0.195" deep, 2/pole



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Carling Technologies Part No.	Fig.	Coil Rating	Price Each			
				1	10	25	50
<b>Color: Black</b>							
691-AA1B0346103B1C	AA1-B0-34-610-3B1-C	A	10A	25.90	18.34	16.95	15.11
691-AA1B0346153B1C	AA1-B0-34-615-3B1-C	A	15A	25.90	18.34	16.95	15.11
691-AA1B0346203B1C	AA1-B0-34-620-3B1-C	A	20A	25.90	18.34	16.95	15.11
691-AA1B0346253B1C	AA1-B0-34-625-3B1-C	A	25A	25.90	18.34	16.95	15.11
691-AA1B0346303B1C	AA1-B0-34-630-3B1-C	A	30A	23.55	16.68	15.41	13.74
<b>Color: White</b>							
691-AA1B0346155D1C	AA1-B0-34-615-5D1-C	A	15A	21.82	20.66	19.63	17.84
691-AA1B0346205D1C	AA1-B0-34-620-5D1-C	A	20A	21.82	20.66	19.63	17.84
691-AA1B0346505D1C	AA1-B0-34-650-5D1-C	A	50A	22.82	21.62	20.54	18.66
691-AA2B036302D1C	AB2-A0-03-630-2D1-C	B	30A	65.96	42.40	38.87	34.14

**A SERIES: CIRCUIT BREAKERS WITH VISI-ROCKER® ACTUATOR**

- Type: Hydraulic/Magnetic
- Dual-color rocker actuator indicates either ON mode for AC1 items or TRIPPED/OFF mode for AF1 items
- Indicator/Legend Color: Red
- Rocker color: Black
- Circuit: Series Trip (Current)
- Poles: One
- Frequency and Delay: DC, 50/60Hz Medium
- Terminal: Push-On 0.250 Tab (Q.C.)
- Mounting: Thread Insert 6-32 x 0.195" deep
- Approvals: D suffix - UL Rec.; CSA and VDE Certified
- C suffix: UL Recognized; CSA Certified



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Carling Technologies Part No.	Fig.	Coil Rating	Price Each			
				1	10	25	50
<b>691-AC1B034630131D</b>							
691-AC1B034630131D	AC1-B0-34-630-131-D	C	30A	30.01	21.26	19.63	17.51
691-AC1B0344501G1C	AC1-B0-34-450-1G1-C	C	5A	30.01	21.26	19.63	17.51
691-AC1B0346101G1C	AC1-B0-34-610-1G1-C	C	10A	30.01	21.26	19.63	17.51
691-AF1B0346201G1C	AF1-B0-34-620-1G1-C	C	20A	30.01	21.26	19.63	17.51

**B SERIES: CIRCUIT BREAKERS WITH HANDLE ACTUATOR**

- Type: Hydraulic/Magnetic
- Actuator: Handle, one per pole
- Poles: BA1 - 1 pole; BA2 - 2 poles
- Circuit: Series Trip (Current)
- Actuator/Legend color: Black/White
- Frequency and Delay: DC, 50/60Hz Medium
- Terminal: Push-On 0.250 Tab (O.C.)
- Approvals: D suffix - UL Recognized; CSA and VDE Certified
- C suffix: UL Recognized; CSA Certified



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Carling Technologies Part No.	Fig.	Coil Rating	Price Each			
				1	10	25	50
<b>691-BA1B034425121D</b>							
691-BA1B034425121D	BA1-B0-34-425-121-D	D	2.5A	24.20	17.13	15.82	14.11
691-BA1B034450121D	BA1-B0-34-450-121-D	D	5A	22.00	15.58	14.39	12.83
691-BA1B034610121D	BA1-B0-34-610-121-D	D	10A	22.00	15.58	14.39	12.83
691-BA1B034615121D	BA1-B0-34-615-121-D	D	15A	24.20	17.13	15.82	14.11
691-BA1B034620121D	BA1-B0-34-620-121-D	D	20A	24.20	17.13	15.82	14.11
691-BA2B034425121D	BA2-B0-34-425-121-D	D	2.5A	59.93	41.22	36.65	33.20
691-BA2B034450121D	BA2-B0-34-450-121-D	D	5A	59.93	41.22	36.65	33.20
691-BA2B034620121D	BA2-B0-34-620-121-D	D	20A	45.12	40.11	36.10	32.81
691-BA2B034630121C	BA2-B0-34-630-121-C	D	30A	59.93	41.22	36.65	33.20

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MOUSER STOCK NO.	Carling Technologies Part No.	Fig.	Coil Rating	Price Each		
				1	5	10
691-EA1B02645032EGB	EA1-B0-26-450-32E-GB	G	5	18.02	17.45	17.01
691-EA2B02645032EHB	EA2-B0-26-450-32E-HB	G	5	77.49	52.23	44.76
691-EA2B02661032EHB	EA2-B0-26-610-32E-HB	G	10	202.06	148.41	108.24
691-EA2B02661532EHB	EA2-B0-26-615-32E-HB	G	15	77.49	52.23	44.76
691-EA2B02662032EHB	EA2-B0-26-620-32E-HB	G	20	77.49	52.24	44.75
691-EA2B02663032EHB	EA2-B0-26-630-32E-HB	G	30	77.49	52.23	44.76
691-EA2B02664032EHB	EA2-B0-26-640-32E-HB	G	40	77.49	52.24	44.75
691-EA2B02666032EHB	EA2-B0-26-660-32E-HB	G	60	122.59	82.62	70.82
691-EA3B02663032EHB	EA3-B0-26-630-32E-HB	G	30	122.60	82.64	70.84

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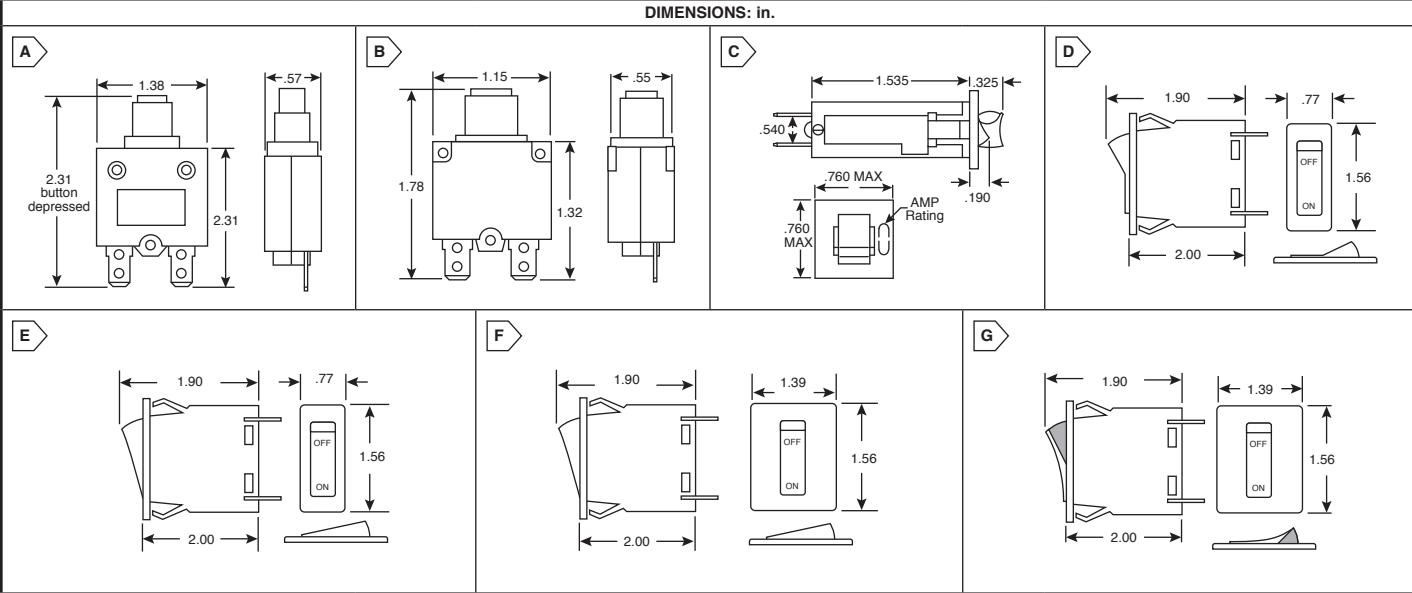
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MOUSER STOCK NO.	Carling Technologies Part No.	Fig.	Coil Rating	Price Each		
				1	5	10
691-EA1B0346103B1C	AA1-B0-34-610-3B1-C	A	10A	25.90	18.34	16.95
691-EA1B0346153B1C	AA1-B0-34-615-3B1-C	A	15A	25.90	18.34	16.95
691-EA1B0346203B1C	AA1-B0-34-620-3B1-C	A	20A	25.90	18.34	16.95
691-EA1B0346253B1C	AA1-B0-34-625-3B1-C	A	25A	25.90	18.34	16.95
691-EA1B0346303B1C	AA1-B0-34-630-3B1-C	A	30A	23.55	16.68	15.41
691-EA1B0346101D1C	AA1-B0-34-610-1D1-C	B	10A	25.90	18.34	16.95
691-EA1B0346151D1C	AA1-B0-34-615-1D1-C	B	15A	25.90	18.34	16.95
691-EA1B0346201D1C	AA1-B0-34-620-1D1-C	B	20A	25.90	18.34	16.95
691-EA1B0346251D1C	AA1-B0-34-625-1D1-C	B	25A	25.90	18.34	16.95
691-EA1B0346301D1C	AA1-B0-34-630-1D1-C	B	30A	23.55	16.68	15.41
691-EA2B0346101D1C	AB2-A0-03-610-1D1-C	B	10A	65.96	42.40	38.87
691-EA2B0346151D1C	AB2-A0-03-615-1D1-C	B	15A	65.96	42.40	38.87
691-EA2B0346201D1C	AB2-A0-03-620-1D1-C	B	20A	65.96	42.40	38.87
691-EA2B0346251D1C	AB2-A0-03-625-1D1-C	B	25A	65.96	42.40	38.87
691-EA2B0346301D1C	AB2-A0-03-630-1D1-C	B	30A	65.96	42.40	38.87

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## DIMENSIONS: in.

**CLB SERIES: THERMAL CIRCUIT PROTECTORS WITH METAL BUSHING**

## Specifications:

- Dielectric Strength: 1500 VAC/1 minute
- Interrupting Capacity: 1200A 232VDC
- Resettable Overload Capacity: 10 x rated current
- Insulation Resistance: 100MΩ
- Operating Temperature: -10°C to 60°C

## Applications:

- Appliances
- Transportation
- Marine
- Telecommunications
- Power Strips
- A-V Equipment
- Medical Equipment
- Power Supplies

**M SERIES: MINIATURE CIRCUIT BREAKERS**

- Type: Hydraulic/Magnetic
- Circuit: Series Trip (Current Coil)
- Actuator/Legend color: Black/White
- Snap-in front panel mounting

- Frequency and Delay: DC, 50/60Hz Medium
- Terminal: Push-On 0.250 Tab (Q.C.)
- Bezel Color: Black



MOUSER STOCK NO.	Carling Technologies Part No.	Fig.	Coil Rating	Price Each			
				1	10	25	50
691-CLB-103-11A3NBA	CLB-103-11A3N-B-A	A	10	3.50	2.77	2.35	1.82
691-CLB-153-11A3NBA	CLB-153-11A3N-B-A	A	15	2.58	2.49	2.41	2.26
691-CLB-203-11A3NBA	CLB-203-11A3N-B-A	A	20	4.21	3.31	2.83	2.20
691-CLB-253-11A3NBA	CLB-253-11A3N-B-A	A	25	5.70	4.48	3.82	2.99
691-CLB-03311B3ABA	CLB-033-11-B-3-A-B-A	A	3A	3.94	3.36	3.05	2.96
691-CLB-04311B3ABA	CLB-043-11-B-3-A-B-A	A	4A	3.98	2.95	2.77	2.67
691-CLB-05311B3ABA	CLB-053-11-B-3-A-B-A	A	5A	4.16	3.96	3.12	2.94
691-CLB-06311B3ABA	CLB-063-11-B-3-A-B-A	A	6A	3.20	2.90	2.65	2.33
691-CLB-07311B3ABA	CLB-073-11-B-3-A-B-A	A	7A	2.92	2.41	2.26	2.19
691-CLB-10311B3ABA	CLB-103-11-B-3-A-B-A	A	10A	2.54	2.10	2.00	1.92
691-CLB-12311B3ABA	CLB-123-11-B-3-A-B-A	A	12A	3.23	2.67	2.54	2.43
691-CLB-15311B3ABA	CLB-153-11-B-3-A-B-A	A	15A	3.14	2.60	2.46	2.36
691-CLB-20311B3ABA	CLB-203-11-B-3-A-B-A	A	20A	3.12	2.58	2.45	2.34
691-CLB-25311B3ABA	CLB-253-11-B-3-A-B-A	A	25A	4.19	3.46	3.32	3.15
691-CLB-30311B3ABA	CLB-303-11-B-3-A-B-A	A	30A	4.01	3.31	3.24	3.00
691-CLB-35311B3ABA	CLB-353-11-B-3-A-B-A	A	35A	3.96	3.27	3.20	2.97
691-CLB-40311B3ABA	CLB-403-11-B-3-A-B-A	A	40A	4.01	3.30	3.23	3.00

**CMB SERIES: THERMAL CIRCUIT PROTECTORS WITH PLASTIC BUSHING**

## Specifications:

- Dielectric Strength: 1500 VAC/1 minute
- Interrupting Capacity: 1000A
- Resettable Overload Capacity: 10 x rated current
- Insulation Resistance: 100MΩ
- Operating Temperature: -10°C to 60°C

## Applications:

- Appliances
- Transportation
- Marine
- Telecommunications
- Power Strips
- A-V Equipment
- Medical Equipment
- Exercise Equipment



MOUSER STOCK NO.	Carling Technologies Part No.	Fig.	Pole	Coil Rating	Price Each			
					1	10	25	50
691-CMB-03311C3NBA	CMB-033-11-C-3-N-B-A	B	3A	3.44	2.87	2.73	2.62	
691-CMB-04311C3NBA	CMB-043-11-C-3-N-B-A	B	4A	3.64	2.61	2.40	2.32	
691-CMB-05311C3NBA	CMB-053-11-C-3-N-B-A	B	5A	6.65	5.64	4.85	4.35	
691-CMB-06311C3NBA	CMB-063-11-C-3-N-B-A	B	6A	2.23	1.84	1.72	1.67	
691-CMB-07311C3NBA	CMB-073-11-C-3-N-B-A	B	7A	2.23	1.84	1.73	1.67	
691-CMB-10311C3NBA	CMB-103-11-C-3-N-B-A	B	10A	2.57	2.12	2.00	1.93	
691-CMB-12311C3NBA	CMB-123-11-C-3-N-B-A	B	12A	2.23	1.84	1.73	1.67	
691-CMB-15311C3NBA	CMB-153-11-C-3-N-B-A	B	15A	2.55	2.35	2.20	2.01	
691-CMB-20311C3NBA	CMB-203-11-C-3-N-B-A	B	20A	2.77	2.56	2.40	2.19	

**CTB SERIES: PANEL MOUNT ROCKER THERMAL CIRCUIT PROTECTORS**

## Specifications:

- Dielectric Strength: 1500 VAC/1 minute
- Interrupting Capacity: 1000A
- Resettable Overload Capacity: 10 x rated current
- Insulation Resistance: 100MΩ
- Operating Temperature: -10°C to 60°C

## Applications:

- Appliances
- Transportation
- Marine
- Power Strips
- A-V Equipment
- Medical Equipment
- Power Supplies
- Exercise Equipment



MOUSER STOCK NO.	Carling Technologies Part No.	Fig.	Pole	Coil Rating	Price Each			
					1	10	25	50
691-CTB-B-B-03	CTB-B-B-03	C	3A	2.09	1.72	1.62	1.57	
691-CTB-B-B-05	CTB-B-B-05	C	5A	2.09	1.72	1.62	1.57	
691-CTB-B-B-06	CTB-B-B-06	C	6A	2.41	1.98	1.87	1.81	
691-CTB-B-B-07	CTB-B-B-07	C	7A	2.41	1.98	1.87	1.81	
691-CTB-B-B-08	CTB-B-B-08	C	8A	2.09	1.72	1.62	1.57	
691-CTB-B-B-10	CTB-B-B-10	C	10A	1.89	1.62	1.49	1.42	
691-CTB-B-B-12	CTB-B-B-12	C	12A	1.80	1.62	1.49	1.39	
691-CTB-B-B-15	CTB-B-B-15	C	15A	2.18	1.87	1.72	1.45	

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MOUSER STOCK NO.	Carling Technologies Part No.	Fig.	Pole	Coil Rating	Price Each			
					1	10	25	50
Visi-Rocker	691-MD2B346151A36BC	MD2-B-34-615-1-A36-B-C	G	2	15A	40.26	38.50	38.22
Illuminated Rocker	691-MF1B346201DB7BC	MF1-B-34-620-1-DB7-B-C	D	1	20A	32.73	23.18	21.41

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2039

# P&B Circuit Breakers

**TE** Authorized Distributor  
connectivity

## W23 SERIES: THERMAL CIRCUIT BREAKERS WITH PUSH/PULL ACTUATOR

### Features:

- SPDT contact configuration
- May be used as ON/OFF switch
- Visible trip indicator

### Specifications:

- Max. operating voltage: 50VDC or 250VAC
- Resettable overload capacity: ten times rated current

- Dielectric strength: > 1500 volts RMS
- Termination: two #8-32 screw terminals

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	P&B Part No.	Fig.	Current Rating	Maximum Resistance	Price Each			
					1	25	50	100
655-W23-X1A1G-1	W23-X1A1G-1	A	1A	610mΩ	35.69	31.23	28.26	22.31
655-W23-X1A1G-2	W23-X1A1G-2	A	2A	190mΩ	36.43	31.87	28.84	26.93
655-W23-X1A1G-3	W23-X1A1G-3	A	3A	40mΩ	36.42	31.86	28.83	26.93
655-W23-X1A1G-5	W23-X1A1G-5	A	5A	30mΩ	25.17	22.02	19.93	17.07
655-W23-X1A1G-7.50	W23-X1A1G-7.50	A	7.5A	20mΩ	25.17	22.02	19.93	17.07
655-W23-X1A1G-10	W23-X1A1G-10	A	10A	10mΩ	25.17	22.02	19.93	17.07
655-W23-X1A1G-15	W23-X1A1G-15	A	15A	6mΩ	25.17	22.02	19.93	17.07
655-W23-X1A1G-20	W23-X1A1G-20	A	20A	4mΩ	23.71	20.75	18.77	14.82
655-W23-X1A1G-25	W23-X1A1G-25	A	25A	4mΩ	23.71	20.75	18.77	14.82
655-W23-X1A1G-30	W23-X1A1G-30	A	30A	3mΩ	24.68	21.59	19.53	16.73
655-W23-X1A1G-35	W23-X1A1G-35	A	35A	3mΩ	25.17	22.02	19.93	17.07
655-W23-X1A1G-40	W23-X1A1G-40	A	40A	2mΩ	25.17	22.02	19.93	17.07
655-W23-X1A1G-50	W23-X1A1G-50	A	50A	2mΩ	23.71	20.75	18.77	14.82

## W31 SERIES: THERMAL CIRCUIT BREAKERS WITH TOGGLE ACTUATOR

### Features:

- SPDT contact configuration
- May be used as ON/OFF switch

### Specifications:

- Max. operating voltage: 50VDC or 250VAC
- Resettable overload capacity: ten times rated current

- Dielectric strength: > 1500 volts RMS
- Termination: two #8-32 screw terminals

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	P&B Part No.	Fig.	Current Rating	Maximum Resistance	Price Each			
					1	25	50	100
655-W31-X2M1G-1	W31-X2M1G-1	B	1A	610mΩ	44.41	38.85	35.15	27.75
655-W31-X2M1G-2	W31-X2M1G-2	B	2A	190mΩ	45.30	39.63	35.85	28.31
655-W31-X2M1G-3	W31-X2M1G-3	B	3A	40mΩ	43.54	38.10	34.47	28.80
655-W31-X2M1G-5	W31-X2M1G-5	B	5A	30mΩ	29.54	25.84	23.37	21.76
655-W31-X2M1G-7.50	W31-X2M1G-7.50	B	7.5A	20mΩ	29.52	25.82	23.36	19.52
655-W31-X2M1G-10	W31-X2M1G-10	B	10A	10mΩ	32.73	28.63	25.90	20.37
655-W31-X2M1G-15	W31-X2M1G-15	B	15A	6mΩ	30.71	26.87	24.30	22.62
655-W31-X2M1G-20	W31-X2M1G-20	B	20A	4mΩ	29.54	25.84	23.37	21.76
655-W31-X2M1G-25	W31-X2M1G-25	B	25A	4mΩ	30.10	26.33	23.82	20.18
655-W31-X2M1G-30	W31-X2M1G-30	B	30A	3mΩ	29.54	25.84	23.37	21.76
655-W31-X2M1G-35	W31-X2M1G-35	B	35A	3mΩ	29.52	25.82	23.36	18.45
655-W31-X2M1G-40	W31-X2M1G-40	B	40A	2mΩ	31.31	27.37	24.77	19.56
655-W31-X2M1G-50	W31-X2M1G-50	B	50A	2mΩ	29.52	25.82	23.36	18.45

## W28 SERIES: PUSH TO RESET FUSEHOLDER-TYPE THERMAL CIRCUIT BREAKERS

### Features:

- Replaces slow-blow glass cartridge fuse
- Snaps-in mounting
- Button extends for visual trip indication

### Specifications:

- Dielectric strength: over 1500 volts RMS
- Max. operating voltage: 32VDC, 250VAC
- Black with white rate marking

- Termination: .250" quick connects. Soldering not recommended
- Mounting: snaps into panel from front
- Button color: black

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	P&B Part No.	Fig.	Current Rating	Maximum Resistance	Price Each			
					1	25	50	100
655-W28-XQ1A-0.25	W28-XQ1A-0.25	C	0.25A	14Ω	5.65	4.94	4.47	3.53
655-W28-XQ1A-0.50	W28-XQ1A-0.50	C	0.50A	3.55Ω	5.65	4.94	4.47	3.53
655-W28-XQ1A-1	W28-XQ1A-1	C	1A	890mΩ	6.19	5.41	4.90	3.87
655-W28-XQ1A-2	W28-XQ1A-2	C	2A	170mΩ	5.81	5.08	4.60	3.63
655-W28-XQ1A-3	W28-XQ1A-3	C	3A	69mΩ	3.06	2.68	2.55	2.04
655-W28-XQ1A-4	W28-XQ1A-4	C	4A	43mΩ	3.12	2.73	2.46	2.16
655-W28-XQ1A-5	W28-XQ1A-5	C	5A	30mΩ	3.34	2.92	2.63	2.08
655-W28-XQ1A-6	W28-XQ1A-6	C	6A	26mΩ	3.01	2.63	2.38	1.88
655-W28-XQ1A-7	W28-XQ1A-7	C	7A	17mΩ	3.01	2.63	2.37	1.88
655-W28-XQ1A-8	W28-XQ1A-8	C	8A	16mΩ	3.28	2.86	2.58	2.05
655-W28-XQ1A-10	W28-XQ1A-10	C	10A	11mΩ	3.40	2.97	2.69	2.35
655-W28-XQ1A-12	W28-XQ1A-12	C	12A	9mΩ	3.01	2.63	2.38	1.88
655-W28-XQ1A-15	W28-XQ1A-15	C	15A	7mΩ	3.00	2.74	2.47	1.94
655-W28-XQ1A-20	W28-XQ1A-20	C	20A	6mΩ	3.14	2.87	2.58	2.03

## W54/W57 SERIES: PUSH-TO-RESET THERMAL CIRCUIT BREAKERS

### Features:

- Cannot be manually tripped
- Button extends for visual trip indication

### Specifications:

- Max. operating voltage: 250VAC
- Dielectric strength: 1500 VAC (60 seconds)
- Termination: .250" OC, straight
- Resettable overload capacity: Ten times rated current

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	P&B Part No.	Fig.	Current Rating	Maximum Resistance	Price Each			
					1	25	50	100
<b>9.8mmx12.6mm Long Metal Bushing w/ Metal Knurled Nut and Hex Nut Assembled on Bushing</b>								
655-W54-XB1A4A10-5	W54-XB1A4A10-5	D	5A	50mΩ	2.99	2.60	2.36	1.83
655-W54-XB1A4A10-10	W54-XB1A4A10-10	D	10A	25mΩ	2.95	2.57	2.33	1.84
655-W54-XB1A4A10-15	W54-XB1A4A10-15	D	15A	17mΩ	3.26	2.85	2.58	2.04
655-W54-XB1A4A10-20	W54-XB1A4A10-20	D	20A	12mΩ	2.99	2.60	2.36	1.83
655-W54-XB1A4A10-25	W54-XB1A4A10-25	D	25A	10mΩ	3.10	2.81	2.58	2.08
655-W54-XB1A4A10-30	W54-XB1A4A10-30	D	30A	8mΩ	3.64	3.18	2.87	2.27
<b>10.8mmx12.6mm Long Metal Bushing w/ Metal Knurled Nut and Hex Nut Assembled on Bushing</b>								
655-W57-XB7A4A10-5	W57-XB7A4A10-5	E	5A	50mΩ	2.12	1.85	1.67	1.26
655-W57-XB7A4A10-10	W57-XB7A4A10-10	E	10A	25mΩ	2.13	1.86	1.75	1.38
655-W57-XB7A4A10-15	W57-XB7A4A10-15	E	15A	17mΩ	2.20	1.92	1.74	1.53
655-W57-XB7A4A10-20	W57-XB7A4A10-20	E	20A	12mΩ	2.41	2.10	1.91	1.48
<b>9.8mmx9.6mm Long Plastic Bushing w/ Plastic Knurled Nut and Hex Nut Assembled on Bushing</b>								
655-W57-XB1A7A10-5	W57-XB1A7A10-5	E	5A	50mΩ	2.78	2.43	2.20	1.74
655-W57-XB1A7A10-15	W57-XB1A7A10-15	E	15A	17mΩ	2.87	2.50	2.28	1.79
655-W57-XB1A7A10-20	W57-XB1A7A10-20	E	20A	12mΩ	2.65	2.33	2.11	1.64

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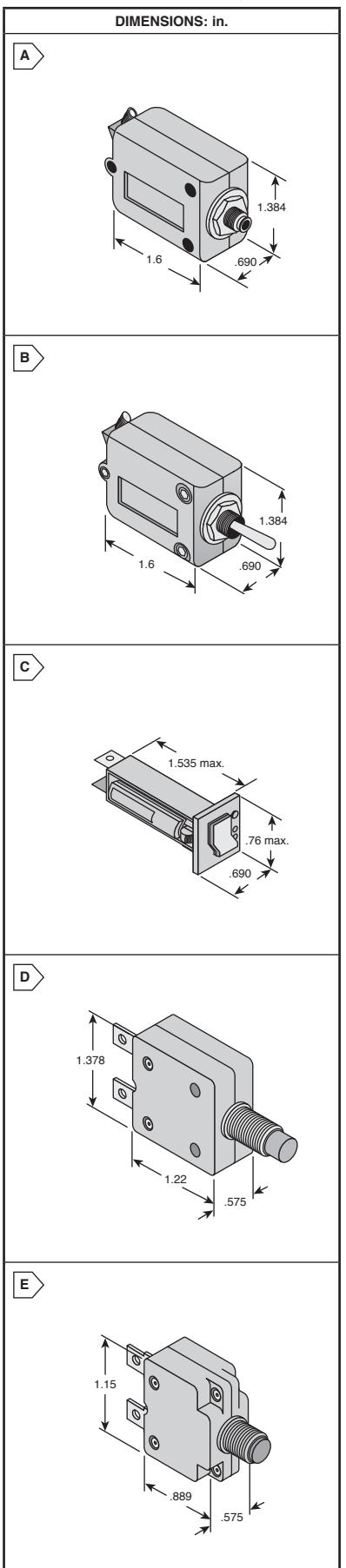
2040

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# P&B Circuit Breakers

**TE** Authorized Distributor  
connectivity

## W58 SERIES: PUSH-TO-RESET THERMAL CIRCUIT BREAKERS

### Features:

- Cannot be manually tripped
- Button extends for visual trip indication

### Specifications:

- Max. operating voltage: 50VDC or 250VAC
- Resettable overload capacity: ten times rated current
- Dielectric strength: > 1500 volts RMS



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	P&B Part No.	Fig.	Current Rating	Maximum Resistance	Price Each			
					1	25	50	100
<b>With .250" QC Terminals; Button: white with red rate marking, red trip band</b>								
655-W58-XB1A4A-1	W58-XB1A4A-1	A	1A	1.35Ω	7.28	6.37	5.76	4.54
655-W58-XB1A4A-2	W58-XB1A4A-2	A	2A	320mΩ	7.42	6.49	5.87	4.64
655-W58-XB1A4A-3	W58-XB1A4A-3	A	3A	180mΩ	7.28	6.37	5.76	4.54
655-W58-XB1A4A-4	W58-XB1A4A-4	A	4A	100mΩ	7.28	6.37	5.76	4.55
655-W58-XB1A4A-5	W58-XB1A4A-5	A	5A	26mΩ	5.19	4.54	4.11	3.24
655-W58-XB1A4A-6	W58-XB1A4A-6	A	6A	26mΩ	5.03	4.40	3.98	3.14
655-W58-XB1A4A-7	W58-XB1A4A-7	A	7A	20mΩ	5.30	4.64	4.19	3.30
655-W58-XB1A4A-8	W58-XB1A4A-8	A	8A	20mΩ	5.19	4.54	4.11	3.24
655-W58-XB1A4A-10	W58-XB1A4A-10	A	10A	14mΩ	5.19	4.54	4.11	3.24
655-W58-XB1A4A-12	W58-XB1A4A-12	A	12A	10mΩ	5.19	4.54	4.11	3.24
655-W58-XB1A4A-15	W58-XB1A4A-15	A	15A	10mΩ	4.78	3.67	3.27	3.08
655-W58-XB1A4A-20	W58-XB1A4A-20	A	20A	5mΩ	5.19	4.54	4.11	3.24
655-W58-XB1A4A-25	W58-XB1A4A-25	A	25A	6mΩ	5.19	4.54	4.11	3.24
655-W58-XB1A4A-30	W58-XB1A4A-30	A	30A	4mΩ	5.19	4.54	4.11	3.24
<b>With 6-32 Screw Terminals; Button: white with black rate marking, red trip band</b>								
655-W58-XC4C12A-1	W58-XC4C12A-1	A	1A	1.35Ω	7.28	6.37	5.76	4.54
655-W58-XC4C12A-2	W58-XC4C12A-2	A	2A	320mΩ	7.28	6.37	5.76	4.54
655-W58-XC4C12A-3	W58-XC4C12A-3	A	3A	180mΩ	7.28	6.37	5.76	4.54
655-W58-XC4C12A-5	W58-XC4C12A-5	A	5A	100mΩ	6.06	5.30	4.79	3.79
655-W58-XC4C12A-7	W58-XC4C12A-7	A	7A	26mΩ	5.81	5.17	4.68	3.69
655-W58-XC4C12A-10	W58-XC4C12A-10	A	10A	20mΩ	5.90	4.95	4.46	3.78
655-W58-XC4C12A-15	W58-XC4C12A-15	A	15A	20mΩ	6.06	5.30	4.79	3.79
655-W58-XC4C12A-20	W58-XC4C12A-20	A	20A	14mΩ	5.51	4.82	4.35	3.47
655-W58-XC4C12A-25	W58-XC4C12A-25	A	25A	10mΩ	5.92	5.30	4.79	3.79
655-W58-XC4C12A-30	W58-XC4C12A-30	A	30A	10mΩ	5.63	4.93	4.45	3.55

## W51 SERIES: ROCKER ACTUATED THERMAL CIRCUIT BREAKER/POWER SWITCH

### Features:

- Provides circuit protection and power switching in single unit.
- Compact, trip-free rocker-actuated design
- Snaps into same cutout as many common power switches

### Specifications:

- Max. operating voltage: 50VDC; 125 or 250VAC
- Resettable overload capacity: Ten times rated current
- Dielectric strength: 1500VAC (60 seconds)
- Reset time: 60 seconds
- Angular button design
- Termination: .250" quick connects.
- Mounting: snaps into panel from front



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	P&B Part No.	Fig.	Current Rating	Maximum Resistance	Price Each			
					1	25	50	100
<b>125VAC, Illuminated, Black Base, Red Rocker</b>								
655-W51-A121B1-5	W51-A121B1-5	B	5A	50mΩ	3.54	3.09	2.80	2.21
655-W51-A121B1-10	W51-A121B1-10	B	10A	25mΩ	3.48	3.03	2.75	2.15
655-W51-A121B1-15	W51-A121B1-15	B	15A	17mΩ	3.49	3.04	2.75	2.17
655-W51-A121B1-20	W51-A121B1-20	B	20A	12.5mΩ	3.54	3.09	2.80	2.21
<b>250VAC, Illuminated, Black Base, Red Rocker</b>								
655-W51-A122B1-5	W51-A122B1-5	B	5A	50mΩ	3.54	3.09	2.80	2.21
655-W51-A122B1-10	W51-A122B1-10	B	10A	25mΩ	3.48	3.03	2.75	2.15
655-W51-A122B1-15	W51-A122B1-15	B	15A	17mΩ	3.77	3.28	2.97	2.34
655-W51-A122B1-20	W51-A122B1-20	B	20A	12.5mΩ	3.77	3.28	2.97	2.34
<b>250VAC, Non-Illuminated, Black Base, Black Rocker</b>								
655-W51-A152A1-5	W51-A152A1-5	B	5A	50mΩ	3.52	3.07	2.79	2.19
655-W51-A152A1-10	W51-A152A1-10	B	10A	25mΩ	3.46	3.02	2.73	2.12
655-W51-A152A1-15	W51-A152A1-15	B	15A	17mΩ	3.37	2.94	2.67	2.07
655-W51-A152A1-20	W51-A152A1-20	B	20A	12.5mΩ	3.41	3.02	2.73	2.12

## W6/W9 SERIES: MAGNETIC HYDRAULIC CIRCUIT BREAKERS

### Features:

- Designed for international market
- Trip-free operation
- W6-White toggle actuator (one per pole)
- W9-Black toggle actuator (one per pole)
- W6-.250" QC
- W9-Heavy duty #10-32

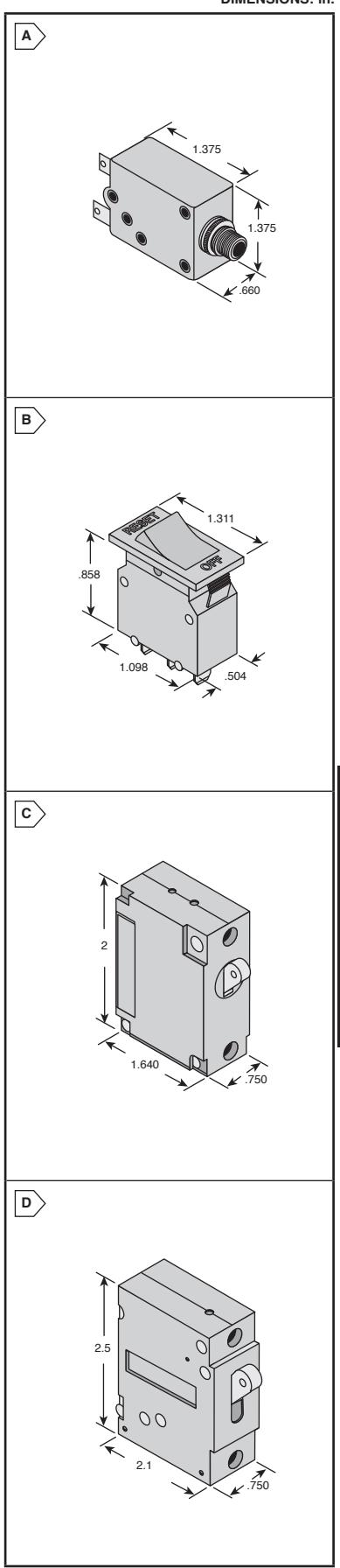
### Specifications:

- All have standard time delay curve (W67-XQ10-5 has instantaneous time delay curve)
- Circuit function: series trip
- Dielectric strength: 1500VAC; 1100VDC
- Insulation resistance: 100MΩ @ 500VDC



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	P&B Part No.	Fig.	Current Rating	Maximum Resistance	No. of Poles	Price Each			
						1	10	25	50
<b>655-W67-X2Q10-5</b>									
655-W67-X2Q52-10	W67-X2Q52-10	C	10A	13mΩ	1	21.25	19.85	18.60	16.82
655-W67-X2Q12-15	W67-X2Q12-15	C	15A	10mΩ	1	23.51	21.92	20.56	18.60
655-W68-X2Q12-10	W68-X2Q12-10	C	10A	13mΩ	2	21.28	19.84	18.61	16.84
655-W68-X2Q12-15	W68-X2Q12-15	C	15A	10mΩ	2	50.30	48.13	44.01	39.81
655-W68-X2Q12-20	W68-X2Q12-20	C	20A	4mΩ	2	49.28	45.98	43.12	39.01
655-W69-X2Q12-10	W69-X2Q12-10	C	10A	13mΩ	3	66.98	62.48	58.57	53.02
655-W91-X112-10	W91-X112-10	D	10A	13mΩ	1	21.26	19.24	17.76	14.79
655-W91-X112-20	W91-X112-20	D	20A	4mΩ	1	21.70	19.64	18.13	15.09
655-W92-X112-1	W92-X112-1	D	1A	1.2Ω	2	50.29	45.11	44.00	39.80
655-W92-X112-15	W92-X112-15	D	15A	10mΩ	2	49.30	44.22	43.13	39.01
655-W92-X112-20	W92-X112-20	D	20A	4mΩ	2	39.13	38.58	37.52	36.52
655-W92-X112-30	W92-X112-30	D	30A	2.7mΩ	2	50.29	45.11	44.00	39.80
655-W92-X112-50	W92-X112-50	D	50A	1.5mΩ	2	50.29	45.11	44.00	39.80
655-W93-X112-50	W93-X112-50	D	50A	1.5mΩ	3	92.59	86.42	81.01	73.30

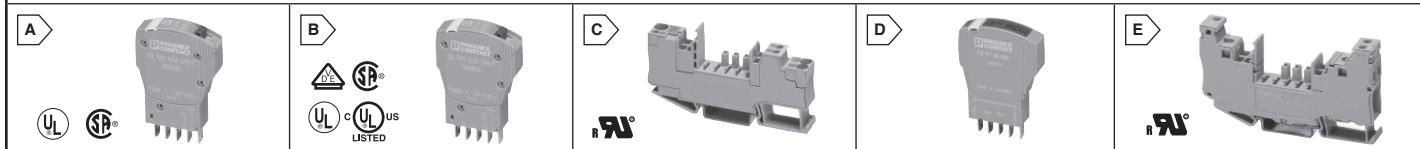


# PHOENIX CONTACT DIN Rail Circuit Breakers

 This page of product is RoHS compliant.

 INSPIRING INNOVATIONS

DIMENSIONS: mm



## CB PLUGGABLE CIRCUIT BREAKERS

### CB TM1 Thermomagnetic Circuit Breakers - Panel Mount

#### Specifications:

- Actuator Type: Slide Switch
- Circuit Function: Trip Free
- Voltage Rating AC/DC: 240/277 VAC, 50VDC
- Operating Temperature: -30°C to +60°C
- Gender: Male
- Number of Poles: 1
- Color: Gray

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Phoenix Type	Current Rating	Voltage Drop	Price Each		
					1	10	25

#### Termination Style: Quick Connect

651-2800835	A	CB TM1 0.5A SFB P	0.5A	2.5V	42.89	40.25	37.19
651-2800836	A	CB TM1 1A SFB P	1A	1.1V	42.89	40.25	37.19
651-2800837	A	CB TM1 2A SFB P	2A	0.64V	42.89	40.25	37.19
651-2800838	A	CB TM1 3A SFB P	3A	0.42V	42.89	40.25	37.19
651-2800839	A	CB TM1 4A SFB P	4A	0.34V	42.89	40.25	37.69
651-2800840	A	CB TM1 5A SFB P	5A	0.31V	41.84	38.19	37.19
651-2800841	A	CB TM1 6A SFB P	6A	0.29V	42.89	40.25	37.19
651-2800842	A	CB TM1 8A SFB P	8A	0.14V	42.89	40.25	37.19
651-2800843	A	CB TM1 10A SFB P	10A	0.13V	41.84	38.19	37.19
651-2800844	A	CB TM1 12A SFB P	12A	0.13V	42.89	40.25	37.19
651-2800845	A	CB TM1 16A SFB P	16A	0.13V	42.89	40.25	37.19
651-2800846	A	CB TM1 0.5A M1 P	0.5A	2.5V	42.89	40.25	37.19
651-2800847	A	CB TM1 1A M1 P	1A	1.1V	42.89	40.25	37.19
651-2800848	A	CB TM1 2A M1 P	2A	0.64V	42.89	40.25	37.69
651-2800849	A	CB TM1 3A M1 P	3A	0.42V	42.89	40.25	37.19
651-2800850	A	CB TM1 4A M1 P	4A	0.34V	42.89	40.25	37.19
651-2800851	A	CB TM1 5A M1 P	5A	0.31V	42.89	40.25	37.69
651-2800852	A	CB TM1 6A M1 P	6A	0.29V	42.89	40.25	37.19
651-2800853	A	CB TM1 8A M1 P	8A	0.14V	42.89	40.25	37.19
651-2800854	A	CB TM1 10A M1 P	10A	0.13V	42.89	40.25	37.69
651-2800855	A	CB TM1 12A M1 P	12A	0.13V	42.89	40.25	37.19
651-2800856	A	CB TM1 16A M1 P	16A	0.13V	42.89	40.25	37.19

### CB E1 Solid State Circuit Breakers - Panel Mount

- Specifications:
- Non-Illuminated
  - Number of Poles: 1
  - IP30 (Actuation area)
  - Actuator Type: Slide
  - Operating Voltage: 8-30VDC
  - Voltage Rating: 24VDC
  - Operating Temperature: 0°C to +50°C

#### Termination Style: Quick Connect

651-2800901	B	CB E1 24DC/1A NO P	1A	140mV	46.50	43.64	41.97
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### CB E1 Solid State Circuit Breakers - Panel Mount (Cont.)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Phoenix Type	Current Rating	Voltage Drop	Price Each		
					1	10	25
<b>Termination Style: Quick Connect (Cont.)</b>							
651-2800902	B	CB E1 24DC/2A NO P	2A	100mV	46.50	43.64	41.97
651-2800903	B	CB E1 24DC/3A NO P	3A	120mV	46.50	43.64	41.97
651-2800904	B	CB E1 24DC/4A NO P	4A	100mV	46.50	43.64	41.97
651-2800905	B	CB E1 24DC/6A NO P	6A	130mV	46.50	43.64	41.97
651-2800908	B	CB E1 24DC/1A S-R P	1A	140mV	53.15	49.88	46.08
651-2800909	B	CB E1 24DC/2A S-R P	2A	100mV	53.15	49.88	46.08
651-2800910	B	CB E1 24DC/3A S-R P	3A	120mV	53.15	49.88	46.08
651-2800911	B	CB E1 24DC/4A S-R P	4A	100mV	53.15	49.88	46.08
651-2800912	B	CB E1 24DC/6A S-R P	6A	130mV	53.15	49.88	46.08
651-2800922	B	CB E1 24DC/1A S-C P	1A	140mV	56.48	53.01	48.97
651-2800923	B	CB E1 24DC/2A S-C P	2A	100mV	56.48	53.01	48.97
651-2800924	B	CB E1 24DC/3A S-C P	3A	120mV	56.48	53.01	48.97
651-2800925	B	CB E1 24DC/4A S-C P	4A	100mV	56.48	53.01	48.97
651-2800926	B	CB E1 24DC/6A S-C P	6A	130mV	56.48	53.01	48.97

### Circuit Breaker Accessories

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Phoenix Type	Description	Price Each		
				1	10	25
651-2800929	C	CB 1/6-2/4 PT-BE	Base element w/push-in connection tech. for CB, device circuit breakers	16.14	15.08	13.93
651-2801014	D	CB PT BRIDGE	Bridge plugs for the CB 1/6-2/4 PT-BE base element	14.95	14.02	13.48
651-2801305	E	CB 1/10-1/10 UT-BE	Base element w/screw connection tech. for CB device circuit breakers.	14.86	13.94	13.94

DIMENSIONS: mm



## THERMO MAGNETIC CIRCUIT BREAKERS

### UT 6-TMC M DIN Rail Thermo Magnetic Circuit Breakers- Pushbutton Type

#### Specifications:

- Housing Width: 12.5mm
- Single-pole

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Phoenix Type	Nominal Current	Voltage Rating AC/DC	Price Each		
					1	10	25
651-0916603	A	UT 6-TMC M 0.5A	.5A	240/28	16.67	15.53	15.49
651-0916604	A	UT 6-TMC M 1A	1A	240/28	16.56	15.53	14.81
651-0916605	A	UT 6-TMC M 2A	2A	240/28	16.56	15.53	14.81
651-0916606	A	UT 6-TMC M 4A	4A	240/28	17.15	16.81	16.13
651-0916607	A	UT 6-TMC M 5A	5A	240/28	16.56	15.53	14.81
651-0916608	A	UT 6-TMC M 6A	6A	240/28	16.67	15.53	15.49
651-0916609	A	UT 6-TMC M 8A	8A	240/28	14.58	13.59	13.56
651-0916610	A	UT 6-TMC M 10A	10A	240/28	14.49	13.59	12.96
651-0916611	A	UT 6-TMC M 12A	12A	240/28	14.58	13.59	13.56
651-0916612	A	UT 6-TMC M 15A	15A	240/28	15.00	14.71	14.12
651-0916613	A	UT 6-TMC M 16A	16A	240/28	14.58	13.59	13.56

### TMC1 DIN Rail Thermo Magnetic Circuit Breakers - Switch Type

#### Specifications:

- Housing Width: 12.5mm
- Operating Temperature: -10°C to 60°C
- Color: Black

For quantities greater than listed, call for quote.

651-0914400	B	TMC 1 M1 100 0.5A	.5A	250/65	76.37	69.71	67.87
651-0914439	B	TMC 1 M1 100 1.0A	1A	250/65	79.13	73.47	70.67
651-0914455	B	TMC 1 M1 100 2.0A	2A	250/65	79.13	73.47	70.67
651-0914497	B	TMC 1 M1 100 5.0A	5A	250/65	76.37	69.71	67.87
651-0914523	B	TMC 1 M1 100 10.0A	10A	250/65	76.37	69.71	67.87
651-0915473	B	TMC 1 M1 100 15.0A	15A	250/65	73.35	66.95	65.19

### TCP DIN Rail Terminal Blocks

#### Features:

- Mounts to standard 35mm DIN Rails
- Bridgeable
- Use with TCP push button circuit breakers
- Can be used with Automotive Type Fuses

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Phoenix Type	Connection Type	Color	Voltage	Current	Terminal	No. of Positions	AWG	Price Each		
										1	10	25
651-3118203	E	UK 6-FSI/C	Screw-Clamp	Black	300	30A	8.2mm	2	26-8	10.71	10.43	10.15
651-3036372	F	ST 4-FSI/C	Spring-Cage	Black	400	30A	8.2mm	2	24-10	6.79	6.61	6.30

651-1052002 - ZB 8: Unprinted

White Unprinted Labels (1 strip of 10)

For quantities greater than listed, call for quote.

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# SCHURTER Circuit Breakers

RoHS Compliant

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## TA35 SERIES: THERMAL CIRCUIT BREAKERS WITH ROCKER ACTUATOR

- TA35 is positively trip-free
- Ratings: 240VAC (3-pole: 415Y/240)
- Snap-in mount front
- Quick-connect terminals
- Illuminated types available with red, green, yellow and blue transparent rockers



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schurter Part No.	Fig.	No. of Poles	No. of Terminals	Rated Current	Switch Color/Markings	Price Each			
							1	10	25	50
693-CFTWKJ20C0	CFTWKJ20C0	A	1	1	2A	White/ON-OFF	9.37	8.33	7.49	7.08
693-CFTWF030C0	CFTWF030C0	A	1	1	3A	White/I-0	8.22	7.30	6.58	6.22
693-CFTBF040C0	CFTBF040C0	A	1	1	4A	Black/I-0	7.31	6.49	5.85	5.53
693-CFTRF050C0	CFTRF050C0	A	1	1	5A	Red/I-0	8.22	7.30	6.58	6.22
693-CFTRF100C0	CFTRF100C0	A	1	1	10A	Red/I-0	8.22	7.30	6.58	6.22
693-CFTWF150C0	CFTWF150C0	A	1	1	15A	White/I-0	8.22	7.30	6.58	6.22
693-CFTWF200C0	CFTWF200C0	A	1	1	20A	White/I-0	7.31	6.49	5.85	5.53
693-CBTWF060C0	CBTWF060C0	B	2	1	6A	White/I-0	11.50	10.23	9.20	8.69
693-CBTWF080C0	CBTWF080C0	B	2	1	8A	White/I-0	12.93	11.50	10.34	9.77
693-CBTWF160C0	CBTWF160C0	B	2	1	16A	White/I-0	12.93	11.50	10.34	9.77
693-CBDWF030C0	CBDWF030C0	B	2	2	3A	White/I-0	13.08	11.63	10.47	9.88
693-CBDWF050C0	CBDWF050C0	B	2	2	5A	White/I-0	14.71	13.08	11.77	11.11
693-CBDWF070C0	CBDWF070C0	B	2	2	7A	White/I-0	14.71	13.08	11.77	11.11
693-CKDWF050C0	CKDWF050C0	C	3	3	5A	White/I-0	20.96	18.62	16.77	15.85
693-CKDWF100C0	CKDWF100C0	C	3	3	10A	White/I-0	20.96	18.62	16.77	15.85

### Accessories

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schurter Part No.	Description	Price Each			
			1	10	25	50
693-CZZ11	CZZ11	Waterproof cover - 1 pole	.93	.83	.75	.71
693-CZZ21	CZZ21	Waterproof cover - 2 pole	1.10	.97	.877	.832

## TA45 SERIES: THERMAL CIRCUIT BREAKERS WITH ROCKER ACTUATOR

- TA45 is positively trip-free
- Ratings: 240VAC/60VDC
- Black switch has white printed I/O legend
- Orange switch is transparent illuminated with white printed I/O legend
- Other rocker switch colors and legends available. Call for more information.

- Snap-in mount
- IP40 degree of protection on front side
- Terminals: .250" quick connect
- DPST switch (On-Off); 3-pole also available. Call for more information
- I-Pole units use 120 Volt illumination; Z-Pole units use 240 Volt



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schurter Part No.	Fig.	Rated Current	Thermal Overload Protection	Switch Color	Price Each			
						1	10	25	50
693-ABTBLJ05C0	ABTBLJ05C0	D	0.5A	1-pole	Black	16.12	14.32	12.89	12.19
693-A126LJ05C0	A126LJ05C0	D	0.5A	1-pole	Orange	22.64	20.13	18.11	17.09
693-ABDBLJ05C0	ABDBLJ05C0	D	0.5A	2-pole	Black	21.57	19.17	17.25	16.28
693-ABTBLJ20C0	ABTBLJ20C0	D	2A	1-pole	Black	14.33	12.73	11.46	10.84
693-A126LJ20C0	A126LJ20C0	D	2A	1-pole	Orange	21.57	19.17	17.25	16.28
693-ABDBLJ20C0	ABDBLJ20C0	D	2A	2-pole	Black	18.73	16.65	14.98	14.14
693-A326LJ20C0	A326LJ20C0	D	2A	2-pole	Orange	26.20	23.45	21.15	19.89
693-ABTBL05C0	ABTBL05C0	D	5A	1-pole	Black	17.86	17.00	15.99	15.15
693-ABDBL05C0	ABDBL05C0	D	5A	2-pole	Black	18.26	16.23	14.61	13.80
693-A326L05C0	A326L05C0	D	5A	2-pole	Orange	31.14	27.69	24.90	23.52
693-ABTBL100C0	ABTBL100C0	D	10A	1-pole	Black	20.09	19.12	17.98	17.04
693-A126L100C0	A126L100C0	D	10A	1-pole	Orange	18.73	16.65	14.98	14.14
693-ABDBL100C0	ABDBL100C0	D	10A	2-pole	Black	17.84	15.86	15.23	14.47
693-A326L100C0	A326L100C0	D	10A	2-pole	Orange	27.69	24.43	22.14	20.90
693-ABTBL150C0	ABTBL150C0	D	15A	1-pole	Black	17.86	17.00	15.99	15.15
693-A126L150C0	A126L150C0	D	15A	1-pole	Orange	21.07	18.73	16.85	15.90
693-ABDBL150C0	ABDBL150C0	D	15A	2-pole	Black	18.10	16.15	14.50	13.73
693-A326L150C0	A326L150C0	D	15A	2-pole	Orange	26.23	23.72	21.17	20.00
693-ABTBL200C0	ABTBL200C0	D	20A	1-pole	Black	17.86	17.00	15.99	15.15
693-A126L200C0	A126L200C0	D	20A	1-pole	Orange	18.73	16.65	14.98	14.14
693-ABDBL200C0	ABDBL200C0	D	20A	2-pole	Black	20.54	18.25	16.42	15.51
693-A326L200C0	A326L200C0	D	20A	2-pole	Orange	27.69	24.61	22.14	20.90

## T9-818 SERIES: THERMAL CIRCUIT BREAKERS FOR PCB MOUNTING

- No wiring needed, therefore less labor cost
- And therefore less material cost
- Fully automated mounting possible

- Fixing pins take load off the contacts
- Eco-friendly
- Safe & easy



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schurter Part No.	Fig.	Rated Current	Internal Resistance	Number of Poles	Rated Voltage		Price Each		
						AC	DC	1	50	100
693-4404.0096	4404.0096	E	3A	80.0mΩ	1	240	48	4.80	4.40	4.06
693-4404.0097	4404.0097	E	4A	26.3mΩ	1	240	48	3.20	2.94	2.71
693-4404.0098	4404.0098	E	5A	24.1mΩ	1	240	48	3.20	2.94	2.71
693-4404.0099	4404.0099	E	6A	19.0mΩ	1	240	48	3.20	2.94	2.71
693-4404.0100	4404.0100	E	7A	18.0mΩ	1	240	48	3.20	2.94	2.71
693-4404.0101	4404.0101	E	8A	14.8mΩ	1	240	48	3.20	2.94	2.71
693-4404.0102	4404.0102	E	10A	13.0mΩ	1	240	48	3.20	2.94	2.71
693-4404.0103	4404.0103	E	12A	12.7mΩ	1	240	48	3.20	2.94	2.71
693-4404.0104	4404.0104	E	14A	9.7mΩ	1	240	32	3.20	2.94	2.71
693-4404.0105	4404.0105	E	15A	8.0mΩ	1	240	32	3.20	2.94	2.71

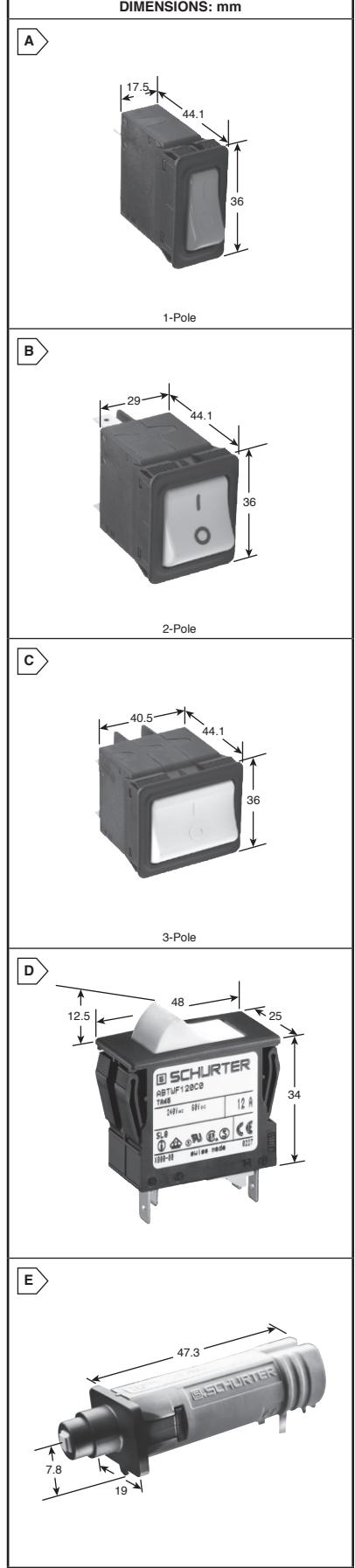
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**SCHURTER** ELECTRONIC COMPONENTS

DIMENSIONS: mm





## OMNIDIRECTIONAL MICROPHONES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CUI Part No.	Fig.	Sensitivity (dB)	Operating Voltage (VDC)	Frequency Range (Hz)	Signal Noise Ratio (dBA)	Output Impedance (kΩ)	Termination	Dimensions: mm	Price Each			
										1	10	25	50
490-CMA-4544PF-W	CMA-4544PF-W	A	-44	3	20 ~ 2000	60	2.2	Pin Terminal	ø9.7 x 4.5	.95	.746	.683	.569
490-CMA-6542TF-K	CMA-6542TF-K	A	-42	1.5	100 ~ 2000	58	1.5	Pin	ø9.7 x 6.5	.95	.746	.683	.569
490-CMB-6544PF	CMB-6544PF	A	-44	4.5	20 ~ 2000	60	1	Pin	ø9.4 x 6.5	1.04	.814	.745	.621
490-CMC-2242PBL-A	CMC-2242PBL-A	A	-42	2	100 ~ 2000	58	2.2	Pin	ø6.0 x 2.2	2.21	1.83	1.52	1.35
490-CMC-2742PBPA-J	CMC-2742PBPA-J	A	-42	2	100 ~ 2000	58	2.2	Pin	ø9.7 x 5.2	2.13	1.77	1.47	1.31
490-CMC-5042PF-AC	CMC-5042PF-AC	A	-42	2	100 ~ 2000	56	2.2	Pin	ø6.0 x 5.0	1.39	1.08	-	.828
490-CMC-5044PF-A	CMC-5044PF-A	A	-44	2	100 ~ 2000	56	2.2	Pin	ø6.0 x 5.0	1.39	1.08	.994	.828
490-CME-1538-100LB	CME-1538-100LB	B	-38	2	20 ~ 2000	58	2.2	Wire	ø4.0 x 1.5	4.57	3.79	3.16	2.84
490-CMI-5247TF-K	CMI-5247TF-K	A	-47	1.5	70 ~ 2000	60	.68	Terminal	ø9.7 x 5.2	2.21	1.83	1.52	1.35

## SPEAKERS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CUI Part No.	Fig.	S.P. Level (dB)	Nominal Input (W)	Max. Input (W)	Impedance (Ω)	Resonance Frequency (Hz)	Cone Type	Magnet Type	Dimensions: mm	Price Each		
											1	10	100
490-CDM-10008	CDM-10008	C	86	0.3	1	8	1200	Mylar	Nd-Fe-B	ø10 x 2.9	1.98	1.64	1.22
490-CLS0231MA-1-L152	CLS0231MA-1-L152	D	89	1	1.5	8	650	Paper	Nd-Fe-B	ø23 x 5.0	4.63	3.84	2.88
490-CLS0301-L152	CLS0301-L152	E	86	1	2	8	550	Paper	Nd-Fe-B	ø30 x 3.0	4.81	3.98	2.98
490-CLS0401MAE-L152	CLS0401MAE-L152	F	91	1	2	4	600	Mylar	Nd-Fe-B	ø40 x 5.0	5.33	4.41	3.31
490-CMS0401KL-1X	CMS0401KL-1X	G	87	4	6	8	320	Mylar	Nd-Fe-B	40 x 40 x 14.5	16.39	13.88	10.72

## BUZZERS

\*Tone: Continuous

Waterproof

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CUI Part No.	Fig.	Rated Voltage	Frequency (Hz)	Current (mA) (Max.)	Sound Pressure (dB)	Dimensions: mm	Price Each			
								1	10	25	50
490-CPE-171	CPE-171	H	30Vp-p	2800	4	75	ø9.0 x 8.0	1.91	1.58	1.32	1.17

## Piezoelectric

### Features:

- Wide operating voltage: 3~250V
- Lower current consumption: less than 30mA Higher rated frequency
- Larger footprint
- Higher sound pressure level

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CUI Part No.	Fig.	Rated Voltage	Frequency (Hz)	Current (mA) (Max.)	Sound Pressure (dB)	Dimensions: mm	Price Each			
								1	10	25	50
490-CPE-171	CPE-171	H	30Vp-p	2800	4	75	ø9.0 x 8.0	1.91	1.58	1.32	1.17
490-CPE-27D44	CEB-27D44	I	20Vp-p	4600	-	-	ø27.0 x 0.51	1.74	1.35	-	1.03
490-CEP-1108	CEP-1108	J	50Vp-p	2500	7	80	ø22.0 x 5.0	1.82	1.51	1.26	1.12
490-CEP-1112	CEP-1112	K	30Vp-p	4000	11	92	ø24.0 x 7.3	2.52	2.09	1.74	1.55
490-CEP-1116	CEP-1116	L	30Vp-p	2000	8	90	ø30.0 x 10.0	2.65	2.20	1.83	1.63
490-CEP-1130	CEP-1130	L	30Vp-p	3000	10	90	ø30.0 x 7.5	2.47	2.05	1.70	1.51
490-CEP-1162	CEP-1162	M	20Vp-p	4000	7	80	ø14.0 x 7.0	2.95	2.44	2.04	1.83
* 490-CEP-2202AS	CEP-2202AS	N	12VDC	3000	11	85	ø24.2 x 16.0	4.49	3.72	3.10	2.79
* 490-CEP-2224	CEP-2224	O	12VDC	3400	15	78	ø24.0 x 9.0	3.04	2.52	2.10	1.89
* 490-CEP-2242	CEP-2242	P	12VDC	4100	7	70	ø13.7 x 7.6	3.18	2.64	2.20	1.98
* 490-CEP-2272A	CEP-2272A	Q	12VDC	3500	10	93	ø31.3 x 16.0	4.23	3.50	2.92	2.62
490-CMI-1240-SMT	CMI-1240-SMT	R	12VDC	4000	8	83	16.9 x 16.9 x 7.8	4.81	3.98	-	2.98
490-CPE-253	CPE-253	S	12VDC	3500	6	87	ø28.0 x 25.4	6.52	5.40	-	4.05
* 490-CPE-270H	CPE-270H	T	12VDC	3500	12	96	ø33.7 x 14.5	4.86	4.03	3.36	3.02
* 490-CPE-4485	CPE-4485	U	100Vp-p	2200	-	100	ø44.80 x 14.10	7.09	5.88	4.90	4.41
* 490-CPE-827	CPE-827	V	50Vp-p	4500	11	97	ø30.0 x 5.6	1.74	1.35	1.24	1.03

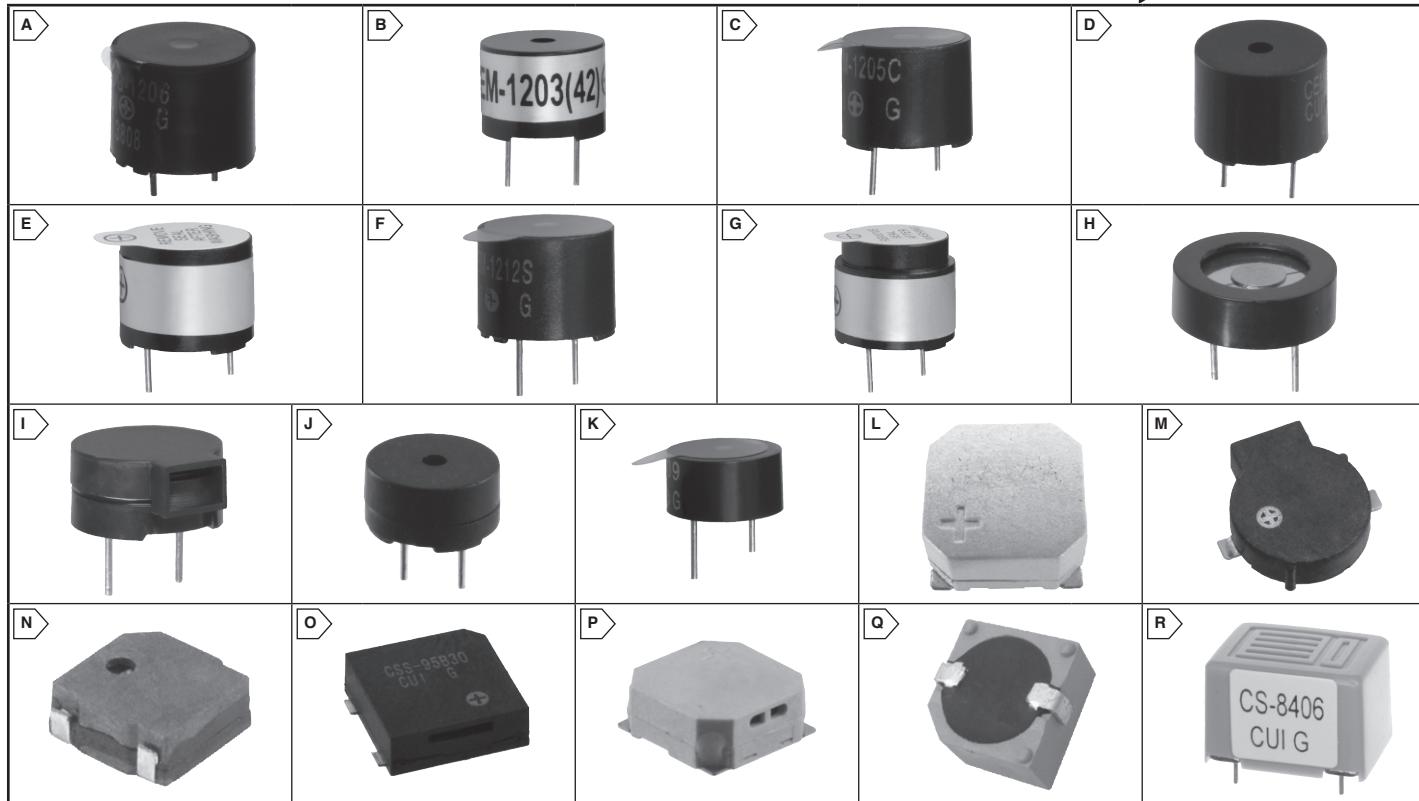
## Piezoelectric - Tape and Reel Package

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CUI Part No.	Fig.	Rated Voltage	Frequency (Hz)	Current (mA) (Max.)	Sound Pressure (dB)	Dimensions: mm	Price Each			
								1	10	25	50
490-CMT-1075-SMT-TR	CMT-1075-SMT-TR	W	25Vp-p	5200	5	75	ø10.0 x 3.1	3.73	3.09	2.58	2.32
490-CMT-1203-SMT-TR	CMT-1203-SMT-TR	X	25Vp-p	4000	5	8	12.0 x 12.0 x 3.0	2.50	2.08	1.73	1.54
490-CMT-1603-SMT-TR	CMT-1603-SMT-TR	Y	25Vp-p	4000	3	70	16.0 x 16.0 x 2.6	2.43	2.02	1.68	1.49

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## BUZZERS (CONT.)

### Features:

- Narrow operating voltage: 1~16V
- Higher current consumption: 30~100mA
- Lower rated frequency
- Smaller footprint
- Lower sound pressure level

### Applications:

- Home Appliances
- Automotive
- Medical
- Security
- Industrial
- Office Automation

\*Tone: Continuous

### Magnetic

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CUI Part No.	Fig.	Rated Voltage	Frequency (Hz)	Current (mA) (Max.)	Sound Pressure (dB)	Dimensions: mm	Price Each			
								1	10	25	50
490-CCG-1206	CCG-1206	A	5Vo-p	2400	50	85	ø12.0 x 10.0	1.26	.985	.902	.752
490-CEM-1203(42)	CEM-1203(42)	B	3.5Vo-p	2048	35	85	ø12.0 x 8.5	1.13	.882	.807	.673
490-CEM-1205C	CEM-1205C	C	5VDC	2300	35	83	ø12.0 x 9.5	2.50	2.08	1.73	1.54
490-CEM-1206S	CEM-1206S	D	5Vo-p	2400	45	85	ø12.0 x 9.5	1.30	1.01	.932	.776
490-CEM-1212C	CEM-1212C	E	12VDC	2300	35	85	ø12.0 x 9.5	3.14	2.60	2.17	1.93
490-CEM-1212S	CEM-1212S	F	12Vo-p	2400	40	85	ø12.0 x 9.5	1.30	1.01	.932	.776
490-CEM-1606	CEM-1606	G	6Vo-p	2048	50	85	ø16.0 x 14.0	1.91	1.58	1.32	1.17
* 490-CSQ-706BP	CSQ-706BP	H	1.5Vo-p	2048	20	70	ø12.0 x 6.0	1.48	1.15	1.05	.88
490-CSQG703BP	CSQG703BP	H	3Vo-p	2000	90	85	ø12.0 x 3.8	1.26	.985	.902	.752
490-CSQ-RP-E	CSQ-RP-E	I	1.5Vo-p	2730	80	85	ø12.0 x 6.0	1.10	.855	.783	.653
490-CST-911AP	CST-911AP	J	1.5Vo-p	2730	80	85	ø9.0 x 4.5	1.57	1.22	1.11	.932
490-CST-931AP	CST-931AP	J	3Vo-p	2730	80	85	ø9.0 x 4.5	1.57	1.22	1.11	.932
490-CST-951AP	CST-951AP	J	5Vo-p	2730	80	85	ø9.0 x 4.5	1.57	1.22	1.11	.932
490-CX-0905C	CX-0905C	K	5VDC	2730	35	80	ø9.6 x 5.0	2.47	2.05	1.70	1.51

### Magnetic - Surface Mount

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CUI Part No.	Fig.	Rated Voltage	Frequency (Hz)	Current (mA) (Max.)	Sound Pressure (dB)	Dimensions: mm	Price Each			
								1	10	25	50
490-CSS-73B16K-SMT	CSS-73B16K-SMT	L	3.6Vo-p	2730	100	87	8.5 x 8.5 x 4.0	3.23	2.68	2.23	1.99

### Magnetic - Tape and Reel Package

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CUI Part No.	Fig.	Rated Voltage	Frequency (Hz)	Current (mA) (Max.)	Sound Pressure (dB)	Dimensions: mm	Price Each			
								1	10	25	50
* 490-CBT-09427-SMT-TR	CBT-09427-SMT-TR	M	3.6Vo-P	2730	110	87	ø9.0 x 2.5	2.69	2.23	1.86	1.65
490-CSS-0575A-SMT-TR	CSS-0575A-SMT-TR	N	3Vo-p	4000	110	75	5.0 x 5.0 x 1.9	3.33	2.76	2.30	2.07
490-CSS-95B30-SMT-TR	CSS-95B30-SMT-TR	O	5Vo-p	2700	80	92	10.0 x 10.0 x 3.2	3.79	3.14	2.62	2.35
490-CSS-J4D20-SMT-TR	CSS-J4D20-SMT-TR	P	3.6Vo-p	3100	80	90	8.5 x 8.5 x 3.2	3.18	2.64	2.20	1.95
490-CT-1205CL-SMT-TR	CT-1205CL-SMT-TR	Q	5VDC	2400	30	88	12.8 x 12.8 x 7.1	3.30	2.73	2.28	2.05
490-CT-1205C-SMT-TR	CT-1205C-SMT-TR	Q	5VDC	2400	30	90	12.8 x 12.8 x 10.0	3.30	2.73	2.28	2.05
490-CT-1212CL-SMT-TR	CT-1212CL-SMT-TR	Q	12VDC	2400	30	85	12.8 x 12.8 x 7.1	2.95	2.45	2.04	1.81

### Solid State Buzzers

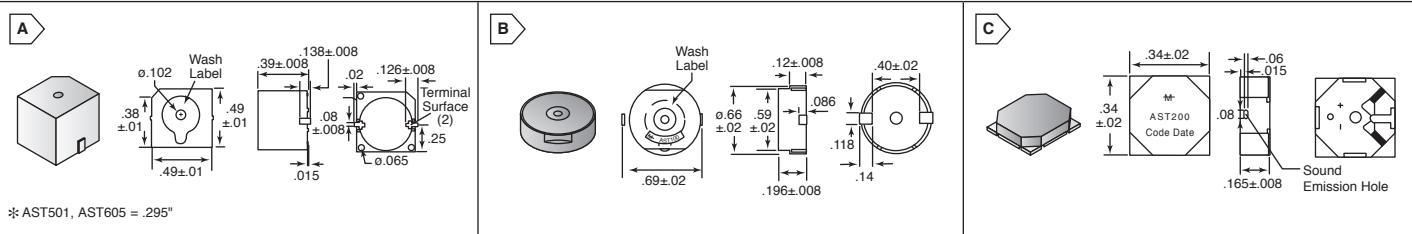
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CUI Part No.	Fig.	Rated Voltage	Frequency (Hz)	Current (mA) (Max.)	Sound Pressure (dB)	Dimensions: mm	Price Each			
								1	10	50	
* 490-CS-8406	CS-8406	R	6VDC	-	25	75	22.5 x 16.7 x 15.5	5.33	4.41	3.31	
490-CS-8412	CS-8412	R	12VDC	-	30	77	22.5 x 16.7 x 15.5	4.63	3.84	2.88	

# MALLORY SONALERT® Audible Alarms and Buzzers

MALLORY

**DIMENSIONS: in.**



**MALLORY SONALERT II™ - SURFACE MOUNT (WITH AND WITHOUT CIRCUITRY)**

MOUSER STOCK NO.	Fig.	Resonate/Oscillating Frequency (Hz)	Rated Voltage Vpp	Operating Voltage (max.)	Sound Pressure dB (min.)	Current Consumption (max.)	Price Each		
							1	25	100
539-ASI301Q	A	2300 ±300 Hz	5 VDC	4~7 VDC	90 dB	30 mA	2.84	2.53	2.46
539-ASI401Q	A	2300 ±300 Hz	12 VDC	9~15 Vpp	90 dB	50 mA	2.84	2.53	2.46
539-AST100Q	B	4000 ±500 Hz	5 Vpp	15 Vpp	80 dB	1.5 mA	1.62	1.44	1.40
539-AST200Q	C	2700 ±500 Hz	3 Vpp	2~5 Vpp	80 dB	80 mA	3.87	3.45	3.34
539-AST501Q	A	2400 ±500 Hz	1.5 Vpp	1~2 Vpp	85 dB	70 mA	2.53	2.26	2.19
539-AST605Q	A	2400 ±500 Hz	5 Vpp	4~7 Vpp	87 dB	50 mA	2.47	2.20	2.13

**MALLORY SONALERT®**

- Board mount with circuitry
  - Low profile and compact
  - Piezo tone quality
  - Made in the USA

MOUSER STOCK NO.	Fig.	Frequency	Minimum Sound Pressure (dB/2 ft.)	Rated Voltage	Maximum Current	Price Each			
						1	10	25	100
539-MSR320R	D	3.40KHz ± .4KHz	75 @ 12V	3-20VDC	3-16mA @ 3-20VDC	4.47	4.23	3.99	3.87
539-MSR320SR	D	3.40KHz ± .4KHz	62 @ 3V	3-20VDC	3-16mA @ 3-20VDC	4.60	4.33	4.20	4.08
539-MSR516NRR	D	3.90KHz ± .4KHz	85 @ 12V	5-16VDC	3-16mA @ 5-16VDC	5.28	4.98	4.83	4.69
539-MSO320R	E	3.15KHz ± .4KHz	75 @ 12V	3-20VDC	3-16mA @ 3-20VDC	4.91	4.63	4.49	4.37
539-MAS800Q	F	2.8KHz ± .5KHz	103 @ 12V	9-12VDC	50mA @ 12VDC	7.14	6.73	6.53	6.34
539-MAS800SQ	F	2.8KHz ± .5KHz	103 @ 12V	9-12VDC	50mA @ 12VDC	7.14	6.73	6.53	6.34
539-MAS803Q	F	2.8KHz ± .5Hz	95 @ 3V	3-7VDC	130mA @ 7VDC	6.02	5.68	5.50	5.35
539-MAS806Q	F	2.8KHz ± .5Hz	95 @ 6V	5-14VDC	50mA @ 14VDC	6.54	6.17	5.98	5.81
539-MSR516NSR	D	3.90KHz	85 @ 12V	5-16VDC	3-16mA @ 5-16VDC	5.45	5.14	4.98	4.84
539-MAS806SQ	F	2.8KHz	95 @ 6V	5-14VDC	3-16mA @ 5-16VDC	6.57	6.19	6.00	5.84

**MALLORY SONALERT II™ - SPECIALTY BOARD MOUNT WITH CIRCUITRY**

MOUSER STOCK NO.	Fig.	Sound Type	Freq.	Minimum Sound Pressure (dB@2 ft.)	Rated Voltage	Maximum Current	Price Each			
							1	25	50	100
539-MSR516NPR	D	Fast Pulse	3.9KHz	85 @ 12V	5-16VDC	3-12mA @ 5-16VDC	5.74	5.25	5.17	5.10
539-MSR516NJR	D	Slow Pulse	3.9KHz	85 @ 12V	5-16VDC	3-12mA @ 5-16VDC	5.72	5.23	5.14	5.08

## **MALLORY SONALERT® INTERMITTENT TONES**



MOUSER STOCK NO.	Fig.	Mounting Method	Freq. ±500 (Hz)	Operating Voltage + AC/DC Non-Polar All others DC only		Sound Pressure dB (A) @ 2 ft.		Typical Operating Current (mA)		Price Each		
				Min.	Max.	@ V Min.	@ V Max.	@ Min. V	@ Max. V	1	25	50
<b>Fast Pulse</b>												
539-SC110HPR	G	Panel	4500	† 30	† 120	68	80	6	20	46.06	43.96	43.41
539-SC110PR	G	Panel	2900	† 30	† 120	68	80	6	21	43.12	41.16	40.65
539-SC616NPR	H	Panel	2900	6	16	80	95	4	16	23.63	22.56	22.28
539-SC628DPR	H	Panel	1900	6	28	60	75	6	23	29.97	28.61	28.25
539-SC628ANPR	H	Panel	2900	6	28	80	95	4	30	37.33	35.63	35.19
539-SC628NDP	H	Panel	2000	10	28	85	95	2	10	27.76	26.50	26.17
539-SC628NPR	H	Panel	2900	6	28	80	90	4	16	30.87	29.46	29.10
539-SC628PR	I	Panel	2900	6	28	68	80	6	22	28.15	26.87	26.53
539-SC648ANPR	H	Panel	2900	10	48	91	104	4	26	40.29	38.46	37.98

Chime

<b>539-SC616CPR</b>	I	Panel	2900	6	16	68	78	3	8	<b>33.32</b>	<b>31.80</b>	<b>31.40</b>
<b>539-SC628CPNR</b>	H	Panel	2900	6	28	84	95	6	16	<b>62.64</b>	<b>59.79</b>	<b>59.04</b>

Slow Pulse  
539-SC110

<b>539-SC710JR</b>	G	Panel	2900	† 30	† 120	68	80	6	21	43.24	41.27	40.76
<b>539-SC110JR</b>	G	Panel	2900	† 30	† 120	80	95	8	28	44.93	42.89	42.35
<b>539-SC616NJR</b>	H	Panel	2900	6	16	80	95	4	16	26.13	24.94	24.63
<b>539-SC628AJR</b>	H	Panel	2900	6	28	68	80	4	16	39.07	37.29	36.83
<b>539-SC628ANJR</b>	H	Panel	2900	6	28	80	95	4	30	39.78	37.97	37.50
<b>539-SC628DJR</b>	H	Panel	1900	6	28	60	75	5	23	29.21	27.88	27.53
<b>539-SC628EJR</b>	H	Panel	1900	6	28	50-62	65-78	0.5	2	29.97	28.60	28.25
<b>539-SC628JR</b>	H	Panel	2900	6	28	68	80	5	20	29.15	27.82	27.47
<b>539-SC628JWR</b>	H	Panel	2900	6	28	78	89	5	20	28.51	27.21	26.87

## **Short Pulse**

539-SC6

**Siren**    **539-SC648S**    H    Panel    1900    10    48    80    90    3.5    6.5    **51.83**    **49.47**    **48.85**  
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# MALLORY Audible Alarms, Buzzers and Transducers

**MALLORY**

**DIMENSIONS: (in.)**

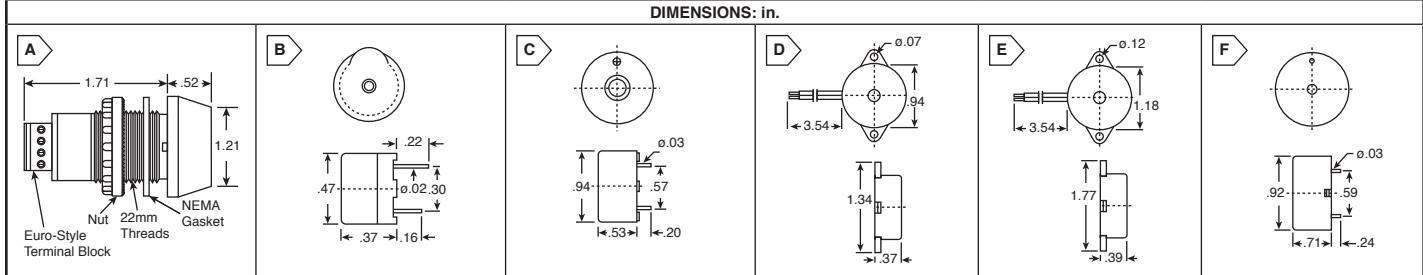
MOUSER STOCK NO.	Fig.	Mounting Method	Freq. ±500 (Hz)	Operating Voltage		Sound Pressure dB (A) @ 2ft.		Typical Operating Current (mA)		Price Each		
				Min.	Max.	@ VMin.	@ VMax.	@ Min.V	@ Max.V	1	25	50
539-SC105R	A	Panel	2900	1	5	60	75	3	16	17.16	15.68	15.44
539-SC110DR	B	Panel	1900	130	120	60	75	6	21	35.92	34.29	33.86
539-SC110NR	B	Panel	2900	130	120	80	95	8	28	40.07	38.24	37.77
539-SC110R	B	Panel	2900	130	120	68	80	6	21	33.28	31.77	31.37
539-SC250R	B	Panel	2900	160	125	68	80	5	18	34.60	33.03	32.61
539-SC307NR	A	Panel	2900	3	7	80	90	3	8	24.15	23.05	22.76
539-SC416R	A	Panel	2900	4	16	68	80	4	14	17.16	15.68	15.44
539-SNP428R	B	Snap in	2900	14	28	64	78	3	18	16.81	16.04	15.84
539-SC616NR	B	Panel	2900	16	16	80	95	4	16	20.38	19.45	19.21
539-SC628ADR	A	Panel	1900	6	28	60	75	4	15	30.82	29.42	29.05
539-SC628ANR	C	Panel	2900	6	28	80	95	8	28	35.96	34.32	33.89
539-SC628APR	B	Panel	2900	16	28	68	80	2	10	38.95	37.18	36.71
539-SC628AR	B	Panel	2900	16	28	68	80	6	23	28.18	26.90	26.56
539-SC628DR	A	Panel	1900	6	28	60	75	6	23	18.58	17.73	17.51
539-SC628M	A	Panel	2900	6	28	70	85	4	16	62.71	59.83	59.11
539-SC628MN	A	Panel	2900	6	28	80	90	4	16	62.69	59.84	59.11
539-SC628NR	A	Panel	2900	6	28	80	90	3	14	17.94	17.13	16.91
539-SC648ANR	B	Panel	2900	10	48	91	104	4	26	36.06	34.42	33.99
539-SC648AR	B	Panel	2900	10	48	68	80	4	16	28.36	27.07	26.74
539-SC628R	A	Panel	2900	6	28	68	80	3	18	17.16	15.68	15.44
539-SC648R	A	Panel	2900	10	48	68	80	4	18	17.96	17.15	16.93
539-SC110ER	B	Panel	1900	130	120	50/63	65/78	4	10	31.97	30.52	30.14
539-SC250R	B	Panel	1900	160	250	55/65	65/78	5	16	43.23	41.27	40.75
539-SC628ER	A	Panel	1900	6	28	55/65	65/75	3	11	18.45	17.61	17.39
539-SC628FR	A	Panel	2900	6	28	55/68	70/80	2	4	17.16	15.68	15.44
539-SC628HR	B	Panel	4500	6	28	78	89	6	23	22.91	21.87	21.59
539-SC628NDR	A	Panel	2000	6	28	75	95	3	15	24.08	22.98	22.70
539-SC628NLR	D	Panel	2900	6	28	80	90	4	16	20.79	19.84	19.60
539-SC628AHR	B	Panel	4500	6	28	68	80	4	16	31.05	29.64	29.27
539-SCE016XD3CTB	E	Panel	2900	6	16	95	105	-	40	21.90	20.90	20.64
539-SCE028LA3CTB	E	Panel	2900	16	28	85	95	-	20	44.93	38.22	37.74
539-SCE028LD3CTB	E	Panel	2900	16	28	85	95	-	40	19.70	18.80	18.57
539-SCE028MD3CTB	E	Panel	2900	16	28	75	85	-	40	21.20	17.18	16.96
539-SCE120MA3CTB	E	Panel	2900	16	28	75	85	-	20	41.70	35.36	34.92
<b>Chime</b>												
539-SCE028MD3CM1B	E	Panel	2900	16	28	75	85	-	40	57.24	54.64	53.96
<b>Double Tone</b>												
539-SCE028XD3MG5B	E	Panel	3	16	28	85	105	-	40	77.27	73.75	72.83
<b>Fast Double Beep</b>												
539-SCE120XA3DP2B	E	Panel	2900	48	120	95	105	-	40	78.73	75.15	74.21
<b>VOLUME CONTROL</b>												
• Manual • Produces approximately -10dB to -15dB attenuation												
For quantities greater than listed, call for quote.												
MOUSER STOCK NO.	Fig.	Material	Description				Price Each					
539-SCVC	F	Black plastic	For SC series only				1	25	100	.97	.865	.838
<b>MOUNTED PIEZO TRANSDUCERS</b>												
• No Circuitry												
For quantities greater than listed, call for quote.												
MOUSER STOCK NO.	Fig.	No. of Pins / Leads	Resonant Frequency ±500 (Hz)	Operating Voltage (max.)	Current (max.) mA	Sound Pressure dB (min.)	Price Each					
							1	25	100			
<b>External Drive, No Feedback</b>												
539-PT-1540PQ	G	2 pins	4000	25Vp-p	1.5	85	1.11	.993	.963			
539-PT2040PQ	H	2 pins	4000	30Vp-p	1.5	90	1.02	.907	.879			
539-PT2020PQ	I	2 pins	2000	30Vp-p	1.5	80	1.44	1.29	1.25			
539-PT-1250WQ	J	2 wires	4800	30Vp-p	1.5	80	1.14	1.02	.988			
539-PT2060WQ	K	2 wires	5000	25Vp-p	1.5	80	1.07	.956	.927			
539-PT2725WQ	L	2 wires	6000	30Vp-p	1.5	90	1.53	1.36	1.32			
539-PT2745WQ	M	2 wires	2500	30Vp-p	1.5	90	1.52	1.35	1.31			
539-PT2130PQ	N	2 wires	4500	30Vp-p	1.5	90	1.86	1.66	1.61			
539-PT2726PQ	O	2 pins	3000	30Vp-p	5.0	90	1.88	1.68	1.63			
<b>Self Drive with Feedback</b>	P	2 pins	2500	30Vp-p	1.5	90	1.88	1.68	1.63			
539-PT-2735FPLQ	Q	3 pins	3500	3-28VDC	10	88	1.90	1.69	1.64			
539-PT3529FPQ	R	3 pins	2900	3-28VDC	8	90	2.19	1.95	1.89			
539-PT2038FWQ	K	3 wires	3800	3-28VDC	8	85	1.26	1.12	1.09			
539-PT3529FWQ	S	3 wires	2900	3-28VDC	8	90	2.04	1.82	1.76			
<b>Telephone Ringer</b>	T	2 wires	750	40Vp-p	1.5	87	2.20	1.96	1.90			
<b>ELECTRO-MAGNETIC INDICATORS, SMALL SIZE</b>												
• With Circuitry												
For quantities greater than listed, call for quote.												
MOUSER STOCK NO.	Fig.	Rated Volt. (V)	Resonant Frequency (Hz)	Operating Voltage (V)	Current (max.) mA	Sound Pressure dB (min.)	Price Each					
							1	25	100			
539-PB-12N23P-01Q	U	1	2300	1.25-2.5	25	80	3.78	3.37	3.27			
539-PB-12N23P05Q	U	5	2300	4.5-5.5	50	85	2.98	2.57	2.50			
539-PB-12N23P-12Q	U	12	2300	9.0-15	50	85	2.89	2.57	2.50			
539-PB-12N23MP05AQ	V	5	3200	3-7	50	85	2.67	2.38	2.31			
539-PK26N04P06AQ	W	6	450	4-8	40	95	6.59	6.02	5.86			
539-PK26N04P12AQ	X	12	400	8-14	45	95	6.43	5.88	5.72			

# MALLORY Audible Alarms, Buzzers and Transducers

This page of product is RoHS compliant.

**MALLORY**

DIMENSIONS: in.



## ZA SERIES: 22MM PANEL ALARMS WITH TERMINAL BLOCK TERMINATION

- NEMA 3R/4X/12; IP-66

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Pulse Rate	Voltage Rating	Current (max.) mA	Sound Pressure dB (min.)	Price Each		
						1	25	50
539-ZA028MDCT	A	Continuous	16-28	40	75-85	47.07	44.92	44.37
539-ZA028MACT	A	Continuous	16-28	40	85-95	57.20	54.60	53.92
539-ZA028LDCT	A	Continuous	16-28	40	85-95	49.67	47.41	46.82
539-ZA028LDFP1	A	Fast	16-28	40	85-95	55.03	52.52	51.87
539-ZA028LACT	A	Continuous	16-28	40	85-95	64.75	61.80	61.03
539-ZA028LAFP1	A	Fast	16-28	40	85-95	78.65	75.07	74.14
539-ZA028LAMP1	A	Medium	16-28	40	85-95	42.47	40.54	40.03
539-ZA028LDMP1	A	Medium	16-28	40	85-95	29.71	28.36	28.01
539-ZA028LDPS1	A	Short	16-28	40	85-95	31.20	29.78	29.41
539-ZA120MACT	A	Continuous	48-120	40	75-85	61.54	58.74	58.01
539-ZA120MACT	A	Continuous	48-120	40	75-85	61.54	58.74	58.01
539-ZA120LACT	A	Continuous	48-120	40	85-95	67.71	64.63	63.83
539-ZA120LAFP1	A	Fast	48-120	40	85-95	82.08	76.95	76.95
539-ZA120LAMP1	A	Medium	48-120	40	85-95	45.70	43.62	43.08
539-ZA016MDCT	A	Continuous	6-16	40	75-85	46.95	44.81	44.26
539-ZA016LDCT	A	Continuous	6-16	40	85-95	49.67	47.41	46.82
539-ZA016LDFP1	A	Fast	6-16	40	85-95	55.03	52.52	51.87
539-ZA016LDMP1	A	Medium	6-16	40	85-95	29.71	28.36	28.01

## PIEZO INDICATORS

- With Circuitry

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Pulse Rate	Oscillating Freq. ±.5 (kHz)	Operating Voltage (VDC)	Current (max.) mA	Sound Pressure dB (min.)	Price Each		
							1	25	100
<b>PC Mount, 2 Pins</b>									
539-PK12N23P-01Q	B	Constant	2300	1.25-2.5	25	80	3.78	3.37	3.27
539-PK20A38PO	C	Constant	3.8	3-24	15	95	3.79	3.38	3.28
539-PK20A25PQ	C	Constant	2.5	3-24	25	95	4.07	3.63	3.52
539-PK27A25PSQ	D	Constant	2.5	3-24	10	95	4.43	3.95	3.83
539-PK-12N40PQ	E	Constant	4.1	3-15	10	83	3.00	2.68	2.60
539-PF21A31PQ	F	Constant	3.0	3-24	18	85	4.28	3.82	3.70
539-PF21A31PQ	F	Fast	3.0	3-24	18	85	6.40	5.85	5.69
<b>Flange Mount, 2 Wires</b>									
539-PK21N30WQ	G	Constant	3.0	1.5-30	12	80	3.17	2.83	2.75
539-PK27N26WQ	H	Constant	2.5	3-28	15	90	3.65	3.26	3.16
539-PF27N36WQ	H	Fast	3.5	3-28	15	90	4.91	4.48	4.36
539-PL-27N26WQ	H	Slow	2.5	3-28	15	90	5.26	4.81	4.68
539-PK27N36WQ	H	Constant	3.5	3-28	15	90	3.60	3.21	3.12
<b>Panel and Flange Mount, 2 Wires</b>									
539-PK20A35EWQ	I	Constant	3.5	3-24	10	95	3.97	3.54	3.43
539-PK20A35EWQ	I	Fast	3.5	3-24	10	95	5.54	5.06	4.92
<b>Panel and Flange Mount, 3 Wires</b>									
539-PFD-20A35EWQ	I	Con.+Fast	3.5	3-24	10	95	6.04	5.52	5.36

## PIEZO MYLAR SPEAKERS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Resonant Frequency ±200 (Hz)	Operating Voltage (max.)	Impedance (Ω)	Sound Pressure dB (min.)	Price Each		
						1	25	100
539-PB-2712PQ	J	1250	2-5Vp-p	8.0	85	3.94	3.51	3.41

## PIEZOELECTRIC ELECTRO-MAGNETIC TRANSDUCERS, SMALL SIZE

- No Circuitry

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Rated Voltage (V)	Resonant Frequency (Hz)	Operating Voltage (V)	Current (max.) mA	Sound Pressure dB (min.)	Price Each		
							1	25	100
539-PB-1220PQ	K	1.5	2048	1.25-2.5	40	85	1.11	.985	.955
539-PB-2211PQ	K	1.5	2048	1.25-2.5	18	80	1.11	.992	.962
539-PB1621PQ	L	5	2048	4-7	60	85	2.40	2.14	2.07
539-PB1622PQ	L	12	2048	10-14	40	85	2.19	1.95	1.89
539-PB1220PQ06AQ	M	6.0	3250	3.0-10.0	40	85	3.16	2.82	2.73
539-PB0627PQE05AQ	N	5.0	2731	4.0-5.0	90	70	3.24	2.89	2.80
539-PB0927PDAQ	O	5.0	2700	3.0-7.0	80	85	1.90	1.69	1.64
539-PB1226PEAQ	P	1.5	2600	1.1-3.0	30	85	.52	.465	.451
539-PB1420PL03AQ	Q	3.0	2000	1.0-4.0	35	85	2.01	1.79	1.73

## PIEZOELECTRIC SIRENS, BRACKET & WALL MOUNT

- Extra Loud

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Tone	Operating Frequency (kHz)	Operating Voltage (VDC)	Current (max.) mA	Sound Pressure dB (min.)	Price Each		
							1	10	25
539-PS5520Q	R	Constant	3.0±5	5-15	200	105	14.24	13.42	13.02
539-PS562Q	S	Hi-Low	2.5/3.5	5-15	40	100	5.74	5.41	5.25
539-PS-983Q	T	Sweep	1.5-3.5	5-15	150	105	11.14	10.50	10.18

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# PUI AUDIO Audio Transducers and Elements

RoHS Compliant This page of product is RoHS compliant.



## ELECTROMECHANICAL AUDIO TRANSDUCERS

### Features:

- Lower resonant frequency
- Smaller in size
- Available in multiple mounting types
- Multiple tones at multiple frequencies

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	PUI Part No.	Fig.	Resonant Frequency	Rated Voltage	Current Cons. (Max.)	SPL Min. (10cm) (dB)	Dimensions: mm	Price Each			
								1	10	50	100
<b>SMT Mount Type</b>											
665-SMT-0823-S-R	SMT-0823-S-R	A	2300	5	70	87	4 x 8.5 x 8.5	3.90	3.12	2.88	2.57
665-SMT-0927-S4R	SMT-0927-S-4-R	B	2700	3.6	100	85	4 x 9 x 9	4.30	3.44	3.18	2.84
665-SMT0927-S5-R	SMT-0927-S-5-R	B	2700	5	80	85	4 x 9 x 9	4.30	3.44	3.18	2.84
665-SMT1028-SR	SMT-1028-S-R	C	2800	3.6	100	93	3.5 x 10 10	3.65	2.92	2.70	2.41
665-SMT1028TR	SMT-1028-T-R	D	2800	3.6	100	90	3.5 x 10 11	3.65	2.92	2.70	2.41
665-SMT1324TWF5V-R	SMT-1324-TWF5V-R	E	2400	5	40	85	6.5 x 12.5 x 12.5	3.35	2.68	2.48	2.21
665-SMT-1427-S-R	SMT-1427-S-R	-	2700	5	80	85	3.4 x 14.2 x 11	6.25	5.21	4.79	4.17
665-SMT1427TR	SMT-1427-T-R	-	2700	5	80	85	3.4 x 14.2 x 11	5.23	4.18	3.86	3.45
665-SMT0824SW3VR	SMT-0824-SW3-V-R	F	2400	3	60	80	5.5 x 8.5 x 8.5	3.90	3.12	2.88	2.57
665-SMT0824SW5VR	SMT-0824-SW5-V-R	F	2400	3	80	80	5.5 x 8.5 x 8.6	3.90	3.12	2.88	2.57
665-SMT0827SW3VR	SMT-0827-SW3-V-R	F	2700	5	60	85	5.5 x 8.5 x 8.7	3.90	3.12	2.88	2.57
665-SMT0827SW5VR	SMT-0827-SW5-V-R	F	2700	5	80	85	5.5 x 8.5 x 8.8	3.90	3.12	2.88	2.57
<b>PCB Mount Type</b>											
665-AT-1620-TWTR	AT-1620-TWT-R	G	2000	6	40	85	14 x 16 x 16	1.75	1.40	1.29	1.16
665-AT-1620TWT12VR	AT-1620-TWT12VR	G	2000	12	40	85	14 x 16 x 16	1.75	1.40	1.29	1.16
665-AT-1031TTR	AT-1031-TT-R	H	3100	1.5	80	85	6.5 x 9.6 x 9.6	6.13	4.90	4.53	4.04
665-AT-1220TTR	AT-1220-TT-R	I	2000	1.5	10	85	8.5 x 12 x 12	1.03	.82	.758	.676
665-AT-1220-TT-5R	AT-1220-TT-5-R	I	2000	1.5	10	73	5.5 x 12 x 12	1.03	.82	.758	.676
665-AT-1224TWTTR	AT-1224-TWT-R	J	2400	5	40	85	9 x 12 x 12	1.38	1.10	1.02	.907
665-AT-1228TTR	AT-1228-TT-R	J	2800	1.5	40	85	10 x 12 x 12	1.38	1.10	1.02	.907

## PIEZO AUDIO TRANSDUCERS

### Features:

- Low resonant frequency
- Low power consumption
- High reliability
- Available in multiple mounting types
- Multiple tones at multiple frequencies

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	PUI Part No.	Fig.	Resonant Frequency	Rated Voltage	Current Cons. (Max.)	SPL Min. (10cm) (dB)	Dimensions: mm	Price Each			
								1	10	50	100
<b>SMT Mount Type</b>											
665-SMT2225TR	SMT-2225-T-R	-	2500	10	8	80	5.6 x 22 x 22	2.80	2.24	2.07	1.85
665-SMT2240TWR	SMT-2240-TW-R	-	4000	10	3	90	7 x 22.5 x 22.5	2.80	2.24	2.07	1.85
<b>PCB Mount Type</b>											
665-AT-1438TWTR	AT-1438-TWT-R	J	3800	5	1	80	6.8 x 13.8 x 13.8	2.03	1.62	1.50	1.34
665-AT-1740-TT-3-R	AT-1740-TT-3-R	K	4000	3	1	78	6.7 x 16.5 x 16.5	1.75	1.40	1.29	1.16
665-AT1740TTR	AT-1740-TT-R	K	4000	5	3	78	7 x 16.8 x 16.8	1.75	1.40	1.29	1.16
665-AT-2440TWTR	AT-2440-TWT-R	K	4000	3	1	80	7.5 x 24 x 24	1.70	1.36	1.26	1.12
665-AT2460TWTR	AT-2460-TWT-R	K	6000	10	8	85	4.5 x 24 x 24	2.23	1.78	1.65	1.47
665-AT2336TWTR	AT-2336-TWT-R	L	3600	12	8	90	6 x 22.5 x 22.5	2.45	1.96	1.81	1.62
665-AT-2830-TWT-R	AT-2830-TWT-R	L	3000	12	8	93	12.7 x 28.5 x 28.5	2.18	1.74	1.61	1.44
665-AT3425TWTR	AT-3425-TWT-R	L	2500	12	7	85	11.5 x 33.6 x 33.6	4.38	3.50	3.24	2.89
665-AT2720TTR	AT-2720-TT-R	M	2000	10	3.5	88	9 x 26.5 x 23	2.18	1.74	1.61	1.44
665-AT2428TWTR	AT-2428-TWT-R	N	3000	12	8	92	12.2 x 24 x 24	2.45	1.96	1.81	1.62
665-AT-4228-TWT-F-R	AT-4228-TWT-F-R	N	2800	12	7	92	14 x 42 x 42	2.73	2.18	2.02	1.80
<b>Flush and Flange Mount Type</b>											
665-AT1750TFLW95R	AT-1750-TFL-LW95-R	O	5000	10	9	80	4 x 16.5 x 16.5	1.40	1.12	1.04	.924
665-AT2460TFLW100R	AT-2460-TF-LW100-R	O	6000	10	8	88	4 x 34 x 24	2.56	2.04	1.89	.669
665-AT3045TFLW110R	AT-3045-TF-LW110-R	Q	4500	10	11	97	5.1 x 44.5 x 30	1.68	1.34	1.24	1.11
665-AT3237TFLW140-R	AT-3237-TF-LW140-R	R	3700	12	7	98	13.5 x 44 x 32	2.38	1.90	1.76	1.57
665-AT4230TFLW135R	AT-4230-TF-LW135-R	R	3000	10	9	96	16 x 60 x 41.8	3.26	2.60	2.41	2.14

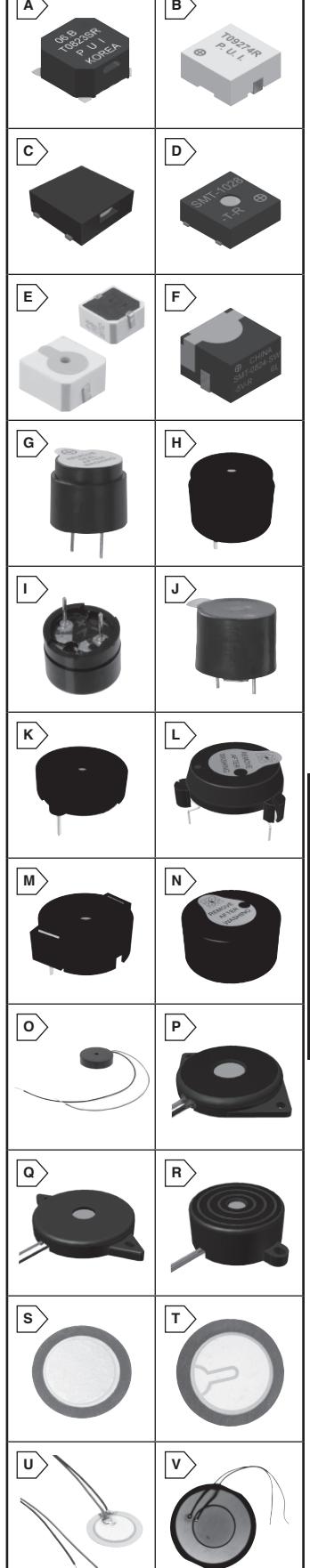
## PIEZO CERAMIC BENDERS (ELEMENTS)

### Features:

- Low cost option
- Low power consumption
- High reliability
- Available in brass, stainless steel and nickel alloy
- Can also be used as a switch

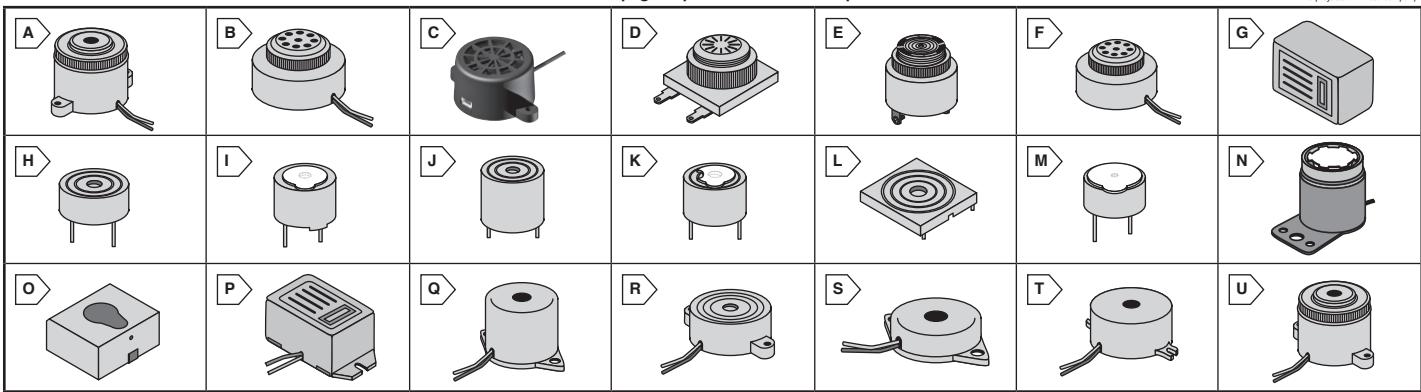
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	PUI Part No.	Fig.	Feed-back	Resonance (Hz)	Input Voltage	Electro-static Capacitance	Dimensions: mm		Price Each				
							Ceramic Diameter	Total Thickness	Bender Thickness	1	10	100	
665-AB1070B	AB1070B	S	No	7000	15	10000	7.4	.12	.05	1.02	.925	.74	.684
665-AB1290B	AB1290B	S	No	9000	30	8000	9.0	.21	.10	1.02	.925	.74	.684
665-KBI-1541	AB1541	S	No	4100	15	8000	8.4	.20	.10	1.02	.925	.74	.684
665-AB2025B	AB2025B	S	No	2500	30	80000	15.0	.10	.05	1.02	.925	.74	.684
665-AB2040B	AB2040B	S	No	4000	30	25000	15.0	.28	.15	1.02	.925	.74	.684
665-AB2065B	AB2065B	S	No	6500	30	14000	15.0	.42	.20	1.02	.925	.74	.684
665-AB2072S	AB2072S	S	No	7200	30	10000	14.0	.43	.20	1.02	.925	.74	.684
665-AB2720B	AB2720B	S	No	2000	30	45000	20.0	.23	.10	1.21	1.10	.88	.813
665-KBI-2734	AB2734B	S	No	3400	30	13000	14.6	.53	.30	1.02	.925	.74	.684
665-AB2746B	AB2746B	S	No	4600	20	16000	20.0	.50	.25	1.02	.925	.74	.684
665-KBI-3526	AB3526B	S	No	2600	30	30000	25.0	.53	.25	1.68	1.53	1.22	1.13
665-AB4113B	AB4113B	S	No	1300	30	150000	32.0	.40	.10	1.68	1.53	1.22	1.13
665-KBI-3529F	AB3529BF	T	Yes	2900	30	25000	25.0	.58	.30	1.68	1.53	1.22	1.13
665-AB2745BF	AB2745BF	T	Yes	4500	20	16000	20.0	.51	.25	1.02	.925	.74	.684
665-KBI-2036F	AB2036AF	T	Yes	3700	30	20000	15.0	.21	.10	1.02	.925	.74	.684
665-AB1290BLW100R	AB1290B-LW100-R	U	No	7000	15	10000	9.90	.12	.05	1.65	1.50	1.20	1.10
665-AB2025BLW100R	AB2025B-LW100-R	U	No	2500	30	80000	20.00	.10	.05	1.73	1.57	1.26	1.16
665-AB2040BLW100R	AB2040B-LW100-R	U	No	4000	30	25000	15.00	.28	.05	1.65	1.50	1.20	1.10
665-AB2720BLW100R	AB2720B-LW100-R	U	No	2000	30	45000	27.00	.23	.10	1.87	1.70	1.36	1.25
665-AB2734BLW100R	AB2734B-LW100-R	U	No	3400	30	13000	27.00	.53	.30	1.70	1.55	1.24	1.14
665-AB2746BLW100R	AB2746B-LW100-R	U	No	4600	30	19000	27.00	.51	.25	1.70	1.55	1.24	1.14
665-AB3526BLW100R	AB3526B-LW100-R	U	No	2600	30	30000	35	.053	.25	2.64	2.40	1.92	1.77
665-AB4113BLW100R	AB4113B-LW100-R	U	No	4100	30	10000	41	.032	.10	2.64	2.40	1.92	1.77
665-APS4812B-LW100-R	APS4812B-LW100-R	V	No	1200	30	65000	44.0	.22	.22	2.73	2.18	1.80	1.74



# PUI AUDIO Sirens and Audio Indicators

RoHS Compliant This page of product is RoHS compliant.



## SIRENS

- Extremely loud output
- Available with visual notification
- Multiple tone outputs
- Available with or without volume control
- Will operate in extreme conditions
- Can be used for warning or alerting in potentially dangerous/noisy environments

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	PUI Part No.	Fig.	Dimensions: mm (H x W x L)	Resonant Frequency (Hz)	Voltage Range	Typical SPL (10cm)	Tone	Price Each			
								1	10	50	100
665-AW10FRNSVC	AW-10FR-NSVC	A	43 x 52.5 x 71	2700-3100	9 - 28VDC	118dB	2 Tones	37.27	35.59	30.59	27.48
665-AW10PWNSVC	AW-10PW-NSVC	B	45 x 50 x 50	2900	9 - 28VDC	106dB	2 Tones	44.78	42.75	36.75	33.00
665-AW15SBW	AW-15SBW	-	75 x 93 x 93	4000	9 - 28VDC	NA	32 Tones	73.20	69.89	60.07	53.95

## PROGRAMMABLE INDICATORS

Ability to program any WAV or MP3 file • Simple-to-use Windows interface

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	PUI Part No.	Fig.	Dimensions: mm (H x W x L)	Resonant Frequency (Hz)	Tone	SPL Min. (10cm)	Rated Voltage	Rated Current (Max. mA)	Washable	Price Each			
										1	10	25	100
665-API-4260-LW150-R	API-4260-LW150-R	C	60 x 25 x 42	100 ~6000	Continuous	100dB	12VDC	350	No	22.98	18.35	18.03	15.15
<b>Accessories</b>													
665-API-CABLE	API-CABLE				Description					6.45	5.85	5.27	4.68
1 meter USB to mini B USB cable													

## INDICATORS Features: UL Recognized

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	PUI Part No.	Fig.	Dimensions: mm (H x W x L)	Resonant Frequency (Hz)	Tone	SPL Min. (10cm)	Rated Voltage	Rated Current (Max. mA)	Washable	Price Each			
										1	10	25	100
665-X-4028-P-C32-R	X-4028-P-C32-R	D	23 x 40 x 40	2800	Continuous	105dB	32VDC	22	No	10.03	9.03	8.62	7.41
665-AI4228PC28R	AI-4228-P-C28-R	E	32.5 x 42.5 x 42.5	2800	Continuous	88dB	12VDC	10	No	17.80	16.04	15.31	13.16
665-AI4328PC120DR	AI-4328-P-C120D-R	E	33 x 42.5 x 42.5	2800	Continuous	98dB	30 - 120 VAC/VDC	17	No	17.25	15.54	14.84	12.75
665-AI4328PC282-R	AI-4328-P-C282-R	E	32.5 x 43 x 43	2800	Continuous	97dB	12VDC	8	No	11.45	10.32	9.85	8.47
665-AI4329PFP28R	AI-4329-P-FP28-R	E	33 x 43 x 43	2900	Fast	88dB	12VDC	6	No	12.55	11.31	10.80	9.28
665-AI4329P-SP28R	AI-4329-P-SP28-R	E	32.5 x 42.5 x 42.5	2900	Slow	88dB	12VDC	6	No	12.55	11.31	10.80	9.28
665-AI4429-P-C12-R	AI-4429-P-C12-R	E	34.5 x 43.5 x 43.5	2900	Continuous	105dB	12VDC	30	No	10.48	9.44	9.01	7.75
665-AI4429PCP12R	AI-4429-P-CP12-R	E	34.5 x 43.5 x 43.5	2900	Multiple	100dB	12VDC	25	No	11.98	10.79	10.30	8.85
665-X-5328PCLW165-R	X-5328-P-C-LW165-R	F	31 x 53 x 53	2800	Continuous	103dB	6VDC	20	No	15.00	13.51	12.90	11.09

## AUDIO INDICATORS

\* Tone: Continuous   \*\* Tone: Siren   † Tone: Fast

For quantities greater than listed, call for quote.

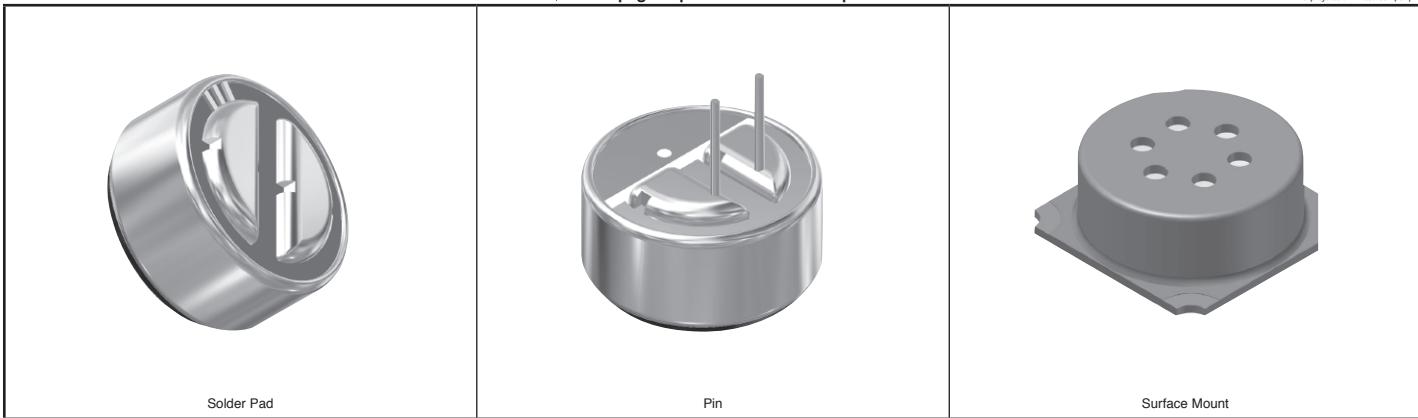
MOUSER STOCK NO.	PUI Part No.	Fig.	Resonant Frequency (KHz)	Rated Voltage (VDC)	Rated Current (Max mA)	SPL Min. (10cm) (dB)	Dimensions: mm	Washable	Price Each			
									1	10	25	100
<b>PCB Mount Type</b>												
665-AI-1223TWT12VR	AI-1223-TWT-12V-R	G	2300	12	30	85	9.5 x 12 x 12	Yes	3.67	3.33	3.00	2.66
665-AI-1223TWT5VR	AI-1223-TWT-5V-R	G	2700	5	30	85	9.5 x 12 x 13	Yes	3.67	3.33	3.00	2.66
665-AI-1440TWT12VR	AI-1440-TWT-12V-R	G	4000	12	7	80	7.5 x 13.8 x 13.8	Yes	3.67	3.33	3.00	2.66
665-AI-1622TWT12VR	AI-1622-TWT-12V-R	G	2200	12	30	85	14 x 16 x 16	Yes	4.00	3.63	3.27	2.90
665-AI-1622TWT5VR	AI-1622-TWT-5V-R	G	2200	5	30	85	14 x 16 x 17	Yes	4.00	3.63	3.27	2.90
665-AI2304TT24V2R	AI-2304-TT-24V-2-R	H	400	24	30	85	15.5 x 17 x 23	No	6.15	5.58	5.02	4.46
665-AI-2331TWT	AI-2331-TWT-R	I	3100	12	15	85	9.7 x 23.4 x 23.4	Yes	4.74	4.30	3.87	3.44
665-AI-2332TWT12VR	AI-2332-TWT-12V-R	I	3200	12	13	85	10.2 x 23.3 x 23.3	Yes	4.74	4.30	3.87	3.44
665-AI2429T12VR	AI-2429-TT-12V-R	J	2900	12	8	95	16 x 23.8 x 23.8	No	4.74	4.30	3.87	3.44
665-AI2429TWT12V2R	AI-2429-TWT-12V-2-R	K	2900	12	8	100	16 x 23.8 x 23.8	Yes	4.74	4.30	3.87	3.44
665-AI-2429TWT12V3R	AI-2429-TWT-12V-3-R	K	2900	12	8	95	16 x 23.8 x 23.8	Yes	4.74	4.30	3.87	3.44
665-AI-2429TWT	AI-2429-TWT-R	K	2900	12	8	100	16 x 23.8 x 23.8	Yes	4.74	4.30	3.87	3.44
665-AI3039TWT12VR	AI-3039-TWT-12V-R	K	3900	12	15	100	20 x 30 x 30	Yes	3.56	3.23	2.91	2.58
665-AI-2437TWT	AI-2437-TWT-R	K	3700	12	8	100	18 x 24 x 24	Yes	4.74	4.30	3.87	3.44
665-AI-3018-TWT-R	AI-3018-TWT-R	K	1800	12	13	87	17.5 x 30 x 30	Yes	5.29	4.80	4.32	3.84
665-AI4033TWT	AI-4033-TWT-R	L	3300	12	8	95	8.1 x 40 x 40	Yes	9.30	8.38	8.00	6.88
665-AI-4228-TWT-R	AI-4228-TWT-R	M	2800	12	10	99	14 x 42 x 42	Yes	4.55	4.13	3.72	3.30
665-AI5025TWT	AI-5025-TWT-R	K	2500	12	75	115	29 x 50 x 50	Yes	16.58	14.93	14.26	12.26
665-X2629-TWT-R	X-2629-TWT-R	-	2900	12	35	107	22.8 x 25 x 26	Yes	6.70	6.08	5.47	4.86
665-XL5530-LW300-S-R	XL-5530-LW300-S-R	N	2,000/4,000	12	260	123	54.5 x 54.5 x 56	No	25.36	24.22	22.52	18.69

## Surface Mount Type

665-SMI1324TWF5VR	SMI-1324-TW-5V-R	O	2400	5	30	85	6.7 x 12.5 x 12.5	Yes	6.75	6.08	5.81	4.99
665-SMI1324TW3V3R	SMI-1324-TW-3V-R	O	2400	3	30	75	6.5 x 12.8 x 12.8	Yes	6.75	6.08	5.81	4.99
665-SMI-1324TW5V2R	SMI-1324-TW-5V-2-R	O	2400	5	30	88	6.5 x 12.8 x 12.8	Yes	6.75	6.08	5.81	4.99
665-SMI1324TWF12VR	SMI-1324-TW-12V-R	O	2400	12	30	85	6.5 x 12.51 x 3.1	Yes	6.75	6.08	5.81	4.99
<b>Flange Mount Type</b>												
665-AI2304TFLW12012R	AI-2304-TF-LW120-12V-R	P	400	12	30	89	15.5 x 17 x 22.8	No	5.93	5.38	4.84	4.30
665-AI2304TFLW1205VR	AI-2304-TF-LW120-5V-R	P	400	4.5	20	75	15.5 x 17 x 23	No	5.93	5.38	4.84	4.30
665-AI2304TFLW120R	AI-2304-TF-LW120-R	P	400	24	24	86	15.5 x 17 x 23	No	6.67	6.05	5.45	4.84
665-AI2337TFLW115R	AI-2337-TF-LW115-R	Q	3700	12	8	100	17 x 23 x 33	No	4.88	4.43	3.99	3.54
665-AI2604TFLW1152R	AI-2604-TF-LW115-12V-R	R	400	12	50	89	16.2 x 26 x 39	No	5.46	4.95	4.46	3.96
665-AI2604TFLW11524R	AI-2604-TF-LW115-24V-R	R	400	24	25	92	16.2 x 26 x 39	No	5.46	4.95	4.46	3.96
665-AI-3245TFLW95R	AI-3245-TF-LW95-R	S	4500	12	5	90	10.8 x 22 x 32	No	3.89	3.53	3.18	2.82
665-AI4228-TFLW1403R	AI-4228-TF-LW140-3-R	R	2800	12	10	106	16 x 41.8 x 60	No	5.02	4.55	4.10	3.64
665-AI4228TFLW1404R	AI-4228-TF-LW140-4-R	R	2800	12	7	95	16 x 41.8 x 60	No	4.41	4.00	3.60	3.20
665-AI4228TFLW140CR	AI-4228-TF-LW140-C-R	R	2800	12	10	106	16 x 41.8 x 60	No	5.82	5.28	4.75	4.22
665-AI4228TFLW140FPR	AI-4228-TF-LW140-FP-R	R	2800	12	10	98	16 x 41.8 x 60	No	7.50	6.76	6.45	5.55
665-AI-4228TFLW140R	AI-4228-TF-LW140-R	R	2800	12	10	105	16 x 41.8 x 60	No	5.02	4.55	4.10	3.64
665-X4032TFLW105R	X-4032-TF-LW105-R	T	3200	9	9	97	23 x 40 x 50	No	8.78	7.91	7.55	6.49
665-X4033-TFLW80R	X-4033-TF-LW80-R	T	3300	6	9	106	23 x 40 x 50	No	8.78	7.91	7.55	6.49
665-XL2835TFFPLW150R	XL-											

# PUI AUDIO Electret Condenser Microphones

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## ELECTRET CONDENSER MICROPHONES

### Features:

- Electret Condenser
- Small in size
- Available in omni-directional, uni-directional and noise canceling
- Available with internal feedback capacitors
- Low power consumption
- Available in multiple mounting types

### Applications:

- Hand Held Devices
- Medical equipment and systems
- Security alarms and equipment
- Computer related devices
- Voice-activated equipment

### Omni-Directional

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	PUI Part No.	Terminal Type	Dimensions: mm	Sensitivity (dB)	Impedance (KΩ)	VDC	Washable	Price Each			
								1	10	100	250
665-AOM-6742L-R	AOM-6742L-R	Solder Pad	6.7 x 9.7	-42	2.2	1.5	No	1.65	1.18	.87	.78
665-AOM4546L-R	AOM-4546L-R	Solder Pad	4.5 x 9.7	-46	2.2	1.5	No	1.65	1.18	.87	.78
665-AOM4546PNFR	AOM-4546P-NF-R	Pin	4.5 x 9.7	-46	2.2	1.5	No	1.93	1.37	1.02	.917
665-AOM4546PR	AOM-4546P-R	Pin	4.5 x 9.7	-46	2.2	1.5	No	1.65	1.18	.87	.78
665-AOM-4544P-2R	AOM-4544P-2-R	Pin	4.5 x 9.7	-44	2.2	1.5	No	1.65	1.18	.87	.78
665-AOM-4540L-R	AOM-4540L-R	Solder Pad	6.5 x 9.4	-40	2.2	1.5	No	1.65	1.18	.87	.78
665-AOM6545PR	AOM-6545P-R	Pin	5.2 x 6	-45	1	4.5	No	1.65	1.18	.87	.78
665-AOM6746LR	AOM-6746L-R	Solder Pad	6.7 x 9.7	-46	2.2	1.5	No	1.65	1.18	.87	.78
665-POM5238PR	POM-5238P-R	Pin	3.5 x 6	-38	2.2	2	No	2.52	1.80	1.33	1.20
665-POM3546LR	POM-3546L-R	Solder Pad	3 x 6	-46	2.2	2	No	2.77	1.98	1.46	1.31
665-POM3042LR	POM-3042L-R	Solder Pad	3 x 6	-42	2.2	2	No	2.77	1.98	1.46	1.31
665-POM2744PC33-R	POM-2744P-C33-R	Pin	3.2 x 6	-44	2.2	2	No	3.08	2.20	1.63	1.46
665-POM2738LR	POM-2738L-R	Solder Pad	2.2 x 6	-38	2.2	2	No	3.08	2.20	1.63	1.46
665-POM2738PC33R	POM-2738P-C33-R	Pin	2.7 x 6	-38	2.2	2	No	3.08	2.20	1.63	1.46
665-POM-2738P-R	POM-2738P-R	Pin	2.7 x 6	-38	2.2	2	No	3.08	2.20	1.63	1.46
665-POM-2735P-R	POM-2735P-R	Pin	2.7 x 6	-35	2.2	3	No	3.08	2.20	1.63	1.46
665-POW2246P2R	POW-2246P-2-R	Pin	2.2 x 6	-46	2.2	2	No	3.08	2.20	1.63	1.46
665-POW2246PC33R	POW-2246P-C33-R	Pin	2.2 x 6	-46	2.2	2	No	3.08	2.20	1.63	1.46
665-POM2244LC33R	POM-2244L-C33-R	Solder Pad	2.2 x 6	-44	2.2	2	No	3.08	2.20	1.63	1.46
665-POW2244P2R	POW-2244P-2-R	Pin	2.2 x 6	-44	2.2	2	No	3.08	2.20	1.63	1.46
665-ROU2244PNFR	ROM-2244P-NF-R	Pin	2.2 x 5.8	-44	2.2	2	No	3.33	2.38	1.76	1.58
665-ROU2238PNFR	ROM-2238P-NF-R	Pin	2.2 x 5.8	-38	2.2	2	No	3.33	2.38	1.76	1.58
665-TOM1242LNFR	TOM-1242L-NF-R	Solder Pad	1.2 x 4	-42	2.2	2	No	3.71	2.65	1.96	1.76
665-TOM1545PR	TOM-1545P-R	Pin	1.5 x 4	-45	2.2	2	No	3.71	2.65	1.96	1.76
665-AOW4544PC3310B	AOW-4544P-C3310-B-R	Pin	4.5 x 9.7	-44	2.2	2	Yes	3.47	2.48	1.83	1.64
665-POW2742PC3310B	POW-2742P-C3310-B-R	Pin	2.7 x 6	-42	2.2	2	Yes	3.71	2.65	1.96	1.76
665-POW2242LC3310B	POW-2242L-C3310-B-R	Solder Pad	2.2 x 6	-42	2.2	2	Yes	3.71	2.65	1.96	1.76
665-POW2242PC3310B	POW-2242P-C3310-B-R	Pin	2.2 x 6	-42	2.1	2	Yes	3.71	2.65	1.96	1.76
665-POW1644LBR	POW-1644L-B-R	Solder Pad	1.6 x 6	-44	2.2	3	Yes	4.59	3.28	2.42	2.18
665-POW1644PBR	POW-1644P-B-R	Pin	1.6 x 6	-44	2.2	3	Yes	4.59	3.28	2.42	2.18

### Uni-Directional

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	PUI Part No.	Terminal Type	Dimensions: mm	Sensitivity (dB)	Impedance (KΩ)	VDC	Washable	Price Each			
								1	10	100	250
665-PUM3046LR	PUM-3046L-R	Solder Pad	3 x 6	-46	2.2	2	No	3.15	2.25	1.67	1.49
665-PUM3546LR	PUM-3546L-R	Solder Pad	3.5 x 6	-46	2.2	2	No	3.15	2.25	1.67	1.49
665-PUM5250LR	PUM-5250L-R	Solder Pad	5.2 x 6	-50	2.2	2	No	3.15	2.25	1.67	1.49
665-DUM5246LR	DUM-5246L-R	Solder Pad	5.2 x 8	-46	2.2	2	No	3.47	2.48	1.83	1.64
665-AUM-5247L-R	AUM-5247L-R	Solder Pad	5.2 x 9.7	-47	0.68	1.5	No	2.42	1.73	1.28	1.15

### Noise Canceling

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	PUI Part No.	Terminal Type	Dimensions: mm	Sensitivity (dB)	Impedance (KΩ)	VDC	Washable	Price Each			
								1	10	100	250
665-TNM3054LR	TNM-3054L-R	Solder Pad	3 x 4.5	-54	2.2	2	No	3.71	2.65	1.96	1.76
665-PNM2751LR	PNM-2751L-R	Solder Pad	2.7 x 6	-51	2.2	2	No	3.33	2.38	1.76	1.58
665-PNM3546LR	PNM-3546L-R	Solder Pad	3.5 x 6	-46	2.2	2	No	3.33	2.38	1.76	1.58
665-PNM5250LR	PNM-5250L-R	Solder Pad	5.2 x 6	-50	2.2	1.5	No	3.33	2.38	1.76	1.58
665-ANM-5254L-R	ANM-5254L-R	Solder Pad	5.2 x 9.7	-54	0.68	1.5	No	1.65	1.18	.87	.78

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ELECTRONICS

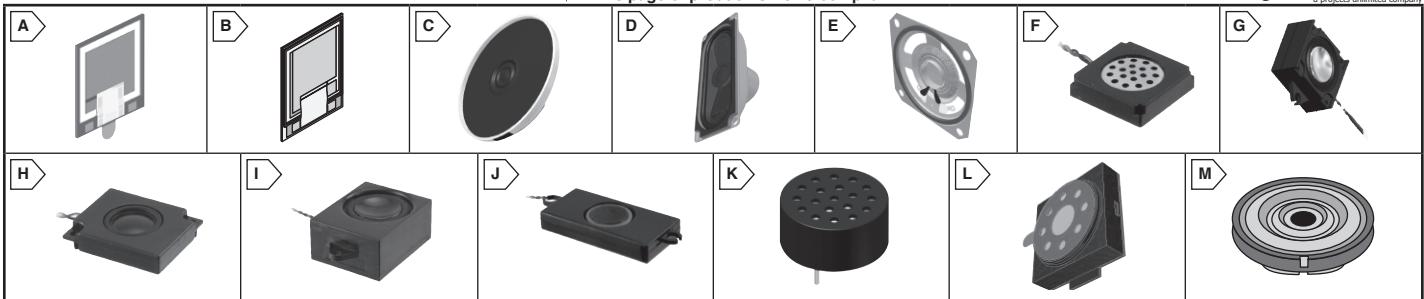
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2051

# PUI AUDIO Speakers

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## MULTI-LAYER PIEZO SPEAKERS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	PUI Part No.	Fig.	Dimensions: mm (H x W x L)	Rated / Max. Power (Vp-p)	SPL (dBA)	Resonant Frequency (Hz)	Frequency Range (Hz)	Price Each			
								1	10	50	100
665-APS2709S-T-R	APS2709S-T-R	A	1.5 x 21.3 x 26.5	5/16	78	1000	300 - 20K	4.84	4.40	4.01	3.71
665-APS2718S-T-R	APS2718S-T-R	B	0.8 x 24.8 x 27.3	4/10	75	1800	300 - 20K	6.05	4.84	4.47	3.99

## SPEAKERS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	PUI Part No.	Fig.	Dimensions: mm (H x W x L)	Rated Power (W)	Max. Power (W)	Impedance ( $\Omega$ )	Cone Material	Resonant Frequency (Hz)	Frequency Range (Hz)	Price Each			
										1	10	50	100
<b>Round</b>													
665-AS01308MR2R	AS01308MR-2-R	C	2.8 x 13 x 13	0.2	0.3	8	Mylar	1100	700 - 5000	3.78	3.02	2.79	2.49
665-AS01308MRR	AS01308MR-R	C	2 x 13 x 13	0.2	0.4	8	Mylar	1050	1050 - 20000	3.78	3.02	2.79	2.49
665-AS01708MR-SC-R	AS01708MR-SC-R	C	2.9 x 15 x 15	0.3	0.5	8	Mylar	750	750 - 5000	4.48	3.58	3.31	2.95
665-AS02008MRR	AS02008MR-R	C	3 x 20 x 20	0.5	0.8	8	Mylar	500	500 - 4000	2.38	1.90	1.76	1.57
665-AS02008MOR	AS02008MO-R	C	3 x 14 x 20	0.5	1	8	Mylar	750±20	400 - 20000	5.37	4.30	3.97	3.54
665-AS02008MR5R	AS02008MR-5-R	C	3 x 18 x 18.3	0.5	1	8	Mylar	500±20	500 - 4000	3.02	2.42	2.23	1.99
665-AS03008MRR	AS03008MR-R	C	4.8 x 30 x 30	0.5	1	8	Mylar	650	650 - 15000	3.23	2.58	2.38	2.13
665-AS04508MR3R	AS04508MR-3-R	C	5 x 45 x 45	1	1.5	8	Mylar	450	450 - 6000	3.88	3.10	2.87	2.56
665-AS05008MR-R	AS05008MR-R	C	18.5 x 50 x 50	0.2	0.4	8	Mylar	550	550 - 4500	4.03	3.22	2.98	2.66
665-AS05008PR2R	AS05008PR-2-R	C	18.5 x 50 x 50	0.2	0.4	8	Paper	550	550 - 4500	4.03	3.22	2.98	2.66
665-AS06608MRR	AS06608MR-R	C	12.5 x 66 x 66	0.5	0.8	8	Mylar	380	380 - 7500	4.58	3.66	3.38	3.02
665-AS04008PRR	AS04008PR-R	C	6.55 x 40 x 40	0.5	0.8	8	Paper	700	700 - 4750	3.50	2.80	2.59	2.31
665-AS05008PR6R	AS05008PR-6-R	C	18.5 x 50 x 50	0.4	0.7	8	Paper	500	500 - 5000	4.73	3.78	3.50	3.12
665-AS05008PRR	AS05008PR-R	C	9.5 x 50 x 50	0.1	0.2	8	Paper	500	500 - 4500	4.03	3.22	2.98	2.66
<b>Oval</b>													
665-AS07008PO2R	AS07008PO-2-R	D	23 x 30.5 x 70	2	5	8	Paper	300	300 - 20000	4.83	3.86	3.57	3.18
665-AS07104PO-R	AS07104PO-R	D	25 x 41 x 71	3	5	4	Paper	100	100 - 20000	4.83	3.86	3.57	3.18
665-AS07108PO-3-R	AS07108PO-3-R	D	23.5 x 41 x 71	3	5	8	Paper	250	100 - 20000	4.83	3.86	3.57	3.18
665-AS02708COR	AS02708CO-R	D	6 x 20.5 x 27	1	2	8	Cloth	550	250 - 20000	4.30	3.44	3.18	2.84
665-AS04008COR	AS04008CO-R	D	5.8 x 20 x 40	2	3	8	Cloth	400	200 - 20000	5.40	4.32	3.99	3.56
665-AS04008PO2R	AS04008PO-2-R	D	11.5 x 28.3 x 40	1	2	8	Paper	450	450 - 20000	5.40	4.32	3.99	3.56
665-AS04008PS4WR	AS04008PS-4W-R	D	11.5 x 28.3 x 40	2	4	8	Paper	380	380 - 20000	5.40	4.32	3.99	3.56
665-AS07108POR	AS07108PO-R	D	25 x 41 x 71	3	5	8	Paper	250	100 - 20000	4.83	3.86	3.57	3.18
<b>Square</b>													
665-AS05008MSR	AS05008MS-R	E	12 x 50.5 x 50.5	1.5	3	8	Mylar	800	800 - 7000	4.03	3.22	2.98	2.66
665-AS06608PSR	AS06608PS-R	E	29 x 66.3 x 66.3	4	5	8	Paper	230	230 - 12000	7.23	5.78	5.34	4.77
665-AS07708PS2R	AS07708PS-2-R	E	25.5 x 77 x 77	4	8	8	Paper	270	270 - 8000	4.70	3.76	3.48	3.10
665-ASE02008MLWL150R	ASE02008MR-LW150-R	F	10.30 x 30 x 60	0.5	0.7	8	Mylar	1400	800 - 20	3.98	3.12	2.98	2.65
665-ASE02808MLWL150R	ASE02808MR-LW150-R	G	14.80 x 28 x 31	2	3	8	Mylar	550	450 - 16	7.24	6.16	5.86	5.05
665-ASE03008MLWL150R	ASE03008MR-LW150-R	H	6.00 x 25 x 30	1	1.5	8	Mylar	800	550 - 18	4.98	3.98	3.63	3.30
665-ASE04508MLWL150R	ASE04508MR-LW150-R	I	20 x 35.6 x 44.7	3	5	8	Mylar	280	250 - 12	8.98	7.23	6.54	5.98
665-ASE06008MLWL150R	ASE06008MR-LW150-R	J	10.30 x 30 x 60	2	3	8	Mylar	500	400 - 20	6.49	5.29	4.89	4.35
<b>PCB Mount</b>													
665-AST-01508MR-R	AST-01508MR-R	K	7.5 x 15 x 15	0.3	0.5	8	Mylar	1700	1700 - 20000	7.68	6.91	6.14	5.68
665-AST-01532MR	AST-01532MR-R	K	7.5 x 15 x 15	0.3	0.5	32	Mylar	2100	2100 - 20000	4.35	3.48	3.22	2.87
665-AST-02308MR-R	AST-02308MR-R	K	8.5 x 23 x 23	0.08	0.15	8	Mylar	1500	600 - 20000	3.20	2.56	2.37	2.11
665-AST-03008MRR	AST-03008MR-R	K	12.5 x 29.9 x 29.9	0.15	0.2	8	Mylar	1400	500 - 20000	3.53	2.82	2.61	2.33
665-AST-03032MR-R	AST-03032MR-R	K	12 x 30 x 30	0.1	0.2	32	Mylar	1200	1200 - 20000	3.53	2.82	2.61	2.33
665-AST-030C0MR-R	AST-030C0MR-R	K	12.7 x 29.7 x 29.7	0.15	0.3	100	Mylar	1200	1200 - 10000	3.53	2.82	2.61	2.33
665-AST-03208MR-R	AST-03208MR-R	K	15.1 x 31.9 x 31.9	0.1	0.2	8	Mylar	1500	500 - 20000	2.90	2.32	2.14	1.91
665-AST-1732MR-R	AST-1732MR-R	K	8 x 17 x 17	0.2	0.5	32	Mylar	1700	1700 - 20000	4.35	3.48	3.22	2.87
<b>Surface Mount</b>													
665-SMS-1508-2R	SMS-1508-2-R	L	5 x 15 x 15	0.3	0.5	8	Mylar	850	850 - 20000	8.18	6.54	6.04	5.40

## WATER RESISTANT SPEAKERS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	PUI Part No.	Fig.	Dimensions: mm (H x W x L)	Power (W)		Impedance ( $\Omega$ )	Cone Material	Frequency (Hz)		Price Each			
				Rated	Max.			Resonant	Range	1	10	50	100
665-AS04008PRWRR	AS04008PR-WR-R	C	6.55 x 40 x 40	0.5	0.8	8	Treated Paper	700	700 - 4750	4.23	3.38	3.12	2.79
665-AS05008PRWRR	AS05008PR-WR-R	C	12 x 50 x 50	1	1.5	8	Treated Paper	550	550 - 5000	4.75	3.80	3.51	3.14
665-AS02708COWRR	AS02708CO-WR-R	D	6 x 20.5 x 27	1	3	8	Treated Cloth	550	250 - 20000	5.00	4.00	3.70	3.30
665-AS04008PO2-WR-R	AS04008PO-2-WR-R	D	11.5 x 28.3 x 40	1	2	8	Treated Paper	450	450 - 20000	6.13	4.90	4.53	4.04
665-AS04008PS4WWR	AS04008PS-4W-WR-R	D	11.5 x 28.3 x 40	2	4	8	Paper	380	380 - 20000	6.13	4.90	4.53	4.04
665-AS07108POWRR	AS07108PO-WR-R	D	25 x 41 x 71	3	5	8	Treated Paper	250	100 - 20000	5.53	4.42	4.09	3.65
665-AS09008PO2WWR	AS09008PO-2-WR-R	D	40.5 x 50 x 90	5	8	8	Paper	240	240 - 18000	6.95	5.56	5.14	4.59
665-AS06608PSWWR	AS06608PS-WR-R	E	29 x 66.3 x 66.3	4	5	8	Treated Paper	230	230 - 12000	7.95	6.36	5.88	5.25
665-AS07708PS2WWR	AS07708PS-2-WR-R	E	25.5 x 77 x 77	4	8	8	Treated Paper	270	270 - 8000	5.43	4.34	4.01	3.58

## MINIATURE SPEAKER TRANSDUCERS

For quantities greater than listed, call for quote.

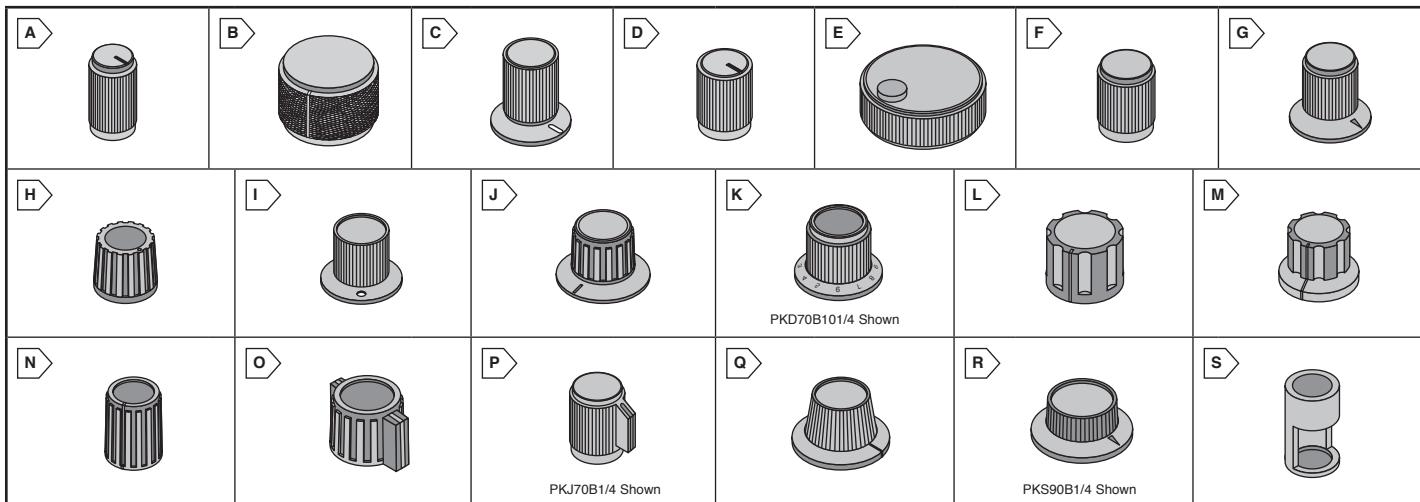
MOUSER STOCK NO.	PUI Part No.	Fig.	Dimensions: mm (H x W x L)	Power (W)		Impedance ( $\Omega$ )	Cone Material	Frequency (Hz)		Price Each			
				Rated	Max.			Resonant	Range	1	10	50	100
665-ADS02008MRR	ADS02008MR-R	M	4 x 19.9 x 19.9	0.08	0.2	8	Mylar	750	750 - 5000	3.13	2.50	2.31	2.06
665-ADS02908MRR	ADS02908MR-R	M	9.5 x 29 x 29	0.1	0.2	8	Mylar	650	650 - 4000	3.13	2.50	2.31	2.06

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# ALCOSWITCH Knobs

**TE** Authorized  
connectivity Distributor



## K SERIES MACHINED ALUMINUM CONTROL KNOBS

### Specifications:

- Made of machined aluminum alloy stock
- Set screws: steel, type 303, hex head, cup point
- Finish is gloss anodize
- \*Parts are Black body with Natural skirt and top.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Alcoswitch Part No.	Fig.	Shaft Size	Knurl Type	Knob Color	Description	Diameter: in. (mm)	Height: in. (mm)	Price Each			
										1	10	25	50
506-KB500B1/4	3-1437621-8	KB500B1/4	A	1/4"	Straight	Black	Top line indicator	.500 (12.7)	.787 (20.0)	11.37	10.72	9.85	9.19
506-KB500B1/8	3-1437621-9	KB500B1/8	A	1/8"	Straight	Black	Top line indicator	.500 (12.7)	.787 (20.0)	8.19	7.44	6.90	6.55
506-KD500B1/4	7-1437621-2	KD500B1/4	B	1/4"	Diamond	Black	Side indicator line	.500 (12.7)	.630 (16.0)	4.76	4.61	4.45	4.30
506-KD1250A1/4	6-1437621-8	KD1250A1/4	B	1/4"	Diamond	Natural	Side indicator line	1.25 (31.8)	.750 (19.1)	18.48	16.86	15.87	14.60
506-KFS400B1/8	8-1437621-6	KFS400B1/8	C	1/8"	Straight	Black	Indicator dot on skirt	.380 (9.65)	.500 (12.7)	8.92	8.53	7.85	7.55
506-KLN1250B1/4	9-1437621-5	KLN1250B1/4	D	1/4"	Straight	Black	Top and side indicator	1.25 (31.8)	.591 (15.0)	16.03	14.54	14.02	12.42
506-KLN700A1/4	1437622-2	KLN700A1/4	D	1/4"	Straight	Natural	Top and side indicator	.740 (18.8)	.625 (15.9)	8.13	7.73	7.32	6.96
506-KLN700B1/4	1437622-3	KLN700B1/4	D	1/4"	Straight	Black	Top and side indicator	.740 (18.8)	.625 (15.9)	8.48	7.99	7.34	6.85
506-KLN900B1/4	1437622-7	KLN900B1/4	D	1/4"	Straight	Black	Top and side indicator	.937 (23.8)	.625 (15.9)	9.27	8.73	8.02	7.48
506-KN1751AS1/4	3-1437622-5	KN1751AS1/4	E	1/4"	Straight	Natural	Fingertip spinner	1.75 (44.5)	.620 (15.8)	43.67	39.82	37.52	34.47
506-KN1751BS1/4	3-1437622-8	KN1751BS1/4	E	1/4"	Straight	Black	Fingertip spinner	1.75 (44.5)	.620 (15.8)	31.74	28.96	27.28	25.05
506-KN500B1/8	4-1437622-7	KN500B1/8	F	1/8"	Straight	Black	Side indicator line	.500 (12.7)	.625 (15.9)	5.05	4.79	4.65	4.45
506-KN700B1/4	6-1437622	KN700B1/4	F	1/4"	Straight	Black	Side indicator line	.750 (19.1)	.625 (15.9)	9.66	9.51	8.71	8.04
506-KN1250B1/4	2-1437622-7	KN1250B1/4	F	1/4"	Straight	Black	Side indicator line	1.25 (31.8)	.625 (15.9)	14.83	14.39	13.70	13.41
506-KNS701BA1/4	8-1437622	KNS701BA1/4	G	1/4"	Straight	Black *	Arrowhead indicator on skirt	.750 (19.1)	.625 (15.9)	14.49	13.17	12.05	11.27

## P SERIES MOLDED PHENOLIC KNOBS

### Specifications:

- Made of general purpose phenolic (thermoset)
- Insert is made of Cu alloy
- Inlays and skirts are aluminum alloy, spun finish
- Set screws: steel, hex head, cup point

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Alcoswitch Part No.	Fig.	Shaft Size	Knurl Type	Description	Diameter: in. (mm)	Height: in. (mm)	Price Each			
									1	10	25	50
506-PK1100B1/4	1437624-3	PK1100B1/4	H	1/4"	Serrated	White indicator on top and spun aluminum inlay	.700 (17.8)	.530 (13.5)	2.25	2.15	2.07	1.94
506-PK50B1/4	1437624-6	PK50B1/4	I	1/4"	Straight	White dot indicator on skirt and spun aluminum inlay	.748 (19.0)	.550 (14.0)	2.38	2.19	2.07	1.99
506-PK50B1/8	1437624-7	PK50B1/8	I	1/8"	Straight	White dot indicator on skirt and spun aluminum inlay	.748 (19.0)	.550 (14.0)	2.24	2.11	2.01	1.88
506-PK70B1/4	1437624-8	PK70B1/4	I	1/4"	Straight	White dot indicator on skirt and spun aluminum inlay	.984 (25.0)	.590 (15.0)	3.16	2.87	2.76	2.47
506-PK90B1/4	1437624-9	PK90B1/4	I	1/4"	Straight	White dot indicator on skirt and spun aluminum inlay	1.25 (31.8)	.595 (15.1)	3.56	3.26	3.11	2.83
506-PKA50B1/4	1-1437624-0	PKA50B1/4	J	1/4"	Ribbed	White line indicator on skirt and spun aluminum inlay	.795 (20.2)	.590 (15.0)	1.89	1.75	1.64	1.49
506-PKA50B1/8	1-1437624-1	PKA50B1/8	J	1/8"	Ribbed	White line indicator on skirt and spun aluminum inlay	.795 (20.2)	.590 (15.0)	2.06	1.87	1.80	1.61
506-PKA70B1/4	1-1437624-5	PKA70B1/4	J	1/4"	Ribbed	White line indicator on skirt and spun aluminum inlay	.980 (24.9)	.750 (19.1)	2.63	2.44	2.32	2.22
506-PKA90B1/4	1-1437624-7	PKA90B1/4	J	1/4"	Ribbed	White line indicator on skirt and spun aluminum inlay	1.375 (34.9)	.840 (21.3)	3.33	3.02	2.88	2.59
506-PKD70B1/4	PKD70B1/4	PKD70B1/4	K	1/4"	Straight	Black arrow indicator on skirt and spun aluminum inlay	1.02 (25.9)	.610 (15.5)	2.67	2.59	2.54	2.51
506-PKD70B101/4	3-1437624-2	PKD70B101/4	K	1/4"	Straight	0-10 numerals on skirt and spun aluminum inlay	1.02 (25.9)	.610 (15.5)	2.43	2.33	2.18	2.05
506-PKE60B1/4	4-1437624-3	PKE60B1/4	L	1/4"	Fluted	Line indicator on side and spun aluminum inlay	.626 (15.9)	.472 (12.0)	2.91	2.64	2.54	2.27
506-PKE90-B	4-1437624-5	PKE90B1/4	L	1/4"	Fluted	Line indicator on side and spun aluminum inlay	.890 (22.6)	.512 (13.0)	3.18	2.89	2.70	2.51
506-PKES120B1/4	4-1437624-6	PKES120B1/4	M	1/4"	Fluted	Skirt and White indicator line and spun aluminum inlay	1.30 (32.9)	.628 (16.0)	2.80	2.57	2.45	2.34
506-PKES60B1/4	5-1437624-0	PKES60B1/4	M	1/4"	Fluted	Skirt and White indicator line and spun aluminum inlay	.748 (19.0)	.470 (11.9)	2.28	2.06	1.97	1.77
506-PKES60B1/8	5-1437624-1	PKES60B1/8	M	1/8"	Fluted	Skirt and White indicator line and spun aluminum inlay	.748 (19.0)	.470 (11.9)	2.10	1.91	1.75	1.61
506-PKES90B1/4	5-1437624-3	PKES90B1/4	M	1/4"	Fluted	Skirt and White indicator line and spun aluminum inlay	1.01 (25.7)	.570 (14.5)	2.22	1.86	1.81	1.78
506-PKG40B1/8	5-1437624-9	PKG40B1/8	N	1/8"	Ribbed	White indicator line and spun aluminum inlay	.437 (11.1)	.472 (12.0)	1.53	1.46	1.41	1.27
506-PKG50B1/4	6-1437624	PKG50B1/4	N	1/4"	Ribbed	White indicator line and spun aluminum inlay	.551 (14.0)	.512 (13.0)	2.34	2.14	2.01	1.78
506-PKG50B1/8	6-1437624-1	PKG50B1/8	N	1/8"	Ribbed	White indicator line and spun aluminum inlay	.551 (14.0)	.512 (13.0)	2.13	2.00	1.89	1.82
506-PKG70B1/8	6-1437624-8	PKG70B1/8	N	1/8"	Ribbed	White indicator line and spun aluminum inlay	.740 (18.8)	.559 (14.2)	4.73	4.54	4.35	4.17
506-PKGP-70B1/4	7-1437624-2	PKGP70B1/4	O	1/4"	Ribbed	Bar pointer, White indicator line, and spun aluminum inlay	.740 (18.8)	.460 (11.7)	5.05	4.62	4.40	3.96
506-PKJ70B1/4	7-1437624-7	PKJ70B1/4	P	1/4"	Straight	Bar pointer, White indicator line, and spun aluminum inlay	.760 (19.3)	.555 (14.1)	2.97	2.91	2.88	2.84
506-PKJ50B1/8	7-1437624-9	PKJ50B1/8	P	1/8"	Straight	Bar pointer, White indicator line, and spun aluminum spin plate	.515 (13.1)	.585 (14.9)	5.47	4.97	4.77	4.27
506-PKS1106B1/4	9-1437624-7	PKS1106B1/4	Q	1/4"	Straight	Black line indicator on alum. skirt, spun aluminum inlay	1.17 (29.6)	.670 (17.0)	4.06	4.05	3.74	3.44
506-PKS1105B101/4	9-1437624-6	PKS1105B101/4	Q	1/4"	Straight	Black numbers 0-9 on alum. skirt, spun aluminum inlay	1.17 (29.6)	.670 (17.0)	3.39	3.18	3.06	2.98
506-PKS90B1/4	1437625-5	PKS90B1/4	R	1/4"	Straight	Black arrow indicator on alum. skirt, spun aluminum inlay	1.42 (36.1)	.596 (15.1)	4.33	3.99	3.62	3.37
506-PKS90B101/4	1437625-6	PKS90B101/4	R	1/4"	Straight	Black numbers 1-10 on alum. skirt, spun aluminum inlay	1.42 (36.1)	.596 (15.1)	6.61	6.52	6.42	6.33

## ADAPTER

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TE Part No.	Alcoswitch Part No.	Fig.	Description		Diameter: in. (mm)	Height: in. (mm)	Price Each			
								1	10	25	50
506-KR104	1825620-1	KR104	S	Shaft hole adapter, 1/4" to 1/8"		-	-	1.00	.952	.927	.914

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## PCB HARDWARE

### EZ-Links

- Designed to link PCB tracks where through hole links are not possible.
- Typical applications include use on aluminum backplanes in power applications.
- Low profile options available for space saving design.

- High current
- Small footprint



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Harwin Part No.	Fig.	Description	Price Each		
				1	10	100
855-S1621-46R	S1621-46R	A	SMT Jumper Link, Tin, 12.3mm long	.23	.164	.135
855-S1731-46R	S1731-46R	B	SMT Jumper Link, Tin, 6.86mm long, 2.54 high	.25	.176	.145
855-S1911-46R	S1911-46R	C	SMT Jumper Link, Tin, 6.85mm long, 0.97 high	.28	.197	.17

### EZ-Shield Clips - Allows RFI Shield Component Rework without Desoldering

- SMT Device offering a fast solution for assembling RFI shields to PCBs.
- Eliminates the need for through holes and post reflow operations.
- Save PCB real estate.

- Mini Clip uses 40% less space than Midi and Maxi.
- Substantial improvement in time and simplicity of assembly tuning and re-work.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Harwin Part No.	Fig.	Description	Price Each		
				1	10	100
855-S0971-46R	S0971-46R	D	SMT Mini Shield Clip .20 - .30MM, Tin	.44	.293	.198
855-S0981-46R	S0981-46R	D	SMT Corner Shield Clip .20 - .25MM, Tin	.47	.31	.21
855-S0991-46R	S0991-46R	D	SMT Micro Shield Clip .20 - .25MM, Tin	.50	.29	.169
855-S1001-46R	S1001-46R	D	SMT Micro Shield Clip .15 - .20MM, Tin	.44	.288	.195
855-S1411-46R	S1411-46R	E	SMT RFI Clip, Maxi, Tin	.60	.395	.267
855-S1711-06R	S1711-06R	E	SMT RFI Clip, Midi, Tin/Lead	.34	.233	.201
855-S1711-46R	S1711-46R	E	SMT RFI Clip, Midi, Tin	.58	.386	.261
855-S1721-46R	S1721-46R	F	SMT RFI Clip, Mini, Tin	.53	.306	.179

\* Non-RoHS Compliant    Δ Low Profile    † Securing 90° corners

### EZ-Test Points

- Ideal for use with standard probes, clips and hooks.
- Can be placed using industry standard equipment.
- Suitable for automatic manual test.

- High speed placement
- Industry standard Tape and Reel packaging.
- Strong and Durable



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Harwin Part No.	Fig.	Description	Price Each		
				1	10	100
855-S1751-06R	S1751-06R	G	SMT Test Terminal, Tin/Lead	.29	.204	.167
855-S1751-46R	S1751-46R	G	SMT Test Terminal, Tin	.29	.204	.167

\* Non-RoHS Compliant

### EZ-EMI/RFI Shield Cans

- Suitable for use with the Midi Shield clips (S1711R and S2711R series)
- Provides excellent RFI and EMI protection to sensitive circuitry at the PCB level

- Standard can sizes available from stock

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Harwin Part No.	Fig.	Description	Price Each		
				1	10	50
855-S01-30200500	S01-30200500	H	30(L)X20(W)X05(Thickness) Can	4.40	4.22	3.69
855-S01-30300500	S01-30300500	H	Shield 30(L)X30(W)X05(Thickness) Can	4.87	4.68	4.09
855-S01-50250500	S01-50250500	H	Shield 50(L)X25(W)X05(Thickness) Can	5.45	5.23	4.36

### EZ-Spring Contacts

- Prevents EMC noise and static.
- Simple and effective method for connecting multiple PCBs.

- No special tooling required, uses standard pick and place equipment.
- Protected tips prevent product from hooking.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Harwin Part No.	Fig.	Dimensions: mm	Finish	Price Each		
					1	10	100
855-S1741-46R	S1741-46R	I	2.5	5.4	.50	.328	.222
855-S1761-42R	S1761-42R	J	3.5	4.5	.57	.423	.314
855-S1791-42R	S1791-42R	J	4.0	7.0	.55	.405	.301
855-S7051-42R	S7051-42R	K	6.0	4.1	.55	.408	.303
855-S7061-42R	S7061-42R	L	5.5	7.0	.55	.408	.303
855-S7071-46R	S7071-46R	M	2.5	3.5	.54	.359	.243
855-S7081-42R	S7081-42R	N	2.75	6.25	.54	.359	.243
855-S7091-42R	S7091-42R	O	2.7	3.7	.54	.359	.243
855-S7101-42R	S7101-42R	P	3.5	4.05	.51	.376	.279
855-S7041-42R	S7041-42R	P	4.0	4.0	.51	.376	.279
855-S7111-42R	S7111-42R	P	4.5	4.0	.51	.376	.279
855-S7121-42R	S7121-42R	Q	1.7	2.5	.47	.31	.21

### EZ-Cable Clips

- Suitable for use with insulated cables with outer ø0.9 to ø0.3mm pick and placed.
- Low profile & small footprint saves PCB space.

- Cable clip can be soldered at the same time as the rest of the board, reducing additional operation time required for mounting plastic clip types.

RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Harwin Part No.	Fig.	Description	Price Each		
				1	10	100
855-S8091-46R	S8091-46R	R	Cable Clip for 0.9mm Cable	.26	.179	.147
855-S8101-46R	S8101-46R	R	Cable Clip for 1.0mm Cable	.29	.204	.167
855-S8111-46R	S8111-46R	R	Cable Clip for 1.0 - 1.5mm Cable	.29	.204	.167
855-S8121-46R	S8121-46R	R	Cable Clip for 1.50 - 2.00mm Cable	.29	.204	.167
855-S8131-46R	S8131-46R	R	Cable Clip for 2.00 - 3.00mm Cable	.29	.204	.167

### EZ-Coin Cell Battery Retainers

- Highly effective retention of coin cell batteries.
- Eliminates the need for soldered-in cells.
- Vertical Mount minimizes PCB real estate usage.

- Low profile design available with dual independent contact points for enhanced electrical reliability.

RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Harwin Part No.	Fig.	Battery Type	Price Each		
				1	10	100
855-S8201-46R	S8201-46R	S	CR1225/BR1225	.51	.455	.354
855-S8211-46R	S8211-46R	T	CR2016/CR2025/CR2032 and BR2016/BR2020/BR2025	.66	.59	.459
855-S8401-46	S8401-46	U	CR2032 and BR2032	1.31	1.18	.917
855-S8411-45R	S8411-45R	V	CR1220	1.08	.97	.755
855-S8421-45R	S8421-45R	W	CR2032	1.07	.959	.746

### EZ-Board PC Board Socket, SMT

- Accepts pins of between ø1.10mm and ø1.80mm.
- Rated to 8 Amps electrical current.
- Reduced component costs.

- Greatly reduces process costs by removing the need for secondary operations.
- SMT product is pick and place-able using standard assembly machines.

RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Harwin Part No.	Fig.	Description	Price Each		
1	10	100				
855-S9101-46R	S9101-46R	X	Tape & Reeled, to mate with ø1.10-ø1.80mm pin	.27	.191	.157

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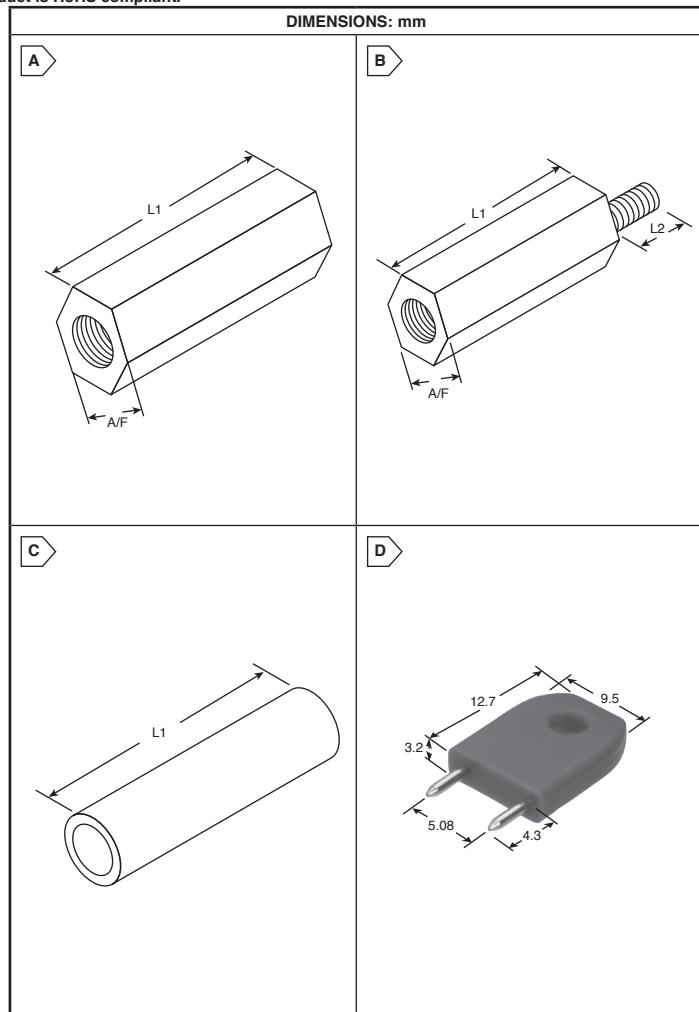
# HARWIN Metric Spacers and Shorting Links

 This page of product is RoHS compliant.

## METRIC HEX SPACERS, THREADED-BRASS/NICKEL

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Size	A/F	L1 (mm)	L2 (mm)	Price Each		
						1	10	100
<b>Female</b>								
855-R30-101402	A	M3 X 4mm	5.5	4	-	.48	.363	.306
855-R30-101702	A	M3 X 7mm	5.5	7	-	.48	.363	.306
855-R30-101802	A	M3 X 8mm	5.5	8	-	.49	.374	.316
855-R30-101902	A	M3 X 9mm	5.5	9	-	.51	.383	.323
855-R30-1011002	A	M3 X 10mm	5.5	10	-	.52	.394	.333
855-R30-1011102	A	M3 X 11mm	5.5	11	-	.54	.405	.342
855-R30-1011202	A	M3 X 12mm	5.5	12	-	.55	.414	.35
855-R30-1011302	A	M3 X 13mm	5.5	13	-	.56	.426	.36
855-R30-1011402	A	M3 X 14mm	5.5	14	-	.58	.435	.367
855-R30-1011502	A	M3 X 15mm	5.5	15	-	.59	.446	.377
855-R30-1011602	A	M3 X 16mm	5.5	16	-	.61	.457	.386
855-R30-1012002	A	M3 X 20mm	5.5	20	-	.66	.498	.42
855-R30-1012502	A	M3 X 25mm	5.5	25	-	.73	.547	.462
<b>Male/Female</b>								
855-R30-3000402	B	M3 X 4mm	5.0	4	6	.45	.338	.285
855-R30-3000502	B	M3 X 5mm	5.0	5	6	.48	.36	.304
855-R30-3000602	B	M3 X 6mm	5.0	6	6	.48	.36	.304
855-R30-3000702	B	M3 X 7mm	5.0	7	6	.51	.383	.323
855-R30-3000802	B	M3 X 8mm	5.0	8	6	.51	.383	.323
855-R30-3000902	B	M3 X 9mm	5.0	9	6	.54	.405	.342
855-R30-3001002	B	M3 X 10mm	5.0	10	6	.54	.405	.342
855-R30-3001102	B	M3 X 11mm	5.0	11	6	.57	.428	.361
855-R30-3001202	B	M3 X 12mm	5.0	12	6	.57	.428	.361
855-R30-3001302	B	M3 X 13mm	5.0	13	6	.60	.45	.38
855-R30-3001402	B	M3 X 14mm	5.0	14	6	.60	.45	.38
855-R30-3001502	B	M3 X 15mm	5.0	15	6	.63	.473	.399
855-R30-3001602	B	M3 X 16mm	5.0	16	6	.63	.473	.399
855-R30-3001802	B	M3 X 18mm	5.0	18	6	.66	.495	.418
855-R30-3001902	B	M3 X 19mm	5.0	19	6	.72	.54	.456
855-R30-3002002	B	M3 X 20mm	5.0	20	6	.62	.45	.425
855-R30-3002402	B	M3 X 24mm	5.0	24	6	.62	.45	.425
855-R30-3002502	B	M3 X 25mm	5.0	25	6	.67	.608	.459
855-R30-3003002	B	M3 X 30mm	5.0	30	6	.75	.54	.51
855-R40-3000702	B	M4 X 7mm	7.0	7	8	.60	.455	.384
855-R40-3000802	B	M4 X 8mm	7.0	8	8	.63	.475	.401
855-R40-3001002	B	M4 X 10mm	7.0	10	8	.69	.52	.439
855-R40-3001202	B	M4 X 12mm	7.0	12	8	.62	.452	.427
855-R40-3001302	B	M4 X 13mm	7.0	13	8	.65	.47	.444
855-R40-3001502	B	M4 X 15mm	7.0	15	8	.70	.504	.476
855-R40-3001602	B	M4 X 16mm	7.0	16	8	.72	.522	.493
855-R40-3002002	B	M4 X 20mm	7.0	20	8	.82	.594	.561
855-R40-3002502	B	M4 X 25mm	7.0	25	8	.93	.672	.635
855-R40-3003002	B	M4 X 30mm	7.0	30	8	1.07	.767	.725



## METRIC CIRCULAR SPACERS, CLEARANCE TYPE (CONT.)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Size	O/D (mm)	L1 (mm)	Price Each		
					1	10	100
<b>Nylon 66</b>							
855-R30-6700394	C	M3 X 3mm	5	3	.18	.138	.116
855-R30-6700494	C	M3 X 4mm	5	4	.30	.225	.19
855-R30-6700594	C	M3 X 5mm	5	5	.19	.144	.122
855-R30-6700694	C	M3 X 6mm	5	6	.33	.248	.209
855-R30-6700794	C	M3 X 7mm	5	7	.33	.248	.209
855-R30-6700894	C	M3 X 8mm	5	8	.20	.151	.128
855-R30-6700994	C	M3 X 9mm	5	9	.36	.27	.228
855-R30-6701094	C	M3 X 10mm	5	10	.22	.169	.143
855-R30-6701194	C	M3 X 11mm	5	11	.39	.293	.247
855-R30-6701294	C	M3 X 12mm	5	12	.39	.293	.247
855-R30-6701394	C	M3 X 13mm	5	13	.39	.293	.247
855-R30-6701494	C	M3 X 14mm	5	14	.42	.315	.266
855-R30-6701594	C	M3 X 15mm	5	15	.24	.18	.152
855-R30-6702094	C	M3 X 20mm	5	20	.45	.338	.285
855-R30-6702594	C	M3 X 25mm	5	25	.48	.36	.304

## D308 SERIES - 1.00MM SHORTING LINKS

### Specifications:

- Uninsulated links can be soldered directly into PCB for permanent linking
- Current Rating: 10A at 20°C
- Moulding: Acetal Copolymer UL94-HB
- Contact: Brass
- Gold Plated

\* Non-RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Harwin Part No.	Fig.	Insulation Color	Price Each			
				1	100	500	1000
<b>Uninsulated</b>							
* 855-D3080-05	D3080-05	-	-	.34	.207	.197	.165
<b>Insulated</b>							
855-D3086-97	D3086-97	D	Blue	1.01	.702	.632	.562
855-D3086-98	D3086-98	D	Black	1.01	.702	.632	.562
855-D3086-99	D3086-99	D	Red	1.01	.702	.632	.562

# HEYCO Liquid Tight Cordgrrips

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## LIQUID TIGHT STRAIGHT-THRU CORDGRIPS

### Standard Cordgrrips

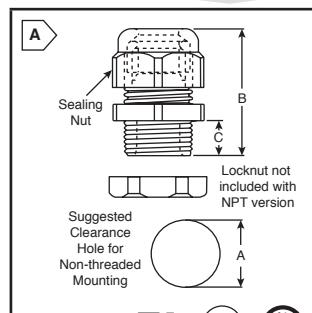
Cordgrrips are for flexible cords. Install in either clearance or threaded holes.

Cable Dia. Range (In.)	Black		Gray		Fig.	Description	Dimensions: in.			Price Each				
	Min.	Max.	MOUSER STOCK NO.	Heyco Part No.			A	B	C	1	10	50	100	
<b>For PG Hubs with Locknuts</b>														
0.064	0.210	<a href="#">836-3444</a>	3444	<a href="#">836-3445</a>	3445	A	RLTF 7	0.492	1.170	0.330	.80	.634	.596	.558
0.114	0.250	<a href="#">836-3207</a>	3207	<a href="#">836-3208</a>	3208	A	LTf 7	0.492	1.170	0.330	.80	.634	.596	.558
0.069	0.187	<a href="#">836-3446</a>	3446	---	---	A	RLTF 9	0.599	1.300	0.340	.89	.70	.63	.60
0.181	0.312	<a href="#">836-3210</a>	3210	<a href="#">836-3211</a>	3211	A	LTf 9	0.599	1.300	0.340	.89	.70	.58	.50
0.069	0.250	<a href="#">836-3448</a>	3448	<a href="#">836-3449</a>	3449	A	RLTF 11	0.733	1.460	0.390	1.04	.829	.683	.595
0.230	0.395	<a href="#">836-3213</a>	3213	<a href="#">836-3214</a>	3214	A	LTf 11	0.733	1.460	0.390	.95	.76	.63	.55
0.170	0.450	<a href="#">836-3216</a>	3216	<a href="#">836-3217</a>	3217	A	LTf 13.5	0.804	1.530	0.410	1.61	1.26	1.03	.88
0.230	0.530	<a href="#">836-3219</a>	3219	<a href="#">836-3220</a>	3220	A	LTf 16	0.886	1.660	0.450	1.35	1.07	.93	.86
0.250	0.490	<a href="#">836-3454</a>	3454	---	---	A	RLTF 21	1.115	1.870	0.520	1.89	1.49	1.24	1.07
0.450	0.705	<a href="#">836-3222</a>	3222	<a href="#">836-3223</a>	3223	A	LTf 21	1.115	1.870	0.520	1.71	1.35	1.12	.972
0.590	0.990	<a href="#">836-3225</a>	3225	<a href="#">836-3226</a>	3226	A	LTf 29	1.470	2.230	0.590	3.36	2.65	2.19	1.90
<b>For NPT Hubs without Locknuts</b>														
0.069	0.187	<a href="#">836-3458</a>	3458	---	---	A	RLTF 3/8	0.670	1.490	0.530	.80	.63	.53	.45
0.181	0.312	<a href="#">836-3228</a>	3228	<a href="#">836-3229</a>	3229	A	LTf 3/8	0.670	1.490	0.530	.80	.63	.58	.54
0.170	0.470	<a href="#">836-3231</a>	3231	<a href="#">836-3232</a>	3232	A	LTf 1/2	0.875	1.720	0.620	1.05	.838	.69	.64
0.230	0.546	<a href="#">836-3200</a>	3200	<a href="#">836-3201</a>	3201	A	LLTF 1/2	0.875	1.830	0.620	1.22	.97	.89	.83
0.450	0.709	<a href="#">836-3234</a>	3234	<a href="#">836-3235</a>	3235	A	LTf 3/4	1.068	1.970	0.630	1.70	1.34	1.20	1.11
0.250	0.485	<a href="#">836-3460</a>	3460	<a href="#">836-3461</a>	3461	A	RLTF 3/4	1.068	1.970	0.630	1.71	1.35	1.12	.98
0.590	1.000	<a href="#">836-8437</a>	8437	<a href="#">836-8438</a>	8438	A	LTf 1	1.375	2.420	0.750	3.02	2.38	1.97	1.71

### Cordgrrips with Integral Sealing Ring

"Ratchet design" of sealing nut assembly provides superior anti-vibration protection and ensures a firm grip on the cable. Integral "Sealing Ring" ensures a superior seal at mounting location every time.

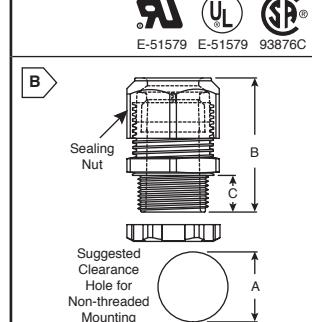
Cable Dia. Range (In.)	Black		Gray		Fig.	Description	Dimensions: in.			Price Each				
	Min.	Max.	MOUSER STOCK NO.	Heyco Part No.			A	B	C	1	10	50	100	
<b>For PG Hubs with Locknuts</b>														
0.065	0.22	<a href="#">836-M3444</a>	M3444	<a href="#">836-M3445</a>	M3445	B	RLTCG 7	0.492	1.16	0.32	.90	.823	.757	.72
0.115	0.25	<a href="#">836-M3207</a>	M3207	<a href="#">836-M3208</a>	M3208	B	LTf CG 7	0.492	1.16	0.32	.82	.749	.689	.62
0.105	0.312	<a href="#">836-M3210</a>	M3210	<a href="#">836-M3211</a>	M3211	B	LTf CG 9	0.599	1.25	0.32	.99	.898	.81	.742
0.23	0.395	<a href="#">836-M3213</a>	M3213	<a href="#">836-M3214</a>	M3214	B	LTf CG 11	0.733	1.48	0.38	1.19	1.08	.996	.898
0.095	0.26	<a href="#">836-M4500</a>	M4500	---	---	B	RLTCG 13.5	0.804	1.5	0.41	1.28	1.17	1.06	.98
0.17	0.45	<a href="#">836-M3216</a>	M3216	<a href="#">836-M3217</a>	M3217	B	LTf CG 13.5	0.804	1.5	0.41	1.28	1.17	1.06	.98
0.18	0.44	<a href="#">836-M4502</a>	M4502	---	---	B	RLTCG 16	0.886	1.68	0.44	1.50	1.36	1.24	1.13
0.26	0.546	<a href="#">836-M3219</a>	M3219	<a href="#">836-M3220</a>	M3220	B	LTf CG 16	0.886	1.68	0.44	1.50	1.36	1.24	1.13
0.25	0.485	<a href="#">836-M3454</a>	M3454	<a href="#">836-M3455</a>	M3455	B	RLTCG 21	1.115	1.89	0.52	2.08	1.89	1.72	1.57
0.485	0.709	<a href="#">836-M3222</a>	M3222	<a href="#">836-M3223</a>	M3223	B	LTf CG 21	1.115	1.89	0.52	2.08	1.89	1.72	1.57
0.49	0.787	<a href="#">836-M4504</a>	M4504	---	---	B	RLTCG 29	1.47	2.23	0.58	3.81	3.47	3.15	2.86
0.59	1	<a href="#">836-M3225</a>	M3225	---	---	B	LTf CG 29	1.47	2.23	0.58	3.72	3.38	3.07	2.79
<b>For Metric Hubs with Locknuts</b>														
0.25	0.49	<a href="#">836-M4342</a>	M4342	---	---	B	RLTCG M25	0.985	1.89	0.52	2.10	1.93	1.78	1.69
0.435	0.705	<a href="#">836-M4344</a>	M4344	---	---	B	LTf CG M25	0.985	1.89	0.52	2.10	1.93	1.78	1.69
0.49	0.785	<a href="#">836-M4346</a>	M4346	---	---	B	RLTCG M32	1.26	2.23	0.58	3.72	3.38	3.07	2.79
0.59	1	<a href="#">836-M4348</a>	M4348	---	---	B	LTf CG M32	1.26	2.23	0.58	3.72	3.38	3.07	2.79
<b>For NPT Hubs without Locknuts</b>														
0.105	0.315	<a href="#">836-M3228</a>	M3228	<a href="#">836-M3229</a>	M3229	C	LTf CG 3/8	0.68	1.41	0.49	.88	.80	.732	.664
0.180	0.400	<a href="#">836-M4520</a>	M4520	---	---	C	RLTCG LL 1/2	0.875	1.68	0.44	1.31	1.20	1.11	1.05
0.095	0.26	<a href="#">836-M4518</a>	M4518	<a href="#">836-M4519</a>	M4519	C	RLTCG 1/2	0.875	1.7	0.61	1.17	1.06	.98	.913
0.17	0.45	<a href="#">836-M3231</a>	M3231	<a href="#">836-M3232</a>	M3232	C	LTf CG 1/2	0.875	1.7	0.61	1.03	.933	.862	.803
0.256	0.485	<a href="#">836-M3460</a>	M3460	---	---	C	RLTCG 3/4	1.04	2	0.62	1.87	1.70	1.55	1.41
0.485	0.709	<a href="#">836-M3234</a>	M3234	---	---	C	LTf CG 3/4	1.04	2	0.62	1.87	1.70	1.55	1.41
0.49	0.787	<a href="#">836-M8439</a>	M8439	---	---	C	RLTCG 1	1.326	2.41	0.76	3.33	3.03	2.76	2.50
0.59	1	<a href="#">836-M8437</a>	M8437	---	---	C	LTf CG 1	1.326	2.41	0.76	3.33	3.03	2.76	2.50
0.787	1.020	<a href="#">836-M4522</a>	M4522	---	---	C	RLTCG 1 1/4	1.68	2.69	0.78	4.85	4.41	4.02	3.66



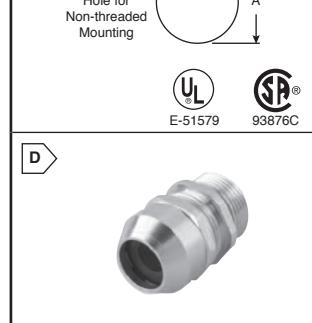
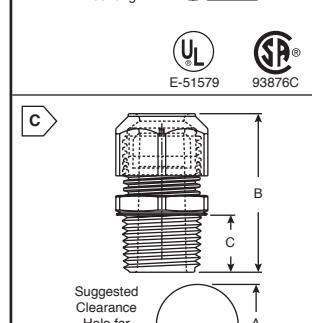
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### METAL LOCKNUTS

Thread Size	MOUSER STOCK NO.	Heyco Part No.	Fig.	Description	Dimensions: in.			Price Each				
					Thickness A	Wrenching B	1	10	50	100		
<b>PG Thread-Nickel Plated Brass</b>												
PG 7	<a href="#">836-2257</a>	2257	E	PG 7	0.110	0.591	.47	.43	.40	.37		
PG 9	<a href="#">836-2258</a>	2258	E	PG 9	0.110	0.709	.70	.66	.63	.60		
PG 11	<a href="#">836-2259</a>	2259	E	PG 11	0.118	0.827	.77	.73	.66	.57		
PG 13.5	<a href="#">836-2260</a>	2260	E	PG 13.5	0.118	0.906	.83	.771	.709	.657		
PG 16	<a href="#">836-2261</a>	2261	E	PG 16	0.118	1.024	.96	.88	.81	.75		
PG 21	<a href="#">836-2262</a>	2262	E	PG 21	0.138	1.261	1.32	1.21	1.12	1.03		
PG 29	<a href="#">836-2263</a>	2263	E	PG 29	0.158	1.615	2.06	1.89	1.74	1.60		
<b>Metric Thread-Nickel Plated Brass</b>												
M12	<a href="#">836-2246</a>	2246	E	LN M12	0.118	0.591	.59	.54	.49	.46		
M16	<a href="#">836-2247</a>	2247	E	LN M16	0.118	0.748	.82	.771	.709	.657		
M20	<a href="#">836-2248</a>	2248	E	LN M20	0.138	0.945	1.01	.93	.85	.79		
M25	<a href="#">836-2249</a>	2249	E	LN M25	0.138	1.181	1.34	1.23	1.11	1.04		



UL® UL E-51579 93876C



UL® UL E-51579 93876C

# HEYCO Cable Clips, Locknuts and Strain Reliefs



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## HEYCLIP MAXRUNNER CABLE CLIP ARRAY

- Patent Pending design is the ultimate in solar wire management
- Accommodates up to 12 cables

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Heyco Part No.	Fig.	Panel Thickness		Wire Dia. Range (Max.) (12) Wires (mm)	Description	Overall Height (mm)	Price Each			
			Clamping Range Min. (mm)	Max. (mm)				1	100	500	1000
836-S6403	S6403	A	1.5	6.4	5.2-7.2	MaxRunner 12 Clip	24.9	.82	1.63	1.50	1.39

## HEYCLIP SUNRUNNER 2 AND 2-R CABLE CLIPS

- .020" thick heat treated 410 stainless steel
- For Mini-Inverter Cables

836-S6404	S6404	B	1.5	6.4	7.6-11.9	SunRunner 2	11.4	.13	1.04	.93	.86
836-S6402	S6402	B	1.5	6.4	7.6-11.9	SunRunner 2-R	11.4	.92	.85	.76	.68
836-S6407	S6407	B	2.3	6.4	5.0-7.6	SunRunner® EZ	10.4	.81	.73	.66	.589

## LIQUID TIGHT STRAIGHT-THRU CORDGRIP LOCKNUTS

- 94V-0 Rated
- 6/6 Nylon

MOUSER STOCK NO.	MOUSER STOCK NO.	Fig.	Description		Price Each			
			1	10	50	100		
<b>Nylon Locknuts, NPT Thread</b>								
836-8461	836-8462	C	NLN 3/8 NPT		.23	.178	.163	.147
836-8463	836-8464	C	NLN 1/2 NPT		.29	.23	.21	.19
836-8465	836-8466	C	NLN 3/4 NPT		.25	.22	.20	.19
836-8467	-----	C	NLN 1 NPT		.77	.628	.525	.473

## SNAP-IN RATCHETING STRAIN RELIEF

- Installs easily
- Black
- For Round and Double D Holes

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Heyco Part No.	Fig.	Panel Dimensions: In.		Description	Price Each			
			Hole Size	Max. Thickness		1	100	500	1000
836-1280	1280	D	0.875	0.125	RSR-875	.34	.32	.312	.296
836-1282	1282	D	1.109	0.125	RSR 1109	.42	.38	.34	.30

## SELF-LOCKING STRAIN RELIEFS

- Black
- 6/6 Nylon

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Heyco Part No.	Fig.	Panel Dimensions: In.		Description	Price Each				
			Hole Size	Max. Thickness		1	100	500	1000	
<b>For Flat Cables • 94V-2</b>										
836-1834	1834	E	SPT-2, SPT-3	.689 x .689	0.157	ST-200N	.25	.126	.107	.097
<b>For Round Cables • 94V-2</b>										
836-1832	1832	F	SV, SVT, HPD	.453 x .512	0.099	ST-101N	.23	.18	.15	.12
836-1836	1836	F	SJ, SJO, SJT	.689 x .689	0.157	ST-201N	.28	.176	.154	.131
836-1848	1848	F	SJT, STO, SEOW-A	.689 x .689	0.157	ST-301N	.26	.13	.11	.10
<b>For Round Cables (U-Shape Chassis Slot)</b>										
836-1839	1839	G	SV, SVT, HPD	.453 x .512	0.062	ST-101A	.23	.18	.15	.12

## LAY-IN STRAIN RELIEF

- For Round, Flat, or Multiple Cables up to .600"

836-1266	1266	H	--	.875 x .875	0.100	SR 8R-200	.75	.68	.62	.55
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## STRAIGHT-THRU STRAIN RELIEFS

- Black
- 6/6 Nylon
- \*Uses elongated hole
- † For flat or round cable

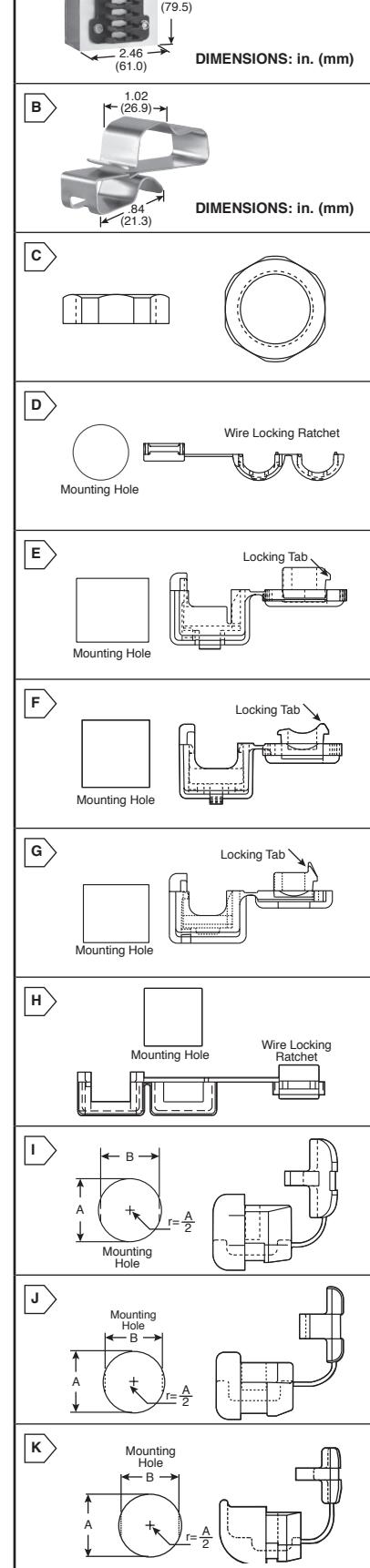
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Heyco Part No.	Fig.	UL Type Designation	Panel Dimensions: In.			Description	Price Each			
				Mounting Hole Dia. (A)	To Prevent Rotation (B)	Max. Thickness		1	100	500	1000
<b>For Round Cables</b>											
836-1157	1157	I	SV, SVT	0.500	0.450	0.062	SR 5MN-3	.14	.10	.08	.07
836-1150	1150	I	SV, SVT, HPD	.500 x .515	0.450	0.062	SR 5N-4	.13	.09	.07	.06
836-1147	1147	I	SV, SVT, HPD	.500 x .515	0.450	0.100	SR 5P-4	.13	.09	.07	.06
836-1184	1184	I	SJ, SJO, SJT	0.500	0.465	0.090	SR 6W-1	.13	.09	.07	.06
836-1217	1217	I	SJ, SJO, SJT	0.625	0.550	0.062	SR 6N-4	.16	.12	.10	.08
836-1210	1210	I	SJ, SJO, SJT	0.625	0.550	0.125	SR 6P-4	.16	.12	.10	.08
836-1200	1200	I	SJ, SJO, SJT	0.625	0.550	0.062	SR 6N3-4	.16	.12	.10	.08
836-1207	1207	I	SJ, SJO, SJT	0.625	0.550	0.125	SR 6P3-4	.16	.12	.10	.08
836-1214	1214	I	SJ, SJO, SJT	0.625	0.550	0.156	SR 6L-1	.16	.12	.10	.08
836-1240	1240	I	SJ, SJO, SJT	0.875	0.770	0.125	SR 7K-2	.23	.18	.15	.12
836-1244	1244	I	SJT, S, ST	0.750	0.660	0.062	SR 7N-2	.23	.18	.15	.12
836-1237	1237	I	SJT, S, ST	0.750	0.660	0.125	SR 7P-2	.23	.18	.15	.12
836-1247	1247	I	SJT, S, ST	0.875	0.770	0.125	SR 2W-2	.23	.18	.15	.12
836-1250	1250	I	SJT, S, ST	0.875	0.770	0.200	SR 7L-2	.23	.18	.15	.12
836-1497	1497	I	SJT	0.875	0.840	0.125	SR 31-2	.23	.18	.15	.12
836-1254	1254	I	S, ST	0.875	0.840	0.062	SR 8N-2	.23	.18	.15	.12
836-1260	1260	I	S, ST	0.875	0.840	0.125	SR 8P-2	.23	.18	.15	.12
836-1287	1287	I	S, ST, SO	1.093	1.000	0.281	SR 9P-2	.24	.22	.19	.17
<b>For Flat Cables</b>											
836-1174	1174	J	HPN, SPT-2	0.562	0.530	0.125	SR 5W-1	.18	.13	.11	.09
836-1484	1484	J	SPT-2, SPT-3	0.560	0.730	0.125	SR 30-1	.17	.12	.10	.08
836-1517	1517	J	SPT-3	0.875	0.840	0.125	SR 34-2	.23	.18	.15	.12
836-1497†	1497†	J	SPT-3	0.875	0.840	0.125	SR 31-2	.23	.18	.15	.12
<b>For Flat Cables with Flex-Protecting Internal Radii</b>											
836-1120	1120	J	SPT-1, HSN	0.500	0.465	0.062	SR 4N-4	.11	.07	.06	.05
836-1117	1117	J	SPT-1, HSN	0.500	0.465	0.100	SR 4K-4	.10	.069	.059	.049
836-1114	1114	J	SPT-1, SPT-2, HSN	0.500	0.460	0.095	SR 4K-1	.10	.069	.059	.049
836-1170	1170	J	SPT-2, SPT-3	0.562	0.530	0.062	SR 5KN-4	.18	.13	.11	.09
836-1167	1167	J	SPT-2, SPT-3	0.562	0.530	0.125	SR 5K-4	.18	.13	.11	.09
836-1160	1160	J	SPT-2	0.625	0.550	0.062	SR 6N4-4	.17	.12	.10	.08
836-1163	1163	J	SPT-2	0.625	0.550	0.125	SR 6P4-4	.17	.12	.10	.08

## RIGHT ANGLE, ROUND CABLE STRAIN RELIEFS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Heyco Part No.	Fig.	UL Type Designation	Panel Dimensions: In.			Description	Price Each			
				Mounting Hole Dia. (A)	To Prevent Rotation (B)	Max. Thickness		1	100	500	1000
836-1374	1374	K	SV, SVT, HPD	0.500	0.450	0.100	SR 15-1	.22	.15	.12	.10
836-1320	1320	K	SJ, SJO, SJT	0.625	0.550	0.125	SR 10-2	.23	.15	.14	.13
836-1327	1327	K	SJ, SJO, SJT	0.625	0.550	0.125	SR 11-2	.23	.154	.144	.134
836-1397	1397	K	SJ, S, ST	0.750	0.660	0.125	SR 17-2	.43	.39	.35	.31



# HEYCO Strain Reliefs, Bushings and Hole Plugs



## PIGTAIL STRAIN RELIEFS FOR ROUND CABLES

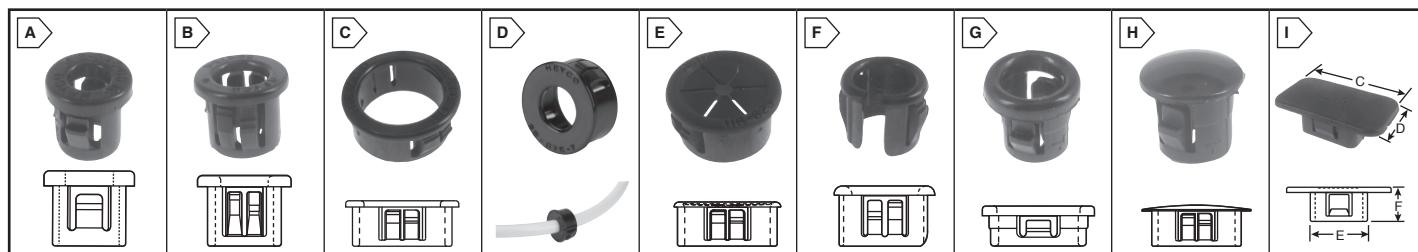
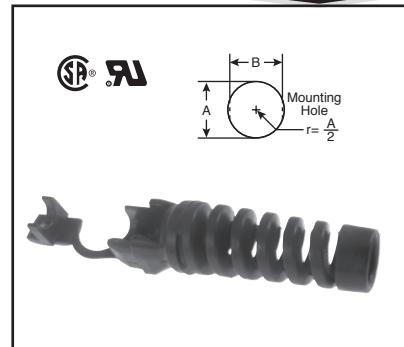
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MOUSER STOCK NO.	Heyco Part No.	UL Type Designation	Panel Dimensions: in.			Description	Price Each			
			Mounting Hole Dia. (A)	To Prevent Rotation (B)	Max. Thickness		1	100	500	1000
836-1590	1590	SV, SVT, HPD	0.500	0.450	0.062	SR 5N-7	.27	.25	.23	.21
836-1593	1593	SV, SVT, HPD	0.500	0.450	0.125	SR 5P-7	.27	.25	.23	.21
836-1599	1599	SJ, SJO, SJT	0.625	0.550	0.062	SR 6N3-7	.81	.73	.66	.59
836-1605	1605	SJ, SJO, SJT	0.625	0.550	0.125	SR 6P3-7	1.06	.949	.862	.762
836-1611	1611	SJ, S, ST	0.750	0.660	0.125	SR 7P-7	.81	.73	.66	.59

## ACCESSORIES

MOUSER STOCK NO.	Heyco Part No.	Description	Price Each
<b>Strain Relief Lab Kit</b>			
836-1999	1999	Approx. 150 pieces of various styles and sizes	40.23
<b>Tools</b>			
836-0022	0022	For hole sizes up to 7/8"	55.05
836-0030	0030	For hole sizes 3/4" and up	132.10



## BUSHINGS • Color: Black



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Heyco Part No.	Fig.	Panel Dimensions: in.		Description	Price Each			
			Hole Size	Max. Thickness		1	100	500	1000

### Snap Bushings

836-2000	2000	A	0.250	0.062	SB 250-2	.13	.09	.07	.06
836-2010	2010	A	0.312	0.062	SB 312-3	.13	.09	.07	.06
836-2030	2030	B	0.375	0.125	SB 375-4	.13	.09	.07	.06
836-2043	2043	B	0.437	0.125	SB 437-5	.13	.09	.07	.06
836-2053	2053	B	0.500	0.125	SB 500-6	.14	.10	.08	.07
836-2073	2073	B	0.625	0.125	SB 625-8	.16	.12	.10	.08
836-2086	2086	B	0.687	0.125	SB 687-9	.16	.12	.10	.08
836-2096	2096	B	0.750	0.125	SB 750-10	.16	.12	.10	.08
836-2840	2840	A	0.750	0.250	SB 750-625	.19	.14	.12	.10
836-2103	2103	C	0.812	0.125	SB 812-10	.18	.13	.11	.09
836-2126	2126	C	0.875	0.125	SB 875-11	.18	.13	.11	.09
836-2140	2140	C	1.000	0.125	SB 1000-12	.21	.17	.15	.13
836-2166	2166	C	1.125	0.125	SB 1093-15	.23	.18	.15	.13
836-2182	2182	C	1.870	0.125	SB 1187-15	.24	.19	.16	.14
836-2201	2201	C	1.250	0.125	SB 1250-16	.24	.19	.16	.14
836-2210	2210	C	1.375	0.125	SB 1375-16	.33	.28	.25	.23
836-2240	2240	C	1.500	0.125	SB 1500-21	.25	.20	.17	.15
836-2300	2300	C	1.750	0.125	SB 1750-22	.25	.20	.17	.15
836-2406	2406	C	2.000	0.125	SB 2000-28	.25	.20	.17	.15
836-2417	2417	C	2.250	0.250	SB 225-29	.44	.40	.36	.32
836-2420	2420	C	2.250	0.250	SB 2.5-31	.57	.52	.46	.42
836-2461	2461	C	3.000	0.250	SB 3.0-39	.92	.83	.75	.67
836-2479	2479	C	4.000	0.250	SB 4.0-55	1.34	1.22	1.10	.99

### Reducer Snap Bushings

836-2020	2020	D	0.375	0.125	SB 375-3	.13	.09	.07	.06
836-2038	2038	D	0.437	0.125	SB 437-4	.13	.09	.07	.06
836-2049	2049	D	0.500	0.125	SB 500-5	.14	.10	.08	.07
836-2058	2058	D	0.500	0.125	SB 500-4	.13	.09	.07	.06
836-2063	2063	D	0.562	0.125	SB 562-6	.09	.06	.055	.046
836-2083	2083	D	0.687	0.125	SB 687-8	.17	.13	.11	.09
836-2110	2110	D	0.875	0.125	SB 875-6	.17	.13	.11	.09
836-2116	2116	D	0.875	0.125	SB 875-8	.16	.12	.105	.086
836-2120	2120	D	0.875	0.125	SB 875-9	.18	.13	.11	.09
836-2123	2123	D	0.875	0.125	SB 875-10	.18	.13	.11	.09
836-2163	2163	D	1.093-1.125	0.125	SB 1093-14	.23	.18	.15	.13
836-2207	2207	D	1.375	0.125	SB 1375-14	.37	.33	.29	.26
836-2233	2233	D	1.500	0.125	SB 1500-7	.40	.36	.32	.29
836-2236	2236	D	1.500	0.125	SB 1500-18	.25	.20	.17	.15
836-2400	2400	D	2.000	0.125	SB 2000-26	.25	.20	.17	.15

### Universal Bushings

836-2077	2077	E	0.625	0.125	UB-625	.18	.13	.11	.09
836-2089	2089	E	0.750	0.125	UB-750	.19	.14	.12	.10
836-2106	2106	E	0.812	0.125	UB-812	.22	.17	.14	.11
836-2119	2119	E	0.875	0.125	UB-875	.22	.17	.14	.11
836-2137	2137	E	1.000	0.125	UB-1000	.22	.17	.14	.11
836-2157	2157	E	1.093	0.125	UB-1093	.23	.18	.15	.12
836-2184	2184	E	1.375	0.125	UB-1375	.27	.21	.16	.13

### Open/Closed Bushings

836-2865	2865	F	0.375	0.125	OCB-375	.17	.13	.11	.09
836-2871	2871	F	0.500	0.125	OCB-500	.20	.15	.13	.12
836-2869	2869	F	0.562	0.125	OCB-562	.16	.12	.10	.08
836-2872	2872	F	0.625	0.125	OCB-625	.16	.12	.10	.08
836-2873	2873	F	0.750	0.125	OCB-750	.22	.15	.13	.11
836-2874	2874	F	0.875	0.125	OCB-875	.21	.10	.09	.07
836-2878	2878	F	1.000	0.125	OCB-1000	.24	.11	.10	.08
836-2879	2879	F	1.093	0.125	OCB-1093	.26	.21	.16	.13

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2058

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## NYLON D-SUB MOUNTING HOLE PLUGS

\* Maximum Panel Thickness: 0.17"

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Heyco Part No.	Fig.	Panel Dimensions: in.				Description	Price Each				
			Hole Size	C	D	E	F	1	100	500	1000	
836-2966	2966	I	0.81	1.25	.70	.69	.41	POP-DB9	.36	.34	.32	.30
836-2968	2968	I	1.13	1.57	.70	1.05	.41	POP-DB15	.61	.57	.53	.49
836-2970	2970	I	1.67	2.12	.70	1.55	.41	POP-DB25	.72	.67	.62	.57
836-2972	2972	I	2.33	2.77	.70	2.23	.41	POP-DB37	.83	.77	.72	.66

# HEYCO Rubber Grommets

RoHS Compliant

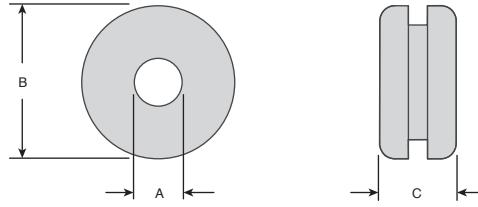
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## HEYCO® RUBBER GROMMETS

### Features:

- Used to protect or cover through holes
- Helps eliminate sharp edges so your wires are protected
- Material: Styrene Butadiene Rubber
- Adds aesthetic value to your application
- Operating Temp: -40°F to 221°F
- Good water resistance
- Provides vibration dampening



### Mounting Diameter: 0.250" to 0.562"

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Mounting Hole Dia. (in.)	Description	Dimensions: in.			Panel Thickness	Price Each	
			A	B	C		1	100
836-G1004	0.250	RG 250-4-2	0.125	0.344	0.188	0.063	.12	.09
836-G1005	0.250	RG 250-5-2	0.156	0.375	0.188	0.063	.11	.084
836-G1006	0.250	RG 250-5-2A	0.156	0.438	0.375	0.063	.16	.12
836-G1010	0.281	RG 281-6-3	0.188	0.438	0.219	0.094	.15	.11
836-G1017	0.312	RG 312-6-2	0.188	0.406	0.219	0.063	.18	.12
836-G1018	0.312	RG 312-6-2A	0.188	0.438	0.188	0.063	.11	.071
836-G1019	0.312	RG 312-6-2B	0.188	0.5	0.25	0.063	.17	.11
836-G1014	0.312	RG 312-6-3	0.188	0.5	0.281	0.094	.20	.14
836-G1020	0.312	RG 312-6-4	0.188	0.438	0.25	0.125	.10	.07
836-G1023	0.312	RG 312-6-8	0.188	0.438	0.375	0.250	.19	.13
836-G1026	0.312	RG 312-7-2	0.219	0.438	0.188	0.063	.09	.063
836-G1033	0.375	RG 375-4-3	0.125	0.5	0.313	0.094	.15	.106
836-G1034	0.375	RG 375-6-6	0.188	0.625	0.375	0.188	.15	.114
836-G1037	0.375	RG 375-8-2	0.25	0.563	0.25	0.063	.19	.13
836-G1038	0.375	RG 375-8-3	0.25	0.5	0.25	0.094	.33	.23
836-G1039	0.375	RG 375-8-3A	0.25	0.563	0.281	0.094	.18	.12
836-G1042	0.375	RG 375-9-2	0.281	0.563	0.25	0.063	.14	.10
836-G1043	0.375	RG 375-10-12	0.313	0.563	0.5	0.375	.18	.12
836-G1047	0.406	RG 406-9-4	0.281	0.625	0.375	0.125	.12	.09
836-G1052	0.437	RG 437-8-2	0.25	0.625	0.188	0.063	.11	.07
836-G1053	0.437	RG 437-8-2A	0.25	0.625	0.313	0.063	.17	.113
836-G1056	0.437	RG 437-8-4	0.25	0.625	0.25	0.125	.12	.08
836-G1057	0.437	RG 437-8-6	0.25	0.625	0.313	0.188	.14	.10
836-G1058	0.437	RG 437-8-8	0.25	0.625	0.375	0.250	.15	.11
836-G1061	0.437	RG 437-10-2	0.313	0.625	0.281	0.063	.12	.09
836-G1062	0.437	RG 437-10-3	0.313	0.625	0.313	0.094	.25	.17
836-G1086	0.500	RG 500-10-8	0.313	0.625	0.625	0.250	.38	.27
836-G1089	0.500	RG 500-12-2	0.375	0.625	0.25	0.063	.11	.08
836-G1090	0.500	RG 500-12-2A	0.375	0.688	0.281	0.063	.19	.127
836-G1092	0.500	RG 500-12-4	0.375	0.625	0.313	0.125	.52	.37
836-G1093	0.500	RG 500-12-4A	0.375	0.625	0.406	0.125	.10	.07
836-G1094	0.500	RG 500-12-5	0.375	0.688	0.313	0.155	.22	.154
836-G1095	0.500	RG 500-12-8	0.375	0.75	0.5	0.250	.19	.13
836-G1096	0.500	RG 500-12-12	0.375	0.625	0.625	0.375	.23	.164
836-G1110	0.562	RG 562-6-6	0.188	0.75	0.312	0.188	.40	.372
836-G1112	0.562	RG 562-10-2	0.313	0.813	0.313	0.063	.27	.194
836-G1114	0.562	RG 562-10-4	0.313	0.813	0.375	0.125	.34	.243

### Mounting Diameter: 0.875" to 1.250"

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Mounting Hole Dia. (in.)	Description	Dimensions: in.			Panel Thickness	Price Each	
			A	B	C		1	100
836-G1215	0.875	RG 875-20-2	0.625	1.125	0.313	0.063	.24	.16
836-G1218	0.875	RG 875-20-4	0.625	1.125	0.375	0.125	.26	.18
836-G1220	0.875	RG 875-20-8	0.625	1.125	0.5	0.250	.32	.233
836-G1232	0.968	RG 968-22-12	0.688	1.313	0.625	0.375	.74	.523
836-G1246	1.000	RG 1000-16-2	0.500	1.250	0.25	0.063	.34	.247
836-G1248	1.000	RG 1000-16-8	0.500	1.375	0.5	0.266	.58	.403
836-G1249	1.000	RG 1000-18-12	0.563	1.250	0.625	0.375	1.82	.128
836-G1252	1.000	RG 1000-22-2	0.688	1.313	0.375	0.063	.34	.254
836-G1257	1.000	RG 1000-22-8	0.688	1.313	0.563	0.250	.36	.258
836-G1258	1.000	RG 1000-24-2	0.750	1.250	0.297	0.063	.33	.234
836-G1260	1.000	RG 1000-24-4A	0.750	1.250	0.375	0.125	1.59	.110
836-G1261	1.000	RG 1000-24-6	0.750	1.250	0.563	0.188	.42	.30
836-G1264	1.000	RG 1000-28-8	0.875	1.250	0.625	0.250	.50	.354
836-G1269	1.062	RG 1062-24-2	0.750	1.375	0.375	0.063	.35	.25
836-G1273	1.062	RG 1062-24-8	0.750	1.375	0.563	0.250	.41	.30
836-G1281	1.125	RG 1125-28-3	0.875	1.500	0.344	0.094	.55	.38
836-G1291	1.250	RG 1250-16-4	0.500	1.500	0.313	0.125	.52	.36
836-G1298	1.250	RG 1250-24-2	0.750	1.625	0.25	0.063	.65	.459
836-G1299	1.250	RG 1250-24-4	0.750	1.625	0.313	0.125	.89	.629
836-G1304	1.250	RG 1250-28-4	0.875	1.625	0.5	0.125	.49	.34
836-G1306	1.250	RG 1250-28-6	0.875	1.625	0.563	0.188	.55	.383
836-G1307	1.250	RG 1250-28-8	0.875	1.625	0.625	0.250	.62	.433

### Mounting Diameter: 0.562" to 0.875"

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Mounting Hole Dia. (in.)	Description	Dimensions: in.			Panel Thickness	Price Each	
			A	B	C		1	100
836-G1121	0.562	RG 562-12-12	0.375	0.75	0.75	0.375	.30	.215
836-G1123	0.562	RG 562-14-2	0.438	0.75	0.25	0.063	.16	.11
836-G1127	0.625	RG 625-6-4	0.188	0.875	0.25	0.125	.92	.646
836-G1130	0.625	RG 625-12-2	0.375	0.875	0.313	0.063	.14	.105
836-G1132	0.625	RG 625-12-4	0.375	0.875	0.375	0.125	.21	.14
836-G1134	0.625	RG 625-12-8	0.375	0.875	0.5	0.250	.23	.163
836-G1135	0.625	RG 625-13-6	0.4	1.100	0.435	0.187	.34	.247
836-G1137	0.625	RG 625-16-2	0.5	0.813	0.281	0.063	.39	.28
836-G1140	0.630	RG 630-16-4	0.5	0.81	0.3	0.110	.136	.953
836-G1150	0.687	RG 687-14-2	0.438	0.938	0.313	0.063	.29	.20
836-G1151	0.687	RG 687-14-2A	0.438	0.938	0.348	0.063	.25	.173
836-G1152	0.687	RG 687-14-4	0.438	0.938	0.375	0.125	.65	.454
836-G1153	0.687	RG 687-14-6	0.438	0.938	0.438	0.188	.30	.215
836-G1155	0.687	RG 687-16-2	0.5	0.875	0.25	0.063	.22	.15
836-G1174	0.750	RG 750-12-2	0.375	1.000	0.375	0.063	.69	.491
836-G1176	0.750	RG 750-16-2	0.5	0.875	0.25	0.063	.45	.31
836-G1177	0.750	RG 750-16-2A	0.5	1.000	0.25	0.063	.70	.49
836-G1178	0.750	RG 750-16-3	0.5	0.875	0.344	0.094	.26	.18
836-G1179	0.750	RG 750-16-3A	0.5	0.969	0.281	0.094	.22	.15
836-G1181	0.750	RG 750-16-5	0.5	0.938	0.406	0.156	.31	.212
836-G1182	0.750	RG 750-16-12	0.5	1.000	0.625	0.375	.31	.213
836-G1188	0.812	RG 812-12-4	0.375	1.063	0.375	0.125	1.03	.958
836-G1197	0.812	RG 812-18-2	0.563	1.063	0.313	0.063	.22	.15
836-G1198	0.812	RG 812-18-4	0.563	1.063	0.375	0.125	.65	.45
836-G1200	0.812	RG 812-18-8	0.563	1.063	0.5	0.250	.46	.31
836-G1208	0.875	RG 875-10-2	0.313	1.375	0.25	0.063	.61	.423
836-G1214	0.875	RG 875-18-12	0.563	1.063	0.625	0.375	.45	.32

# KEYSTONE Test Points and Hardware

**KEYSTONE**  
ELECTRONICS CORP.

RoHS Compliant This page of product is RoHS compliant.

## THRU-HOLE MOUNT TEST POINTS - COLOR KEYED

### Specifications:

- Color-Keyed for visibility and quick identification
- Economical choice for PC Test point terminations
- Snap-fit mounting provides positive retention for wave soldering
- Space saving, ultra low and low profile designs
- Ideal for reliable production testing and field service troubleshooting
- Wire form loop for safe, non-slip testing
- Practical replacement for wire-wrap posts and turrets
- Secure grip for J hooks, EZ hooks, grabbers, alligator clips, tips or probes
- Plastic base strengthens terminal for positive holding power

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Keystone Part No.	Fig.	Mounting Hole (in.)	Board Thickness (in.)	Color	Price Each			
						1	100	500	1000

Miniature Terminal: .010 x .020" Phosphor Bronze Wire, Tin Plate; Base: Glass Filled Nylon UL94V-0

534-5000	5000	A	.040	.062 & .093	Red	.33	.223	.191	.16
534-5001	5001	A	.040	.062 & .093	Black	.32	.216	.185	.155
534-5002	5002	A	.040	.062 & .093	White	.32	.216	.185	.155
534-5003	5003	A	.040	.062 & .093	Orange	.32	.222	.19	.159
534-5004	5004	A	.040	.062 & .093	Yellow	.32	.222	.19	.159

Compact Terminal: .015 x .032" Phosphor Bronze Wire, Tin Plate; Base: Valox, UL94V-0

534-5005	5005	B	.063	.062 & .093	Red	.32	.222	.19	.159
534-5006	5006	B	.063	.062 & .093	Black	.33	.223	.191	.16
534-5007	5007	B	.063	.062 & .093	White	.32	.222	.19	.159
534-5008	5008	B	.063	.062 & .093	Orange	.32	.216	.185	.155
534-5009	5009	B	.063	.062 & .093	Yellow	.32	.222	.19	.159

Multipurpose Terminal: .015 x .032" Phosphor Bronze Wire, Tin Plate; Base: Valox, UL94V-0

534-5010	5010	C	.063	.062 & .093	Red	.32	.222	.19	.159
534-5011	5011	C	.063	.062 & .093	Black	.32	.222	.19	.159
534-5012	5012	C	.063	.062 & .093	White	.32	.222	.19	.159
534-5013	5013	C	.063	.062 & .093	Orange	.32	.222	.19	.159
534-5014	5014	C	.063	.062 & .093	Yellow	.32	.222	.19	.159

## SMT TEST POINTS - TAPE AND REEL

### 5015 Specifications:

- Contact material: .010 Phosphor Bronze
- Contact Finish: Silver Plated
- Tape Material: 8mm wide, 4mm pitch conductive polycarbonate
- Reel size available = 1,000 pieces

### 5016 Specifications:

- Contact material: .015 Phosphor Bronze
- Contact Finish: Silver Plated
- Tape Material: 12mm wide, 4mm pitch conductive polycarbonate
- Reel size available = 1,000 pieces

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Keystone Part No.	Fig.	Description	Price Each			
				1	100	500	1000
534-5015	5015	D	Miniature Ultra low profile	.17	.112	.096	.081
534-5016	5016	E	Compact unique design	.23	.154	.132	.111

## RUBBER GROMMETS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Keystone Part No.	Fig.	Dimensions: in.					Price Each			
			A	B	C	D	E	1	1000	2500	
534-730	730	F	.125	.187	.062	.312	.187	.18	.078	.071	
534-733	733	F	.125	.250	.062	.343	.187	.18	.076	.069	
534-734	734	F	.125	.437	.062	.625	.187	.102	.594	.531	
534-735	735	F	.125	.375	.093	.500	.312	.48	.227	.207	
534-736	736	F	.187	.312	.062	.437	.218	.16	.075	.068	
534-731	731	F	.187	.312	.062	.437	.218	.16	.075	.068	
534-737	737	F	.187	.281	.093	.437	.218	.36	.17	.156	
534-738	738	F	.250	.437	.062	.625	.187	.38	.182	.165	
534-739	739	F	.250	.375	.062	.562	.250	.20	.094	.087	
534-740	740	F	.250	.375	.093	.500	.250	.32	.153	.14	
534-741	741	F	.312	.562	.062	.812	.312	.58	.302	.272	
534-742	742	F	.312	.437	.062	.625	.312	.26	.127	.116	
534-743	743	F	.312	.437	.093	.625	.312	.41	.194	.178	
534-744	744	F	.375	.625	.062	.875	.312	.63	.333	.301	
534-745	745	F	.375	.500	.062	.625	.250	.22	.102	.094	
534-732	732	F	.437	.562	.062	.750	.250	.27	.13	.119	
534-746	746	F	.437	.687	.062	.937	.312	.70	.368	.332	
534-747	747	F	.500	.812	.062	1.062	.312	.73	.385	.347	
534-749	749	F	.500	.750	.093	.968	.281	.30	.147	.133	
534-750	750	F	.562	.812	.062	1.062	.312	.79	.453	.404	
534-752	752	F	.625	.875	.062	1.125	.312	.49	.259	.233	
534-753	753	F	.625	1.250	.062	1.500	.250	.18	.682	.61	
534-755	755	F	.750	1.062	.062	1.375	.375	.120	.694	.619	
534-756	756	F	.750	1.437	.062	1.812	.375	.284	.167	.150	
534-757	757	F	.875	1.250	.062	1.625	.437	.179	.106	.949	

## RUBBER BUMPERS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Keystone Part No.	Fig.	Screw Size	Dimensions: in.					Price Each			
				A	B	C	D	E	1	100	1000	
534-720	720	G	4	.25	.50	.25	.187	.125	.25	.169	.117	
534-721	721	G	4	.25	.625	.312	.187	.125	.39	.26	.185	
534-722	722	G	4	.25	.718	.437	.218	.125	.67	.489	.354	
534-723	723	H	8	.375	.937	.375	.187	.187	.63	.456	.33	

## THUMB SCREWS

For quick removal of panel from chassis.

- Material: Brass, Nickel Plated (QQ-N-290)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Keystone Part No.	Fig.	Thread Size		Price Each			
			1	100	500	1000	2000	
534-1708	1708	I	6-32		1.49	1.27	1.11	
534-1709	1709	I	8-32		1.94	1.78	1.16	
534-1710	1710	I	10-32		1.94	1.78	1.16	

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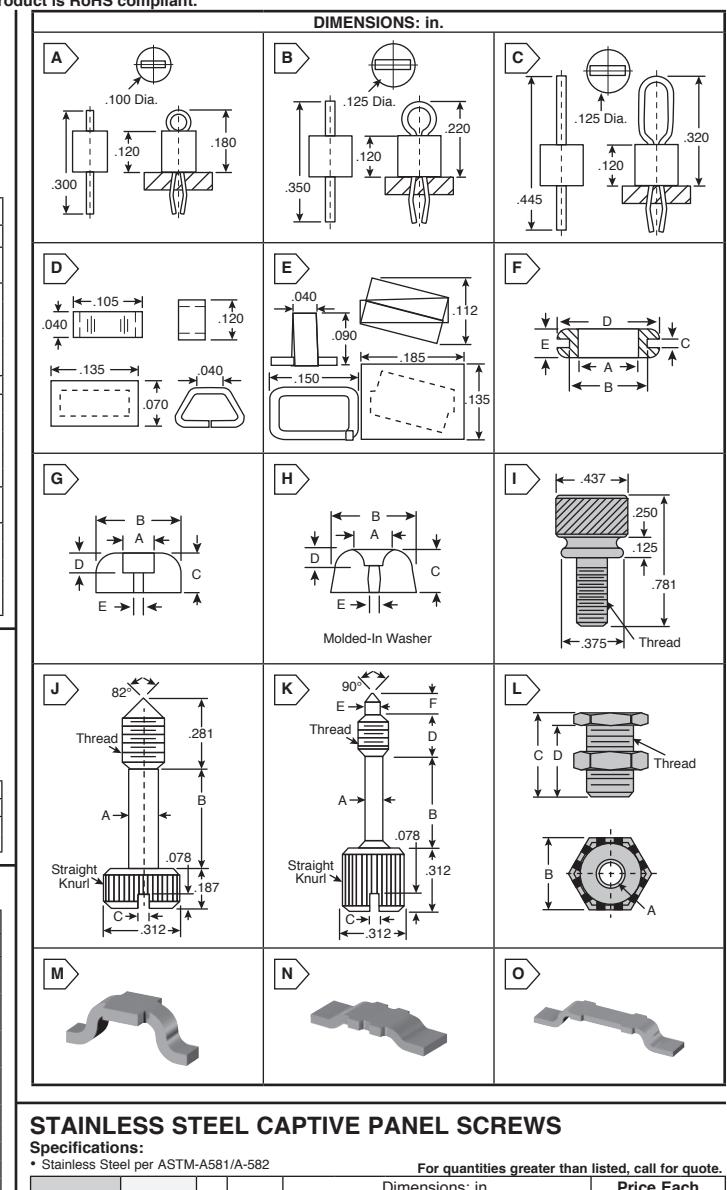
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## PCB JUMPERS

SMT PCB Jumpers link circuit board traces / tracks and offer options where use of through-hole jumpers are not possible. The jumpers have a low profile, space saving design and feature a minimal PCB footprint. Applications include power and aluminum backplanes.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Keystone Part No.
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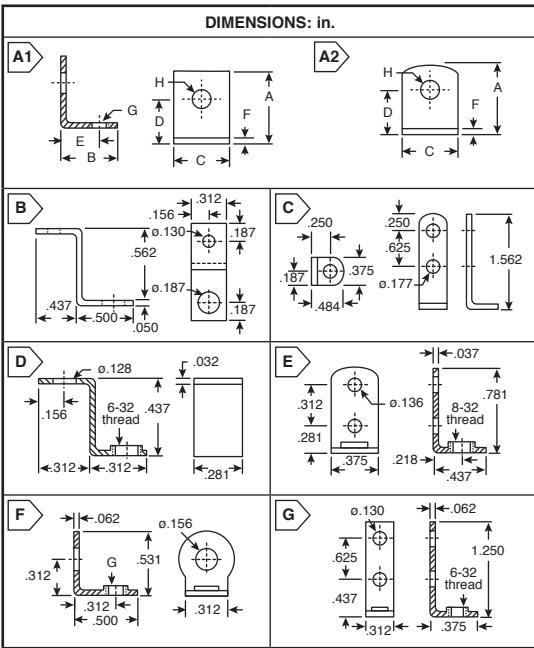
# KEYSTONE Mounting Brackets, Handles, & Accessories

 This page of product is RoHS compliant.

## MOUNTING BRACKETS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Dimensions: in.							Material	Plating	Price Each			
		A	B	C	D	E	F	G Dia.	H Dia.		1	100	500	
<b>Clear Hole Universal Brackets - Non-Threaded</b>														
534-633	A1	.375	.375	.281	.218	.218	.032	.140	.140	Brass	Nickel	.23	.144	.119
534-613	A2	.390	.453	.375	.234	.299	.032	.128	.147	Brass	Nickel	.75	.424	.301
534-615	A1	.420	.343	.281	.281	.203	.032	.125	.144	Brass	Tin	.21	.144	.121
534-4335	A1	.562	.562	.500	.412	.411	.062	.120	.120	Steel	Nickel	.57	.362	.295
534-4336	A1	.562	.562	.500	.412	.412	.062	.144	.144	Steel	Nickel	.57	.362	.295
534-618	A2	.628	.628	.375	.378	.378	.050	.169	.169	Brass	Nickel	.79	.585	.419
534-619	A2	.687	.687	.375	.500	.500	.032	.144	.144	Steel	Tin	.38	.279	.201
534-4326	A1	1.013	.487	.312	.816	.332	.050	.140	.140	Steel	Nickel	.82	.523	.42
534-620	A2	1.156	.656	.375	.906	.406	.032	.169	.169	Steel	Tin	.69	.508	.364
<b>Clear Hole Board Brackets</b>														
534-4325	B	-	-	-	-	-	-	-	-	Steel	Nickel	.67	.528	.411
534-1564	C	-	-	-	-	-	-	-	-	Steel	Nickel	.86	.585	.50
<b>Threaded Brackets</b>														
534-612	A1	.343	.375	.250	.203	.250	.062	.4-40	.130	Steel	Zinc	.25	.172	.146
534-621	A1	.343	.375	.250	.203	.250	.062	.4-40	.4-40	Steel	Zinc	.31	.21	.18
534-616	A1	.453	.312	.250	.265	.187	.047	.4-40	.136	Brass	Tin	.48	.347	.302
534-630	D	-	-	-	-	-	-	-	-	Brass	Tin	1.30	.992	.812
534-631	E	-	-	-	-	-	-	-	-	Steel	Tin	.46	.335	.291
534-634	A1	.375	.375	.281	.218	.218	.032	6-32	.140	Brass	Nickel	.50	.367	.319
534-614	A2	.420	.343	.312	.250	.197	.032	6-32	.144	Brass	Tin	.27	.186	.159
534-4334	A1	.562	.562	.500	.412	.412	.062	6-32	6-32	Steel	Nickel	.39	.263	.225
534-4332	F	-	-	-	-	-	-	6-32	-	Brass	Nickel	.77	.562	.488
534-4333	F	-	-	-	-	-	-	8-32	-	Brass	Nickel	.77	.562	.488
534-617	A2	.578	.500	.500	.328	.299	.062	6-32	.165	Steel	Tin	.47	.342	.297
534-611	A2	.375	.422	.312	.234	.250	.037	8-32	.135	Brass	Tin	.30	.208	.179
534-708	G	-	-	-	-	-	-	-	-	Steel	Nickel	.76	.576	.471



## ROUND INSTRUMENTATION HANDLES

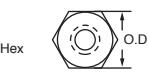
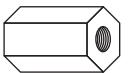
- Enhance the look of quality products and equipment while providing sturdiness for contemporary equipment.

Fig.	Dimensions: in.						Nickel Plated Brass					Aluminum Black Anodize				
							MOUSER STOCK NO.		Price Each			MOUSER STOCK NO.		Price Each		
	A	B	C Dia.	D	E	F	1	10	100	500	1	10	100	500	1	10
A	1.250	1.000	.156	.375	4-40	.156	534-7140	3.81	3.60	3.27	3.06	534-7170	4.67	4.47	3.23	3.15
A	2.000	1.000	.156	.375	4-40	.156	534-7141	4.13	3.46	3.22	3.00	534-7171	3.56	3.29	3.08	2.90
A	3.000	1.000	.156	.375	4-40	.156	534-7142	3.49	3.43	3.21	2.76	534-7172	5.24	4.81	3.48	3.08
A	1.250	.625	.187	.156	4-40	.187	534-9100	5.73	5.27	4.84	3.86	534-9110	4.86	4.46	3.23	3.06
A	1.500	.625	.187	.156	4-40	.187	534-9104	6.79	6.58	4.56	4.32	534-9114	5.11	4.70	4.47	3.44
A	1.750	.625	.187	.156	4-40	.187	534-9102	6.12	5.49	5.06	4.06	-	-	-	-	-
A	2.000	.625	.187	.156	4-40	.187	534-9106	6.31	5.81	5.33	4.24	534-9116	5.11	4.70	4.25	3.96
A	1.250	1.000	.187	.250	6-32	.187	534-9107	6.91	6.35	5.83	4.63	534-9117	5.11	4.69	4.33	3.44
A	1.500	1.000	.187	.250	6-32	.187	534-9108	7.14	6.42	5.91	4.74	534-9118	5.97	5.49	5.05	4.02
A	2.000	1.000	.187	.250	6-32	.187	534-9109	7.20	6.49	5.96	4.87	534-9119	5.60	5.14	4.73	3.74
A	3.000	1.000	.187	.250	6-32	.187	534-9143	7.09	6.73	4.80	4.56	534-7173	5.93	5.44	5.00	4.49
A	3.000	1.500	.250	.562	8-32	.250	534-485	6.83	6.14	4.63	4.17	534-515	5.91	5.61	4.00	3.81
A	3.500	1.500	.250	.562	8-32	.250	534-480	5.51	5.24	4.96	4.67	534-510	6.04	5.73	4.08	3.60
A	4.000	1.500	.250	.562	8-32	.250	534-7144	7.14	6.42	4.86	4.62	534-7174	6.76	6.47	4.64	4.05
A	4.000	1.750	.250	.562	8-32	.250	534-486	5.30	4.48	4.15	3.67	534-516	6.49	5.97	4.28	4.07
A	4.500	1.500	.250	.562	8-32	.250	534-481	5.11	4.31	3.99	3.67	534-511	4.22	3.85	3.58	3.30
A	4.500	1.750	.250	.562	8-32	.250	534-487	5.27	4.40	4.06	3.86	-	-	-	-	
A	5.000	1.500	.250	.562	8-32	.250	534-482	6.04	5.55	5.27	4.85	534-512	5.17	4.32	4.08	3.72
A	5.000	1.750	.250	.562	8-32	.250	534-488	5.48	4.69	4.45	4.22	534-518	4.93	4.36	4.14	3.72
A	5.500	1.500	.250	.562	8-32	.250	534-7144	7.14	6.42	4.86	4.62	534-7174	5.04	4.25	3.97	3.59
A	6.000	1.500	.250	.562	8-32	.250	534-489	5.67	4.85	4.60	4.36	534-519	4.97	4.37	3.94	3.44
A	6.000	1.750	.250	.562	8-32	.250	534-7145	5.63	5.31	4.92	4.43	534-7175	5.59	4.91	4.67	4.18
A	3.000	1.500	.312	.562	10-32	.312	534-7146	5.31	4.90	4.65	4.11	534-7176	7.05	6.96	6.62	4.99
A	4.000	1.500	.312	.562	10-32	.312	534-493	5.31	4.74	4.51	4.14	534-523	7.06	6.70	6.37	6.05
A	4.000	1.750	.312	.562	10-32	.312	534-494	8.35	7.51	5.60	5.32	534-524	7.42	6.68	5.87	5.66
A	4.500	1.500	.312	.562	10-32	.312	534-7147	5.62	4.97	4.65	4.21	534-7177	6.18	5.87	5.40	5.13
A	4.562	1.500	.312	.562	10-32	.312	534-9121	5.62	4.97	4.65	4.21	534-7177	5.43	4.52	4.22	4.10
A	5.000	1.500	.312	.562	10-32	.312	534-491	5.54	5.23	4.96	4.71	534-521	5.17	4.85	4.44	4.11
A	5.000	1.750	.312	.562	10-32	.312	534-495	6.42	5.37	4.94	4.68	534-525	7.77	7.14	5.12	4.41
A	5.500	1.500	.312	.562	10-32	.312	534-492	5.95	5.01	4.72	4.22	534-522	8.49	8.22	5.40	4.86
A	6.000	1.500	.312	.562	10-32	.312	534-7148	6.19	5.71	5.38	4.82	534-7178	5.40	4.53	4.08	3.82
A	6.000	1.750	.312	.562	10-32	.312	534-7149	7.37	6.21	5.72	5.15	534-7179	7.92	6.60	5.33	5.06
A	6.437	1.750	.312	.562	10-32	.312	534-7149	7.37	6.21	5.72	5.15	534-7179	8.35	7.59	5.54	5.25
A	4.000	1.375	.375	.375	10-32	.375	534-7150	9.05	8.14	6.07	5.77	534-7180	4.32	4.05	3.73	3.53
A	6.000	1.375	.375	.375	10-32	.375	534-7151	9.60	8.83	6.45	6.13	534-7181	7.92	7.20	5.33	5.06

For quantities greater than listed, call for quote.

Fig.	Dimensions: in.						Nickel Plated Brass					Aluminum Black Anodize				
							MOUSER STOCK NO.		Price Each			MOUSER STOCK NO.		Price Each		
	For Diameter Thread	A	B	C Dia.	D	E	F	1	10	100	500	1	10	100	500	1
B	.156/4-40	.250	.120	.047	.125	.200	.161	534-71								

## HEX AND ROUND STANDOFFS

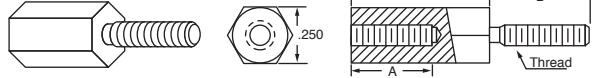


For quantities greater than listed, call for quote.

Length "L" (in.)	Aluminum Clear Iridite				Brass Zinc Plate							
	Hex		Round		Price Each		Hex		Round		Price Each	
	MOUSER STOCK NO.	STOCK NO.	1	100	MOUSER STOCK NO.	STOCK NO.	1	100	MOUSER STOCK NO.	STOCK NO.	1	100
<b>2-56 Thread (.156 O.D.)</b>												
.187	534-1797A	534-1801A	.60	.444	534-1798A	534-1802A	.72	.524				
.250	534-1797B	534-1801B	.65	.475	534-1798B	534-1802B	.81	.616				
.312	534-1797C	534-1801C	.67	.495	534-1798C	534-1802C	.97	.741				
.375	534-1797D	534-1801D	.70	.51	534-1798D	534-1802D	1.05	.798				
<b>4-40 Thread (.187 O.D.)</b>												
.250	534-1891	534-2025	.37	.25	534-1450	534-1547	.45	.326				
.375	534-1892	534-2026	.44	.294	534-1803	534-1864	.52	.382				
.500	534-1893	534-2027	.48	.323	534-1656	534-1657	.60	.435				
.625	534-1894	534-2028	.49	.357	534-1804	-----	.75	.545				
.750	534-1895	534-2029	.54	.395	534-1656A	534-1657A	.77	.589				
.875	534-1896	534-2030	.59	.435	534-1805	-----	.92	.529				
1.000	534-1897	534-2031	.65	.477	534-1656B	534-1657B	.99	.76				
<b>4-40 Thread (.250 O.D.)</b>												
.250	534-2201	534-3478	.36	.241	534-1450A	534-1547A	.48	.324				
.375	534-2202	534-3479	.40	.27	534-1450B	534-1547B	.53	.381				
.500	534-2203	534-3480	.45	.299	534-1450C	534-1547C	.59	.428				
.625	534-2208	534-1839	.48	.323	534-1829	-----	.75	.569				
.750	534-2204	534-3481	.47	.342	534-1450D	534-1547D	.85	.652				
.875	534-1809	534-1846	.53	.39	534-1830	534-1876	.91	.693				
1.000	534-2205	534-3482	.59	.435	534-1450E	534-1547E	.94	.713				
1.500	534-2206	534-3483	.93	.709	-----	-----	-	-				
2.000	534-2207	534-3484	1.08	.818	-----	534-1878	1.81	.134				
<b>6-32 Thread (.250 O.D.)</b>												
.250	534-2208	534-3485	.36	.241	534-1451A	534-1548A	.47	.315				
.375	534-2209	534-3486	.40	.27	534-1451B	534-1548B	.51	.37				
.500	534-2210	534-3487	.44	.291	534-1451C	534-1548C	.59	.428				

## HEX MALE/FEMALE THREADED STANDOFFS

DIMENSIONS: in.



Thread Size	A (in.) Internal	B (in.) External
4-40	.250	.187
6-32	.375	.250
8-32	.375	.375

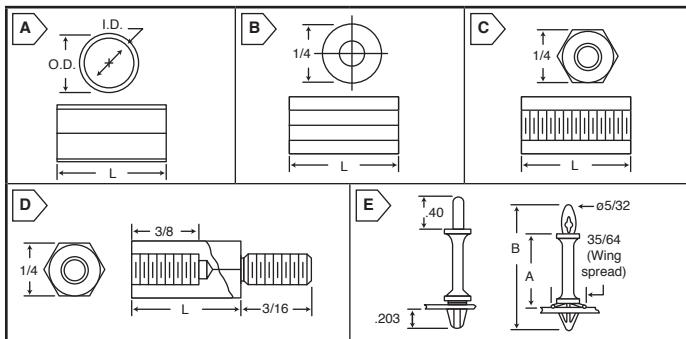
† Int. thread - .130/.150      †† Int. thread - .250

For quantities greater than listed, call for quote.

Length "L" (in.)	Stainless Steel				Brass Nickel Plate				Aluminum Clear Iridite			
	Hex	Price Each	Hex	Price Each	Hex	Price Each	Hex	Price Each	Hex	Price Each	Hex	Price Each
	MOUSER STOCK NO.	1	100	MOUSER STOCK NO.	1	100	MOUSER STOCK NO.	1	100	MOUSER STOCK NO.	1	100
<b>-40 Thread</b>												
.250	534-8712	1.47	1.10	534-8713	.53	.379	534-8714	.42	.281			
.375	534-2087	1.54	1.15	534-7200	.57	.419	534-8400	.47	.318			
.500	534-2088	1.97	1.35	534-1944	.73	.531	534-8401	.57	.417			
.625	534-2089	2.28	2.21	534-1945	.74	.539	534-8402	.61	.448			
.750	534-2090	2.10	1.62	534-1946	.81	.614	534-8403	.62	.456			
.875	534-2091	2.32	2.01	534-7201	.84	.641	534-8404	.67	.495			
1.000	534-2092	1.88	1.41	534-1947	.92	.708	534-8405	.72	.524			
1.125	534-2093	4.11	2.45	534-7202	1.00	.767	534-8406	.80	.614			
1.250	534-2094	3.10	2.79	534-1948	1.43	1.08	534-8407	.81	.62			
1.375	534-2095	3.92	3.61	534-1949	1.46	1.11	534-8408	.95	.726			
1.500	534-2096	2.77	2.22	534-1950	1.49	1.11	534-8409	.97	.743			
1.625	-----	-	-	534-7203	1.50	1.12	534-8410	1.00	.765			
1.750	534-2098	2.98	2.07	-----	-	-	534-8411	1.03	.781			
2.000	534-2099	2.96	2.13	534-1951	1.68	1.25	534-8412	1.06	.807			
<b>6-32 Thread</b>												
.250	534-8715	4.16	2.24	534-8716	.52	.371	534-8717	.45	.302			
.375	534-2119	2.18	1.96	534-7210	.60	.433	534-8413	.43	.309			
.500	534-2120	2.21	1.87	534-1952	.65	.472	534-8414	.43	.314			
.625	534-2121	1.36	.98	534-1953	.75	.573	534-8415	.54	.395			
.750	534-2122	2.41	1.17	534-1954	.79	.602	534-8416	.55	.398			
.875	534-2123	2.93	2.63	534-7211	.90	.692	534-8417	.58	.422			
1.000	534-2124	2.38	1.16	534-1644	.93	.712	534-8418	.61	.443			
1.125	534-2125	1.82	1.47	534-7212	.99	.76	534-8419	.64	.469			
1.250	534-2126	2.14	1.59	534-1955	1.18	.899	534-8420	.69	.502			
1.375	-----	-	-	534-1956	1.27	.974	534-8421	.78	.57			
1.500	534-2128	2.94	2.01	534-1645	1.29	.986	534-8422	.82	.624			
1.625	534-2129	2.06	1.64	534-7214	1.50	1.12	534-8423	.83	.633			
1.750	534-2130	3.21	1.56	534-7215	1.67	1.25	534-8424	.87	.664			
2.000	534-2131	3.96	3.64	534-1646	1.68	1.25	534-8425	.89	.677			
<b>8-32 Thread</b>												
.375	534-2149	3.60	2.07	534-7220	.67	.488	534-8426	.56	.409			
.500	534-2150	2.67	1.86	534-1957	.68	.493	534-8427	.57	.417			
.625	534-2151	2.72	1.84	534-1958	.88	.674	534-8428	.61	.449			
.750	534-2152	2.58	1.79	534-1959	.92	.708	534-8429	.65	.477			
.875	534-2153	2.26	2.10	-----	-	-	534-8430	.73	.53			
1.000	534-2154	2.87	2.06	534-1960	1.07	.814	534-8431	.77	.562			
1.125	534-2155	3.38	2.82	534-7222	1.14	.873	534-8432	.94	.722			
1.250	534-2156	4.02	3.69	534-1961	1.43	1.08	534-8433	.97	.747			
1.375	534-2157	4.41	3.21	-----	-	-	534-8434	1.06	.807			
1.500	534-2158	3.74	2.75	534-1963	1.49	1.11	534-8435	1.07	.815			
1.625	534-2159	6.57	3.77	534-7224	1.58	1.18	534-8436	1.08	.824			
1.750	534-2160	5.94	3.40	534-7225	1.68	1.25	534-8437	1.09	.833			
2.000	534-2161	4.49	3.25	534-1964	1.68	1.25	534-8438	1.10	.842			

For quantities greater than listed, call for quote.

Length "L" (in.)	Aluminum Clear Iridite				Brass Zinc Plate			
	Hex	Round	Price Each	Hex	Round	Price Each	Hex	Round
	MOUSER STOCK NO.	STOCK NO.	1	100	MOUSER STOCK NO.	STOCK NO.	1	100
<b>6-32 Thread (.250 O.D.) (Cont.)</b>								
.625	534-1813	534-1847	.44	.32	534-1451D	534-1548D	.75	.569
.750	534-2211	534-3488	.47	.343	534-1451E	-----	.83	.633



## ALUMINUM SPACERS

- Precision rolled
- Square ends
- Tight joint on outside diameter
- No burrs

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Length (in.)	Screw Size	I.D. $\pm .005$	O.D. $\pm .007$	Price Each			
						1	100	500	1000
534-397	A	3/16	4	.125	.167	.16	.119	.087	.06
534-398	A	1/4	4	.125	.167	.15	.087	.072	.063
534-399	A	5/16	4	.125	.167	.16	.121	.089	.062
534-400	A	3/8	4	.125	.167	.23	.13	.10	.07
534-402	A	1/2	4	.125	.167	.23	.129	.091	.064
534-403	A	5/8	4	.125	.167	.17	.098	.09	.068
534-418	A	3/4	4	.125	.167	.26	.148	.105	.074
534-420	A	1	4	.125	.167	.21	.158	.114	.08
534-405	A	1/4	6	.151	.193	.16	.121	.088	.061
534-406	A	5/16	6	.151	.193	.22	.128	.09	.063
534-407	A	3/8	6	.151	.193	.22	.132	.091	.063
534-409	A	1/2	6	.151	.193	.16	.098	.081	.071
534-425	A	3/4	6	.151	.193	.20	.155	.112	.078
534-427	A	1	6	.151	.193	.20	.15	.108	.075
534-412	A	1/4	8	.178	.232	.34	.203	.139	.097
534-414	A	3/8	8	.178	.232	.36	.209	.146	.101
534-416	A	1/2	8	.178	.232	.28	.215	.154	.108
534-417	A	5/8	8	.178	.232	.41	.23	.163	.114
534-432	A	3/4	8	.178	.232	.43	.246	.174	.121
534-434	A	1	8	.178	.232	.48	.273	.195	.136

## BRASS SPACERS

### Round

- 1/4" O.D. round unthreaded
- Nickel plated
- Drilled for clearance of screw sizes shown in table

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Length (in.)	Screw Size	I.D.	O.D.	Price Each			
						1	100	500	1000
534-1454A	B	1/4	4	.120	.250	.45	.299	.257	.214
534-1457A	B	1/4	6	.140	.250	.46	.308	.265	.221
534-1457B	B	3/8	6	.140	.250	.43	.315	.273	.227
534-1480	B	1/4	8	.171	.250	.46	.308	.264	.22
534-1481	B	3/8	8	.171	.250	.49	.328	.281	.235

### Hex Threaded

- Zinc plated

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	C	1/4	4-40	.125	.250	.48	.324	.278	.231	Price Each			
											1	100	500	1000
534-1450A	C	3/8	4-40	.125	.250	.53	.381	.332	.276					
534-1450C	C	1/2	4-40	.125	.250	.59	.428	.372	.31					
534-1829	C	5/8	4-40	.125	.250	.75	.569	.466	.43					
534-1451A	C	1/4	6-32	.151	.250	.47	.315	.27	.225					
534-1451B	C	3/8	6-32	.151	.250	.51	.37	.322	.268					
534-1451C	C	1/2	6-32	.151	.250	.59	.428	.372	.31					
534-1451D	C	5/8	6-32	.151	.250	.75	.569	.466	.43					
534-1451E	C	3/4	6-32	.151	.250	.83	.633	.518	.478					
534-1635	C	1	6-32	.151	.250	.96	.734	.60	.554					
534-1474A	C	1/4	8-32	.178	.250	.48	.324	.278	.232					
534-1474B	C	3/8	8-32	.178	.250	.52	.381	.332	.276					
534-1474C	C	1/2	8-32	.178	.250	.60	.44	.383	.319					
534-1834	C	5/8	8-32	.178	.250	.75	.569	.466	.43					
534-1474D	C	3/4	8-32	.178	.250	.85	.652	.533	.492					
534-1474E	C	1	8-32	.178	.250	.96	.734	.60	.554					

### Hex Male/Female Threaded

- Can be used as grounded PCB mounts
- Nickel plated

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	D	1/2	4-40	.125	.250	.73	.531	.462	.384	Price Each			
											1	100	500	1000
534-1944	D	5/8	4-40	.125	.250	.74	.539	.469	.39					
534-1945	D	3/4	4-40	.125	.250	.81	.614	.503	.464					
534-1946	D	1	4-40	.125	.250	.92	.708	.579	.535					
534-1947	D													

## NYLON SPACER SUPPORTS

- Fire retardant nylon
- For 1/16" PCB thickness
- Flexible
- Easy PCB mounting
- Max. chassis thickness: .07"

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Dimensions (in.)		Price Each			
		A	B	1	100	500	1000
534-1927A	E	.250	.937	.19	.144	.103	.072
534-1928A	E	.375	1.062	.20	.155	.112	.078
534-1929A	E	.500	1.187	.22	.166	.119	.083
534-1930A	E	.625	1.312	.31	.18	.128	.09

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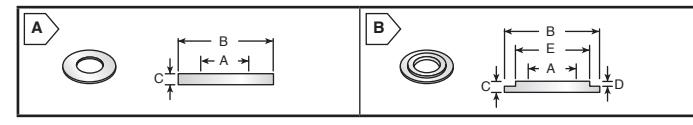
[mouser.com/keystone](http://mouser.com/keystone)



MOUSER  
ELECTRONICS

(800) 346-6873

2063



## FIBER WASHERS

Material: Commercial grade fiber per ASTM D710.

### Flat Washers

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Screw Size	Dimensions: in.				Price Each			
			A	B	C	D	1	100	500	1000
534-3368	A	4	.120	.250	.0625	.10	.038	.027	.023	
534-3201	A	6	.140	.375	.0625	.10	.043	.031	.026	
534-3372	A	8	.171	.375	.0625	.10	.058	.028	.021	
534-3208	A	10	.196	.375	.0625	.10	.058	.028	.021	
534-3373	A	1/4	.260	.500	.0625	.10	.07	.035	.026	
534-3222	A	3/8	.385	.625	.0625	.10	.07	.042	.031	

### Shoulder Washers

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Screw Size	Dimensions: in.				Price Each				
			A	B	C	D	E	1	100	500	1000
534-3062	B	4	.115	.250	.062	.031	.187	.17	.119	.05	.038
534-4698	B	6	.140	.250	.093	.031	.187	.16	.094	.047	.035
534-3233	B	6	.140	.375	.093	.031	.240	.21	.152	.09	.067
534-3065	B	8	.170	.375	.093	.031	.246	.13	.092	.054	.041
534-4702	B	10	.194	.375	.093	.031	.308	.15	.11	.059	.044
534-4711	B	1/4	.253	.500	.093	.031	.308	.15	.099	.059	.048
534-3069	B	3/8	.385	.625	.093	.031	.498	.20	.137	.079	.064

### NYLON WASHER

For quantities greater than listed, call for quote.

MO

## SWAGE THREADED STANDOFFS

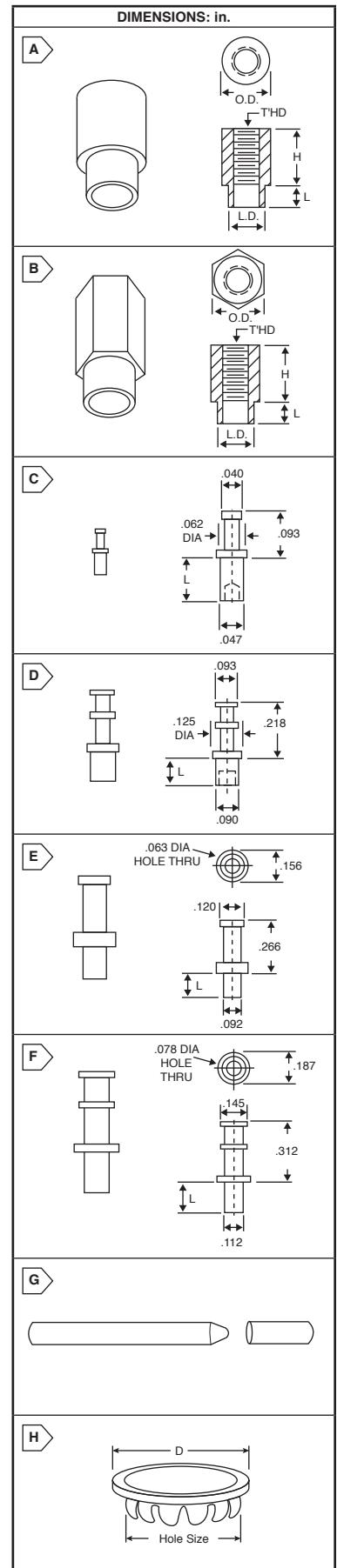
### Specifications:

- Brass per ASTM-B16
- Nickel Plate: QQ-N-290
- For .062" thick boards

RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	"H" Height above Panel	"L" Shank Length	Panel Thickness	"LD" Shank Diameter	Price Each			
						1	100	500	1000
<b>Round 2-56 Thread x .156 O.D. (5/32")</b>									
534-1589-2	A	.125	.109	1/16	.125	.44	.321	.279	.232
534-1590-2	A	.187	.109	1/16	.125	.80	.586	.419	.293
534-1591-2	A	.250	.109	1/16	.125	.74	.638	.422	.329
<b>Hex 2-56 Thread x .156 O.D. (5/32")</b>									
534-1731-2	B	.125	.109	1/16	.125	.88	.561	.448	.328
534-1740-2	B	.250	.109	1/16	.125	1.11	.772	.645	.451
<b>Round 4-40 Thread x .187 O.D. (3/16")</b>									
534-2260-2	A	.125	.109	1/16	.139	.82	.60	.431	.302
534-2262-2	A	.250	.109	1/16	.139	.38	.28	.25	.24
534-2263-2	A	.375	.109	1/16	.139	.87	.639	.46	.322
534-2264-2	A	.500	.109	1/16	.139	.56	.411	.357	.297
<b>Hex 4-40 Thread x .187 O.D. (3/16")</b>									
534-2270-2	B	.125	.109	1/16	.139	.84	.613	.443	.31
534-2272-2	B	.250	.109	1/16	.139	.88	.646	.467	.327
534-2274-2	B	.500	.109	1/16	.139	1.10	.801	.58	.406
<b>Round 4-40 Thread x .250 O.D. (1/4")</b>									
534-1560A	A	.125	.109	1/16	.187	.57	.383	.332	.232
534-1790-2	A	.187	.109	1/16	.187	.98	.561	.396	.276
534-1650-2	A	.250	.109	1/16	.187	.69	.48	.362	.253
534-1623-2	A	.500	.109	1/16	.187	1.77	.987	.703	.492
534-1625-2	A	.750	.109	1/16	.187	2.07	1.15	.824	.577
534-1652-2	A	1.000	.109	1/16	.187	2.48	1.37	.987	.69
<b>Hex 4-40 Thread x .250 O.D. (1/4")</b>									
534-1653-2	B	.125	.109	1/16	.187	.61	.412	.357	.25
534-1746-2	B	.187	.109	1/16	.187	1.11	.624	.444	.311
534-1627-2	B	.250	.109	1/16	.187	.90	.646	.473	.331
534-1629-2	B	.500	.109	1/16	.187	1.77	1.17	1.02	.717
534-1655-2	B	.750	.109	1/16	.187	1.76	1.13	.894	.656
<b>Round 6-32 Thread x .250 O.D. (1/4")</b>									
534-1560B	A	.125	.109	1/16	.187	.57	.383	.332	.232
534-1546	A	.250	.109	1/16	.187	.76	.524	.441	.308
534-1561B	A	.375	.109	1/16	.187	.55	.408	.355	.295
534-1604-2	A	.500	.109	1/16	.187	1.18	.862	.622	.436
534-1608-2	A	.750	.109	1/16	.187	2.07	1.15	.824	.577
<b>Hex 6-32 Thread x .250 O.D. (1/4")</b>									
534-1620-2	B	.125	.109	1/16	.187	.78	.576	.411	.288
534-1621-2	B	.250	.109	1/16	.187	1.42	.797	.567	.396
534-1758-2	B	.500	.109	1/16	.187	1.18	.85	.617	.432
534-1761-2	B	.750	.109	1/16	.187	1.85	1.18	.938	.688



## STANDARDIZED TERMINALS

### Features:

- Swage and thread mounting types available
- Bright tin plated for extended shelf life and excellent solderability
- Wide variety of sizes to suit space and wire size requirements

### Specifications:

- Material: Free Cutting Brass- ASTM-B16
- Plating: Bright Electro-Tin per MIL-T-10727 Type 1

RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Description	Uses Staking Tool #	Board Thickness	"L" Shank Length	Price Each			
						1	100	500	1000
<b>Single &amp; Double Turret Series</b>									
534-1528-1	C	Single	Special Order	0.032	.051	.21	.139	.118	.096
534-1528-2	C	Single	Special Order	0.062	.082	.22	.143	.122	.099
534-1528-4	C	Single	Special Order	0.125	.145	.50	.285	.156	.108
534-1502-1	D	Double	534-TL-2	0.032	.078	.44	.32	.231	.161
534-1502-2	D	Double	534-TL-2	0.062	.109	.29	.195	.167	.14
534-1502-3	D	Double	534-TL-2	0.093	.141	.29	.195	.167	.14
534-1502-4	D	Double	534-TL-2	0.125	.172	.44	.32	.231	.161
<b>Tubular (Hollow) Turret Series</b>									
534-1540-2	E	Tubular	534-TL-5	0.062	.109	.71	.522	.375	.268
534-1540-4	E	Tubular	534-TL-5	0.125	.172	.69	.507	.364	.255
534-1509-2	F	Tubular	534-TL-8	0.062	.109	.90	.651	.472	.331
534-1509-4	F	Tubular	534-TL-8	0.125	.172	.92	.67	.486	.341

## STAKING TOOLS

### Specifications:

- Manufactured from steel with zinc plate
- May be used with an arbor press or hand tapped
- Punch and anvil are precision machined and hardened to ensure long life

For quantities greater than listed, call for quote.

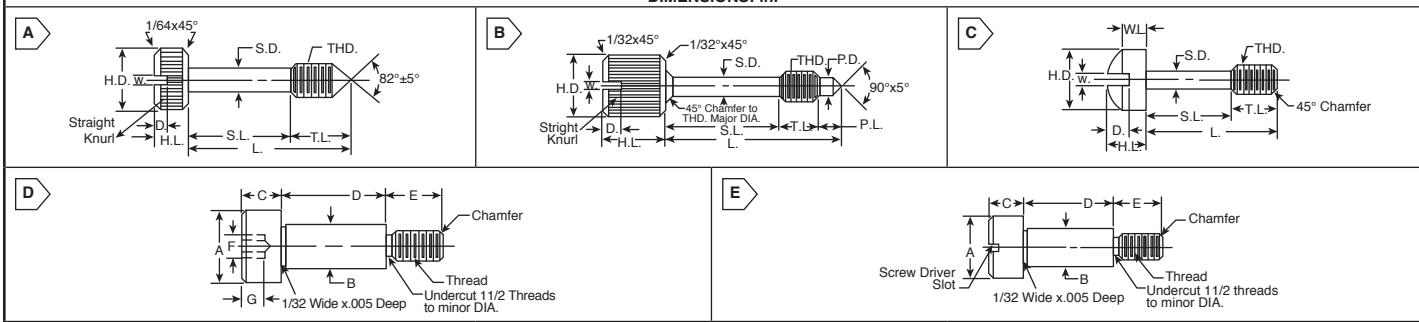
MOUSER STOCK NO.	Fig.	Description	Price Each					
			1	5	100	1000		
534-TL-2	G	Top staking punch and anvil for standardized terminals	21.69		20.44			
534-TL-5	G	Top staking punch and anvil for standardized terminals	21.69		19.95			
534-TL-8	G	Top staking punch and anvil for standardized terminals	21.69		19.95			
534-TL-19	G	For swage standoffs, .187" OD, 2-56 thread	21.69		19.95			
534-TL-20	G	For swage standoffs, .25" OD, 4-40 thread	21.69		19.95			
534-TL-21	G	For swage standoffs, .25" OD, 6-32 thread	21.69		19.95			
<b>METAL HOLE PLUGS</b>								
Plug chassis holes, wiring outlets, access holes, or unused openings. Made of nickel-plated steel.								
• Excellent spring retention								
MOUSER STOCK NO.	Fig.	Hole Size (in.)	D (in.)	No. of Prongs	Price Each			
					1	100	500	1000
534-7600	H	1/4	13/32	6	1.11	.624	.441	.308
534-7601	H	5/16	7/16	6	1.11	.624	.442	.309
534-7602	H	3/8	1/2	6	1.11	.624	.441	.308
534-7603	H	1/2	21/32	8	1.23	.69	.491	.344
534-7604	H	5/8	13/16	8	1.05	.767	.554	.387
534-7606	H	7/8	1 1/16	12	1.58	.885	.631	.441
534-7607	H	1	1 9/64	12	1.83	1.02	.729	.51

# RAF HARDWARE Panel and Shoulder Screws

RoHS Compliant This page of product is RoHS compliant.



DIMENSIONS: in.



## CAPTIVE PANEL SCREWS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Thread Size	Dimensions: in.									Price Each		
			H.D. +0.015/-0.000	H.L. ±0.010	L. ±0.015	T.L. ±0.015	S.D. ±0.005	S.L. ±0.010	W. +0.005/-0.000	D. +0.010/-0.000	1	100	500	
761-0100-SS	A	4-40	5/16	3/16	21/32	9/32	.078	3/8	.036	1/16	2.18	1.90	1.77	
761-0101-SS	A	4-40	5/16	3/16	23/32	9/32	.078	7/16	.036	1/16	2.22	1.95	1.81	
761-0102-SS	A	4-40	5/16	3/16	25/32	9/32	.078	1/2	.036	1/16	2.36	2.07	1.92	
761-0104-SS	A	4-40	5/16	3/16	29/32	9/32	.078	5/8	.036	1/16	2.71	2.37	2.20	
761-0105-SS	A	6-32	5/16	3/16	21/32	9/32	.095	3/8	.045	1/16	2.18	1.90	1.77	
761-0106-SS	A	6-32	5/16	3/16	23/32	9/32	.095	7/16	.045	1/16	2.22	1.95	1.81	
761-0110-SS	A	6-32	3/8	3/16	21/32	9/32	.095	3/8	.045	1/16	2.80	2.45	2.28	

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Thread Size	Dimensions: in.									Price Each			
			H.D. +0.015/ -0.000	H.L. ±0.010	L. ±0.015	T.L. ±0.015	S.D. ±0.005	S.L. ±0.010	P.D. +0.000/ -0.000	P.L. ±0.015	W. +0.005/ -0.000	D. +0.010/ -0.000	1	100	500
761-0367-SS	B	4-40	1/4	3/8	1/8	.078	11/64	.078	5/64	3/64	5/64	1.41	1.24	1.15	
761-0368-SS	B	4-40	1/4	7/16	1/8	.078	15/64	.078	5/64	3/64	5/64	1.44	1.26	1.17	
761-0369-SS	B	4-40	1/4	1/4	1/8	.078	19/64	.078	5/64	3/64	5/64	1.48	1.29	1.20	
761-0370-SS	B	4-40	1/4	1/4	9/16	1/8	23/64	.078	5/64	3/64	5/64	1.73	1.51	1.40	
761-0371-SS	B	4-40	1/4	5/8	1/8	.078	27/64	.078	5/64	3/64	5/64	1.76	1.54	1.43	
761-0379-SS	B	4-40	5/16	7/16	1/8	.078	15/64	.078	5/64	3/64	5/64	1.73	1.51	1.40	
761-0380-SS	B	4-40	5/16	5/16	1/2	1/8	19/64	.078	5/64	3/64	5/64	2.00	1.75	1.63	
761-0382-SS	B	4-40	5/16	5/16	5/8	1/8	27/64	.078	5/64	3/64	5/64	2.11	1.84	1.71	
761-0389-SS	B	6-32	5/16	5/16	7/16	7/32	.095	1/8	.095	3/32	3/64	5/64	1.83	1.60	1.49
761-0390-SS	B	6-32	5/16	5/16	1/2	7/32	.095	3/16	.095	3/32	3/64	5/64	1.90	1.66	1.54
761-0391-SS	B	6-32	5/16	5/16	9/16	7/32	.095	1/4	.095	3/32	3/64	5/64	1.95	1.70	1.58
761-0392-SS	B	6-32	5/16	5/16	5/8	7/32	.095	5/16	.095	3/32	3/64	5/64	2.11	1.84	1.71

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Thread Size	Dimensions: in.									Price Each		
			H.D. +0.015/ -0.005	H.L. ±0.000/ -0.015	L. ±0.015	T.L. ±0.010	S.D. ±0.005	S.L. ±0.010	W.L. +0.000/ -0.010	W. +0.005/ -0.000	D. +0.000/ -0.015	1	100	500
761-0817-SS	C	4-40	11/64	.107	1/4	3/16	.078	1/16	.079	.039	.048	1.06	.93	.861
761-0818-SS	C	4-40	11/64	.107	5/16	3/16	.078	1/8	.079	.039	.048	1.08	.95	.881
761-0819-SS	C	4-40	11/64	.107	3/8	3/16	.078	3/16	.079	.039	.048	1.20	1.05	.978
761-0820-SS	C	4-40	11/64	.107	7/16	3/16	.078	1/4	.079	.039	.048	1.22	1.07	.995
761-0821-SS	C	4-40	11/64	.107	1/2	3/16	.078	5/16	.079	.039	.048	1.25	1.09	1.01
761-0822-SS	C	4-40	11/64	.107	9/16	3/16	.078	3/8	.079	.039	.048	1.38	1.21	1.13
761-0823-SS	C	4-40	11/64	.107	5/8	3/16	.078	7/16	.079	.039	.048	1.41	1.23	1.14
761-0824-SS	C	4-40	11/64	.107	11/16	3/16	.078	1/2	.079	.039	.048	1.60	1.40	1.30
761-0825-SS	C	4-40	11/64	.107	3/4	3/16	.078	9/16	.079	.039	.048	1.63	1.43	1.33
761-0829-SS	C	4-40	11/64	.107	1	3/16	.078	13/16	.079	.039	.048	2.13	1.86	1.73

## PRECISION SHOULDER SCREWS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Fig.	Thread Size	Dimensions: in.									Price Each		
			A ±0.004	B +0.000/-0.001	C ±0.010	D +0.002/-0.000	E ±0.005	F +0.002/-0.000	G Min.	1	100	500		
Socket Head														
761-6901-SS	D	4-40	1/4	.1245	1/8	.1250	5/32	5/64	1/16	1.14	1.00	.926		
761-6902-SS	D	4-40	1/4	.1245	1/8	.1875	5/32	5/64	1/16	1.23	1.07	.998		
761-6903-SS	D	4-40	1/4	.1245	1/8	.2500	5/32	5/64	1/16	1.24	1.08	1.00		
761-6904-SS	D	4-40	1/4	.1245	1/8	.3125	5/32	5/64	1/16	1.50	1.32	1.22		
761-6909-SS	D	6-32	9/32	.1560	1/8	.1875	3/16	3/32	5/64	1.32	1.15	1.07		
761-6910-SS	D	6-32	9/32	.1560	1/8	.2500	3/16	3/32	5/64	1.36	1.19	1.10		
Slotted Head														
761-7001-SS	E	4-40	1/4	.1245	1/8	.1250	5/32	-	-	1.16	1.02	.943		
761-7002-SS	E	4-40	1/4	.1245	1/8	.1875	5/32	-	-	1.20	1.05	.978		
761-7008-SS	E	6-32	9/32	.1560	1/8	.1250	3/16	-	-	1.26	1.10	1.02		
761-7009-SS	E	6-32	9/32	.1560	1/8	.1875	3/16	-	-	1.32	1.15	1.07		
761-7010-SS	E	6-32	9/32	.1560	1/8	.2500	3/16	-	-	1.36	1.19	1.10		

# RAF HARDWARE Round Spacers and Standoffs



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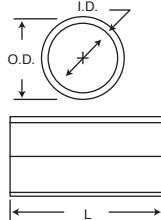
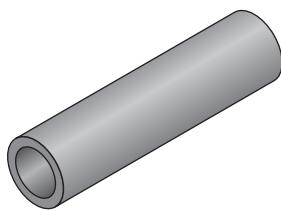
RAF ELECTRONIC  
COMPONENTS, INC.  
a Division of MW Industries, Inc.

## FEMALE ROUND SPACERS

Used for printed circuit board mounting and other applications requiring close control of dimensions, these spacers offer a wide variety of outside dimensions and lengths. In addition to standard models, swage configurations are available to accommodate circuit boards with thickness from 1/32 to 1/4 inch.

### Material Specifications:

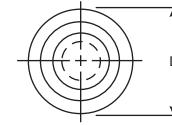
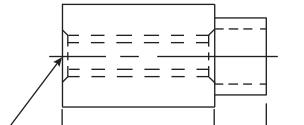
- Aluminum: QQ-A225/3, QQ-A225/6, QQ-A225/8, QQ-A200/9
- Stainless Steel: ASTM-A-581, A-582
- Nylon: LP-410A



Length (in.)	Screw Size	I.D. ±.005	O.D. ±.007	Aluminum Material - Clear Iridite Finish		Stainless Steel Material		Nylon Material				
				MOUSER STOCK NO.	Price Each	MOUSER STOCK NO.	Price Each	MOUSER STOCK NO.	Price Each			
1/8	2	0.090	3/16	761-1107-2-AL-7	.30	.26	761-1107-2-SS	.58	.51	761-1107-2-N	.15	.13
3/16	2	0.090	3/16	761-1108-2-AL-7	.30	.27	761-1108-2-SS	.60	.53	761-1108-2-N	.17	.15
1/4	2	0.090	3/16	761-1109-2-AL-7	.34	.29	-	-	-	761-1109-2-N	.18	.15
3/8	2	0.090	3/16	761-1111-2-AL-7	.35	.30	-	-	-	761-1111-2-N	.19	.16
7/16	2	0.090	3/16	761-1112-2-AL-7	.35	.31	-	-	-	761-1112-2-N	.19	.17
1/2	2	0.090	3/16	761-1113-2-AL-7	.36	.32	-	-	-	761-1113-2-N	.20	.18
1/8	4	0.115	3/16	761-1107-4-AL-7	.30	.26	-	-	-	761-1107-4-N	.15	.13
3/16	4	0.115	3/16	761-1108-4-AL-7	.30	.27	761-1108-4-SS	.60	.53	761-1108-4-N	.17	.15
1/4	4	0.115	3/16	761-1109-4-AL-7	.34	.29	-	-	-	761-1109-4-N	.18	.15
5/16	4	0.115	3/16	761-1110-4-AL-7	.34	.30	-	-	-	761-1110-4-N	.18	.16
3/8	4	0.115	3/16	761-1111-4-AL-7	.35	.30	-	-	-	761-1111-4-N	.19	.16
7/16	4	0.115	3/16	761-1112-4-AL-7	.35	.31	761-1112-4-SS	.78	.68	761-1112-4-N	.19	.17
1/2	4	0.115	3/16	761-1113-4-AL-7	.36	.32	-	-	-	761-1113-4-N	.20	.18
1/8	4	0.115	1/4	761-1122-4-AL-7	.20	.10	761-1122-4-SS	.53	.49	761-1122-4-N	.13	.12
3/16	4	0.115	1/4	761-1123-4-AL-7	.21	.11	761-1123-4-SS	.56	.52	761-1123-4-N	.14	.12
1/4	4	0.115	1/4	761-1124-4-AL-7	.23	.11	-	-	-	761-1124-4-N	.16	.13
5/16	4	0.115	1/4	761-1125-4-AL-7	.25	.13	-	-	-	761-1125-4-N	.15	.13
3/8	4	0.115	1/4	761-1126-4-AL-7	.28	.14	-	-	-	761-1126-4-N	.15	.13
7/16	4	0.115	1/4	761-1127-4-AL-7	.29	.14	-	-	-	761-1127-4-N	.16	.14
1/2	4	0.115	1/4	761-1128-4-AL-7	.30	.15	-	-	-	761-1128-4-N	.16	.14
9/16	4	0.115	1/4	761-1129-4-AL-7	.32	.16	-	-	-	761-1129-4-N	.17	.15
5/8	4	0.115	1/4	761-1130-4-AL-7	.33	.16	-	-	-	761-1130-4-N	.17	.15
11/16	4	0.115	1/4	761-1131-4-AL-7	.35	.17	-	-	-	761-1132-4-N	-	-
3/4	4	0.115	1/4	761-1132-4-AL-7	.37	.18	-	-	-	761-1133-4-N	.18	.16
13/16	4	0.115	1/4	-	-	-	-	-	-	761-1134-4-N	.18	.16
7/8	4	0.115	1/4	-	-	-	-	-	-	761-1135-4-N	.18	.16
15/16	4	0.115	1/4	-	-	-	-	-	-	761-1136-4-N	.19	.16
1	4	0.115	1/4	761-1136-4-AL-7	.45	.22	-	-	-	761-1136-4-N	.19	.16
1/8	6	0.14	1/4	761-1122-6-AL-7	.20	.10	-	-	-	761-1122-6-N	.13	.12
3/16	6	0.14	1/4	761-1123-6-AL-7	.21	.15	761-1123-6-SS	.56	.52	761-1123-6-N	.14	.12
1/4	6	0.14	1/4	761-1124-6-AL-7	.23	.11	761-1124-6-SS	.58	.54	761-1124-6-N	.14	.13
5/16	6	0.14	1/4	761-1125-6-AL-7	.25	.18	-	-	-	761-1125-6-N	.15	.13
3/8	6	0.14	1/4	-	-	-	-	-	-	761-1126-6-N	.15	.13
7/16	6	0.14	1/4	761-1127-6-AL-7	.29	.14	-	-	-	761-1127-6-N	.16	.14
1/2	6	0.14	1/4	761-1128-6-AL-7	.30	.22	-	-	-	761-1128-6-N	.16	.14
9/16	6	0.14	1/4	761-1129-6-AL-7	.32	.16	-	-	-	761-1129-6-N	.17	.15
5/8	6	0.14	1/4	761-1130-6-AL-7	.33	.16	761-1130-6-SS	1.02	.94	761-1130-6-N	.17	.15
11/16	6	0.14	1/4	761-1131-6-AL-7	.35	.17	-	-	-	-	-	-
3/4	6	0.14	1/4	761-1132-6-AL-7	.37	.18	-	-	-	761-1132-6-N	.18	.15
13/16	6	0.14	1/4	761-1133-6-AL-7	.39	.19	-	-	-	761-1133-6-N	.18	.16
7/8	6	0.14	1/4	761-1134-6-AL-7	.41	.21	-	-	-	761-1134-6-N	.18	.16
15/16	6	0.14	1/4	-	-	-	-	-	-	761-1135-6-N	.18	.16
1	6	0.14	1/4	761-1136-6-AL-7	.45	.22	761-1136-6-SS	1.20	1.11	761-1136-6-N	.19	.16
1/8	8	0.166	1/4	-	-	-	-	-	-	761-1122-8-N	.13	.12
3/16	8	0.166	1/4	761-1123-8-AL-7	.21	.11	-	-	-	761-1123-8-N	.14	.12
1/4	8	0.166	1/4	761-1124-8-AL-7	.23	.11	761-1124-8-SS	.58	.54	761-1124-8-N	.14	.13
5/16	8	0.166	1/4	761-1125-8-AL-7	.25	.13	-	-	-	761-1125-8-N	.15	.13
3/8	8	0.166	1/4	761-1126-8-AL-7	.28	.14	-	-	-	761-1126-8-N	.15	.13
7/16	8	0.166	1/4	761-1127-8-AL-7	.29	.14	-	-	-	761-1127-8-N	.16	.14
1/2	8	0.166	1/4	761-1128-8-AL-7	.30	.15	-	-	-	761-1128-8-N	.16	.14
9/16	8	0.166	1/4	761-1129-8-AL-7	.32	.16	-	-	-	-	-	-
5/8	8	0.166	1/4	761-1130-8-AL-7	.33	.16	761-1130-8-SS	1.02	.94	761-1130-8-N	.17	.15
11/16	8	0.166	1/4	-	-	-	-	-	-	761-1131-8-N	.18	.15
3/4	8	0.166	1/4	761-1132-8-AL-7	.37	.18	-	-	-	761-1132-8-N	.18	.15
7/8	8	0.166	1/4	761-1134-8-AL-7	.41	.21	-	-	-	-	-	-
1	8	0.166	1/4	761-1136-8-AL-7	.45	.22	-	-	-	761-1136-8-N	.19	.16

## ROUND SWAGE STANOFF

Round Swage standoffs are primarily used to separate circuit boards, chassis components and other devices from each other. The swaging installation process allows them to provide a permanent fixture.



"L" (in)	SL (B)	Dia. (D)	Thread Size (A)	Aluminum Material - Clear Iridite Finish		Punch	Anvil	"L" (in)	SL (B)	Dia. (D)	Thread Size (A)	Brass Material - Ductile Nickel		
				MOUSER STOCK NO.	Price Each							MOUSER STOCK NO.	Price Each	
1/8	.105	3/16"	2-56	761-3030-B-256-AL-7	1.32	1.24	P-3	AR-18	1/8	.105	2-56	761-3030-B-256-37	.90	.84
3/16	.105	3/16"	2-56	-	-	P-3	AR-18	3/16	.105	2-56	761-3031-B-256-B-37	.92	.86	
1/4	.105	3/16"	2-56	761-3032-B-256-AL-7	1.33	1.25	P-3	AR-19	1/4	.105	2-56	761-3032-B-256-B-37	.93	.88
5/16	.105	3/16"	2-56	-	-	P-3	AR-19	5/16	.105	2-56	761-3033-B-256-B-37	.96	.90	
7/16	.105	3/16"	2-56	761-3035-B-256-AL-7	1.57	1.47	P-3	AR-19	7/16	.105	2-56	761-3036-B-256-B-37	-	-
1/2	.105	3/16"	2-56	-	-	P-3	AR-20	1/2	.105	2-56	761-3036-B-256-B-37	1.02	.95	
3/16	.105	1/4"	4-40	-	-	P-4	AR-22	3/16	.105	4-40	761-3046-B-440-B-37	.67	.62	
1/4	.105	1/4"	4-40	761-3047-B-440-AL-7	1.43	1.34	P-4	AR-23	1/4	.105	4-40	4-40	-	-
5/16	.105	1/4"	4-40	761-3048-B-440-AL-7	1.44	1.35	P-4	AR-23	5/16	.105	4-40	4-40	-	-
7/16	.105	1/4"	4-40	761-3050-B-440-AL-7	1.47	1.38	P-4	AR-23	7/16	.105	4-40	761-3050-B-440-B-37	.84	.79
1/4	.135	1/4"	4-40	-	-	P-4	AR-24	1/4	.135	4-40	4-40	761-3047-C-440-B-37	.71	.67
5/16	.135	1/4"	4-40	761-3048-C-440-AL-7	1.44	1.35	P-4	AR-24	5/16	.135	4-40	4-40	-	-
7/16	.135	1/4"	4-40	761-3050-C-440-AL-7	1.47	1.38	P-4	AR-24	7/16	.135	4-40	4-40	-	-
3/16	.105	1/4"	6-32	761-3046-B-632-AL-7	1.42	1.33	P-4	AR-22	3/16	.105	6-32	761-3046-B-632-B-37	.67	.62
5/16	.105	1/4"	6-32	761-3048-B-632-AL-7	1.44	1.35	P-4	AR-23	5/16	.105	6-32	761-3048-B-632-B-37	.76	.71
3/8	.105	1/4"	6-32	-	-	P-4	AR-23	3/8	.105	6-32	761-3049-B-632-B-37	.61	.58	
1/8	.135	1/4"	6-32	-	-	P-4	AR-22	1/8	.135	6-32	761-3045-C-632-B-37	.61	.58	
3/16	.135	1/4"	6-32	761-3046-C-632-AL-7	1.42	1.33	P-4	AR-22	3/16	.135	6-32	761-3047-C-632-B-37	.71	.67
1/4	.135	1/4"	6-32	-	-	P-4	AR-23	1/4	.135	6-32	761-3047-C-632-B-37	.71	.67	
1/2	.135	1/4"	6-32	761-3051-C-632-AL-7	1.48	1.39	P-4	AR-24	1/2	.135	6			

# RAF HARDWARE Hex Standoffs and Tooling

**RAF**  
RAF ELECTRONIC  
PARTS SOURCE  
a Division of MW Industries, Inc.

## SWAGE TOOLING

### Anvil Tooling

The anvil and punch tooling is used for installing swage standoffs. They are 1/2 diameter heat treated steel and require an arbor press with a 1/2" ram or a similar type of press.

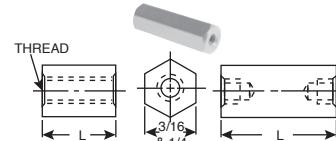
RoHS Compliant This page of product is RoHS compliant.

"L" (in)	Fig.	MOUSER STOCK NO.	Description	Thread	Counterbore (in)	Price Each	
				Depth (A)	Dia (B)	1	5
3/32-3/16	A	761-AR-18	1/2 Hex X 1" L	1/2 - 24 UNS 3A	0.100	0.190	40.00
7/32-7/16	A	761-AR-19	1/2 Hex X 1" L	1/2 - 24 UNS 3A	0.220	0.190	40.00
23/32-1	A	761-AR-21	1/2 Hex X 1" L	1/2 - 24 UNS 3A	0.720	0.190	40.00
1/8-3/16	A	761-AR-22	1/2 Hex X 1" L	1/2 - 24 UNS 3A	0.100	0.253	40.00
1/4-7/16	A	761-AR-23	1/2 Hex X 1" L	1/2 - 24 UNS 3A	0.220	0.253	40.00
1/2-11/16	A	761-AR-24	1/2 Hex X 1" L	1/2 - 24 UNS 3A	0.470	0.253	40.00
3/4-2	A	761-AR-25	1/2 Hex X 1" L	1/2 - 24 UNS 3A	0.720	0.253	40.00

### Punch Tooling

MOUSER STOCK NO.	Fig.	Description	For quantities greater than listed, call for quote.				
			Groove			Price Each	
Diameter (A)	Depth (B)	Radius (C)	1	5			
761-P1-PUNCH	B	0.200 Dia x 2.5" L	0.090	0.008	0.014	45.00	41.82
761-P2-PUNCH	B	0.220 Dia x 2.5" L	0.125	0.008	0.014	45.00	41.82
761-P3-PUNCH	B	0.250 Dia x 2.5" L	0.139	0.008	0.016	45.00	41.82
761-P4-PUNCH	B	0.300 Dia x 2.5" L	0.188	0.008	0.019	45.00	41.82
761-P5-PUNCH	B	0.350 Dia x 2.5" L	0.234	0.008	0.015	45.00	41.82

## HEX FEMALE STANDOFFS 1/4



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	"L" (in)	Thread	Price Each
<b>Aluminum</b>			
761-2098T-440-AL-7	5/32	4-40	.21
761-2099T-440-AL-7	7/32	4-40	.23
761-2100T-440-AL-7	9/32	4-40	.24
761-2101T-440-AL-7	11/32	4-40	.25
761-2102T-440-AL-7	13/32	4-40	.25
761-2103T-440-AL-7	15/32	4-40	.27
761-2104T-440-AL-7	17/32	4-40	.28
761-2105T-440-AL-7	19/32	4-40	.30
761-2106T-440-AL-7	21/32	4-40	.32
761-2107T-440-AL-7	23/32	4-40	.37
761-2108T-440-AL-7	25/32	4-40	.40
761-2109T-440-AL-7	29/32	4-40	.45
761-2110T-440-AL-7	31/32	6-32	.46
761-2111T-440-AL-7	1-1/16	6-32	.84
761-2112T-440-AL-7	1-1/8	6-32	.86
761-2113T-440-AL-7	1-3/16	6-32	.86
761-2114T-440-AL-7	1-1/4	6-32	.87
761-2115T-440-AL-7	1-7/16	6-32	.90
761-2116T-440-AL-7	1-11/16	6-32	.91
761-2117T-440-AL-7	1-1/2	6-32	.91
<b>Stainless Steel</b>			
761-2100T-440-SS	9/32	4-40	.64
761-2101T-440-SS	11/32	4-40	.68

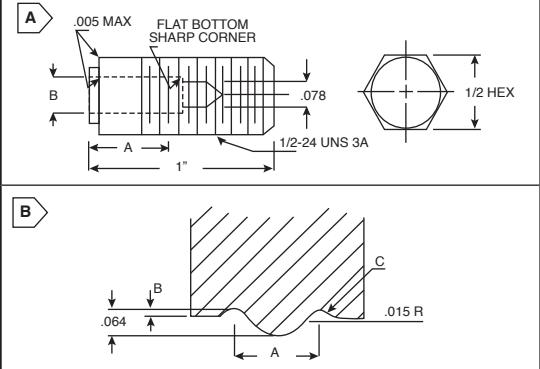
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	"L" (in)	Thread	Price Each
<b>Aluminum (Cont.)</b>			
761-2117-440-AL-7	1-5/16	4-40	.88
761-2118-440-AL-7	1-3/8	4-40	.90
761-2119-440-AL-7	1-7/16	4-40	.91
761-2120-440-AL-7	1-1/2	4-40	.91
761-2098T-632-AL-7	5/32	6-32	.21
761-2100T-632-AL-7	7/32	6-32	.23
761-2101T-632-AL-7	9/32	6-32	.24
761-2102T-632-AL-7	11/32	6-32	.25
761-2103T-632-AL-7	13/32	6-32	.25
761-2104T-632-AL-7	15/32	6-32	.27
761-2105T-632-AL-7	17/32	6-32	.28
761-2106T-632-AL-7	19/32	6-32	.30
761-2107T-632-AL-7	21/32	6-32	.32
761-2108T-632-AL-7	25/32	6-32	.40
761-2109T-632-AL-7	29/32	6-32	.45
761-2110T-632-AL-7	31/32	6-32	.46
761-2111T-632-AL-7	1-1/16	6-32	.84
761-2112T-632-AL-7	1-1/8	6-32	.86
761-2113T-632-AL-7	1-3/16	6-32	.86
761-2114T-632-AL-7	1-1/4	6-32	.87
761-2115T-632-AL-7	1-7/16	6-32	.90
761-2116T-632-AL-7	1-11/16	6-32	.91
761-2117T-632-AL-7	1-1/2	6-32	.91
<b>Stainless Steel (Cont.)</b>			
761-2115-632-SS	1-3/16	6-32	1.75
761-2116-632-SS	1-1/4	6-32	1.79
761-2117-632-SS	1-5/16	6-32	1.82
761-2120-632-SS	1-1/2	6-32	1.90
<b>Nylon</b>			
761-2098T-440-N	5/32	4-40	.45
761-2100T-440-N	9/32	4-40	.50
761-2101T-440-N	11/32	4-40	.53
761-2102T-440-N	13/32	4-40	.55
761-2103T-440-N	15/32	4-40	.59
761-2104T-440-N	17/32	4-40	.61
761-2105T-440-N	19/32	4-40	.72
761-2109T-440-N	27/32	4-40	1.03
761-2110T-440-N	29/32	4-40	1.05
761-2111T-440-N	31/32	4-40	1.06
761-2113-440-N	1-1/16	4-40	1.64
761-2114-440-N	1-1/8	4-40	1.69
761-2115-440-N	1-3/16	4-40	1.75
761-2116-440-N	1-1/4	4-40	1.80
761-2117-440-N	1-7/16	4-40	1.84
761-2118-440-N	1-11/16	4-40	1.88
761-2119-440-N	1-1/2	4-40	1.92
761-2120-440-N	1-13/16	4-40	1.96

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	"L" (in)	Thread	Price Each
<b>Stainless Steel (Cont.)</b>			
761-2115-632-SS	1-3/16	6-32	1.75
761-2116-632-SS	1-1/4	6-32	1.79
761-2117-632-SS	1-5/16	6-32	1.82
761-2120-632-SS	1-1/2	6-32	1.90
<b>Nylon</b>			
761-2098T-440-N	5/32	4-40	.45
761-2100T-440-N	9/32	4-40	.50
761-2101T-440-N	11/32	4-40	.53
761-2102T-440-N	13/32	4-40	.55
761-2103T-440-N	15/32	4-40	.59
761-2104T-440-N	17/32	4-40	.61
761-2105T-440-N	19/32	4-40	.65
761-2106T-440-N	21/32	4-40	.66
761-2107T-440-N	23/32	4-40	.66
761-2108T-440-N	25/32	4-40	.66
761-2109T-440-N	27/32	4-40	.66
761-2110T-440-N	29/32	4-40	.66
761-2111T-440-N	31/32	4-40	.66
761-2112T-440-N	1-1/16	4-40	.66
761-2113T-440-N	1-1/8	4-40	.66
761-2114T-440-N	1-3/16	4-40	.66
761-2115T-440-N	1-1/4	4-40	.66
761-2116T-440-N	1-7/16	4-40	.66
761-2117T-440-N	1-11/16	4-40	.66
761-2118T-440-N	1-1/2	4-40	.66
761-2119T-440-N	1-13/16	4-40	.66
761-2120T-440-N	1-15/16	4-40	.66

DIMENSIONS: in.



## HEX MALE/FEMALE STANDOFFS 3/16

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	"L" (in)	Thread	Price Each
<b>Aluminum</b>			
761-4506-440-AL-7	9/16	4-40	.44
761-4507-440-AL-7	5/8	4-40	.45
761-4508-440-AL-7	11/16	4-40	.46
761-4509-440-AL-7	3/4	4-40	.47
761-4510-440-AL-7	13/16	4-40	.47
761-4511-440-AL-7	7/8	4-40	.48
761-4512-440-AL-7	15/16	4-40	.48
761-4513-440-AL-7	1	4-40	.49
<b>Stainless Steel</b>			
761-4506-440-SS	9/16	4-40	1.12
761-4507-440-SS	5/8	4-40	1.21
761-4508-440-SS	11/16	4-40	1.21
761-4509-440-SS	3/4	4-40	1.22
761-4510-440-SS	13/16	4-40	1.24
761-4511-440-SS	7/8	4-40	1.27
761-4513-440-SS	1	4-40	1.34
<b>Nylon</b>			
761-4506-440-N	9/16	4-40	1.56
761-4508-440-N	11/16	4-40	1.65
761-4509-440-N	3/4	4-40	1.69
761-4510-440-N	13/16	4-40	1.73
761-4513-440-N	1	4-40	1.85

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	"L" (in)	Thread	Price Each
<b>Aluminum</b>			
761-4530A-440-AL-7	7/32	4-40	2.15
761-4530T-440-AL-7	9/32	4-40	2.23
761-4533T-440-AL-7	15/32	4-40	2.44
761-4548-440-AL-7	1-3/8	4-40	3.18
761-4550-440-AL-7	1-1/2	4-40	3.26
761-4546-632-AL-7	1-1/4	6-32	3.14
761-4550-632-AL-7	1-1/2	6-32	3.31
<b>Stainless Steel</b>			
761-4530T-440-SS	9/32	4-40	1.66
761-4531T-440-SS	11/32	4-40	1.73
761-4533T-440-SS	15/32	4-40	1.88
<b>Nylon</b>			
761-4530-440-N	9/16	4-40	1.56
761-4531-440-N	11/16	4-40	1.65
761-4533-440-N	3/4	4-40	1.69
761-4540-440-N	13/16	4-40	1.73
761-4513-440-N	1	4-40	1.85

Hardware



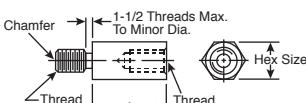
# RAF HARDWARE Hex Standoffs

**RAF**  
RAF ELECTRONIC  
SOLUTIONS, INC.  
a Division of MW Industries, Inc.

## 4.5MM MALE/FEMALE METRIC STANDOFFS

### Material Specifications:

- Aluminum: QQ-A225/3, QQ-A225/6, QQ-A225/8, QQ-A200/9
- Stainless Steel: ASTM-A-581, A-582
- Nylon: LP-410A



RoHS Compliant This page of product is RoHS compliant.

For quantities greater than listed, call for quote.

"L" (mm)	MOUSER STOCK NO.	Thread Size	Price Each	
			1	100
<b>Aluminum-Plain</b>				
5	761-M2100-2545-AL	M2.5X0.45	.41	.37
8	761-M2103-2545-AL	M2.5X0.45	.44	.39
10	761-M2105-2545-AL	M2.5X0.45	.44	.40
12	761-M2107-2545-AL	M2.5X0.45	.46	.41
14	761-M2109-2545-AL	M2.5X0.45	.47	.42
16	761-M2111-2545-AL	M2.5X0.45	.47	.42
5	761-M2100-3005-AL	M3X0.5	.42	.37
7	761-M2102-3005-AL	M3X0.5	.43	.38
8	761-M2103-3005-AL	M3X0.5	.44	.39
10	761-M2105-3005-AL	M3X0.5	.45	.40
12	761-M2107-3005-AL	M3X0.5	.46	.41
15	761-M2110-3005-AL	M3X0.5	.47	.42
25	761-M2120-3005-AL	M3X0.5	.52	.47
<b>Nylon</b>				
5	761-M2100-2545-N	M2.5X0.45	1.16	1.04
6	761-M2101-2545-N	M2.5X0.45	1.18	1.06
7	761-M2102-2545-N	M2.5X0.45	1.20	1.07
8	761-M2103-2545-N	M2.5X0.45	1.22	1.09
9	761-M2104-2545-N	M2.5X0.45	1.24	1.11
11	761-M2106-2545-N	M2.5X0.45	1.28	1.14
12	761-M2107-2545-N	M2.5X0.45	1.31	1.16
13	761-M2108-2545-N	M2.5X0.45	1.33	1.18
14	761-M2109-2545-N	M2.5X0.45	1.35	1.20
15	761-M2110-2545-N	M2.5X0.45	1.36	1.21
16	761-M2111-2545-N	M2.5X0.45	1.38	1.23
18	761-M2113-2545-N	M2.5X0.45	1.43	1.27
20	761-M2115-2545-N	M2.5X0.45	1.47	1.31
5	761-M2100-3005-N	M3X0.5	1.18	1.05
6	761-M2101-3005-N	M3X0.5	1.20	1.07

For quantities greater than listed, call for quote.

"L" (mm)	MOUSER STOCK NO.	Thread Size	Price Each	
			1	100
<b>Nylon (Cont.)</b>				
7	761-M2102-3005-N	M3X0.5	1.21	1.08
8	761-M2103-3005-N	M3X0.5	1.24	1.11
9	761-M2104-3005-N	M3X0.5	1.26	1.12
10	761-M2105-3005-N	M3X0.5	1.28	1.14
11	761-M2106-3005-N	M3X0.5	1.31	1.16
12	761-M2107-3005-N	M3X0.5	1.32	1.18
13	761-M2108-3005-N	M3X0.5	1.34	1.19
14	761-M2109-3005-N	M3X0.5	1.36	1.21
15	761-M2110-3005-N	M3X0.5	1.38	1.23
16	761-M2111-3005-N	M3X0.5	1.41	1.25
17	761-M2112-3005-N	M3X0.5	1.42	1.27
18	761-M2113-3005-N	M3X0.5	1.44	1.29
20	761-M2115-3005-N	M3X0.5	1.48	1.32
21	761-M2116-3005-N	M3X0.5	1.50	1.34
24	761-M2119-3005-N	M3X0.5	1.57	1.40
25	761-M2120-3005-N	M3X0.5	1.58	1.41

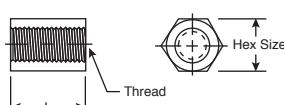
### Stainless Steel

"L" (mm)	MOUSER STOCK NO.	Thread Size	Price Each	
			1	100
<b>Stainless Steel</b>				
5	761-M2100-2545-SS	M2.5X0.45	1.11	.99
7	761-M2102-2545-SS	M2.5X0.45	1.17	1.04
8	761-M2103-2545-SS	M2.5X0.45	1.19	1.06
9	761-M2104-2545-SS	M2.5X0.45	1.22	1.09
10	761-M2105-2545-SS	M2.5X0.45	1.25	1.12
12	761-M2107-2545-SS	M2.5X0.45	1.31	1.17
20	761-M2115-2545-SS	M2.5X0.45	1.53	1.36
7	761-M2102-3005-SS	M3X0.5	1.17	1.04
8	761-M2103-3005-SS	M3X0.5	1.19	1.06
12	761-M2107-3005-SS	M3X0.5	1.31	1.17
15	761-M2110-3005-SS	M3X0.5	1.38	1.23
17	761-M2112-3005-SS	M3X0.5	1.42	1.27
18	761-M2113-3005-SS	M3X0.5	1.48	1.32

## 4.5MM FEMALE METRIC STANDOFFS

### Material Specifications:

- Aluminum: QQ-A225/3, QQ-A225/6, QQ-A225/8, QQ-A200/9
- Stainless Steel: ASTM-A-581, A-582
- Nylon: LP-410A



For quantities greater than listed, call for quote.

"L" (mm)	MOUSER STOCK NO.	Thread Size	Price Each	
			1	100
<b>Aluminum - Plain</b>				
14	761-M1261-2545-AL	M2.5X0.45	.53	.48
15	761-M1262-2545-AL	M2.5X0.45	.56	.50
16	761-M1263-2545-AL	M2.5X0.45	.58	.51
17	761-M1264-2545-AL	M2.5X0.45	.60	.53
18	761-M1265-2545-AL	M2.5X0.45	.61	.55
19	761-M1266-2545-AL	M2.5X0.45	.62	.55
20	761-M1267-2545-AL	M2.5X0.45	.62	.55
21	761-M1268-2545-AL	M2.5X0.45	.63	.56
22	761-M1269-2545-AL	M2.5X0.45	.64	.57
23	761-M1270-2545-AL	M2.5X0.45	.64	.57
25	761-M1272-2545-AL	M2.5X0.45	.65	.58
14	761-M1261-3005-AL	M3X0.5	.53	.48
15	761-M1262-3005-AL	M3X0.5	.56	.50
16	761-M1263-3005-AL	M3X0.5	.58	.51
17	761-M1264-3005-AL	M3X0.5	.60	.53
19	761-M1266-3005-AL	M3X0.5	.62	.55
20	761-M1267-3005-AL	M3X0.5	.62	.55
21	761-M1268-3005-AL	M3X0.5	.63	.56
22	761-M1269-3005-AL	M3X0.5	.64	.57
23	761-M1270-3005-AL	M3X0.5	.64	.57
24	761-M1271-3005-AL	M3X0.5	.65	.58
25	761-M1272-3005-AL	M3X0.5	.65	.58
<b>Stainless Steel</b>				
14	761-M1261-2545-SS	M2.5X0.45	.94	.84
15	761-M1262-2545-SS	M2.5X0.45	.96	.86
16	761-M1263-2545-SS	M2.5X0.45	.99	.88
20	761-M1267-2545-SS	M2.5X0.45	1.42	1.27
24	761-M1271-2545-SS	M2.5X0.45	1.51	1.34
25	761-M1272-2545-SS	M2.5X0.45	1.52	1.36
14	761-M1261-3005-SS	M3X0.5	.94	.84
15	761-M1262-3005-SS	M3X0.5	.96	.86
20	761-M1267-3005-SS	M3X0.5	1.47	1.31
21	761-M1268-3005-SS	M3X0.5	1.49	1.33
23	761-M1270-3005-SS	M3X0.5	1.52	1.36
25	761-M1272-3005-SS	M3X0.5	1.57	1.40
<b>Nylon</b>				
14	761-M1261-2545-N	M2.5X0.45	.94	.84
15	761-M1262-2545-N	M2.5X0.45	.96	.86
16	761-M1263-2545-N	M2.5X0.45	.99	.88
20	761-M1267-2545-N	M2.5X0.45	1.42	1.27
24	761-M1271-2545-N	M2.5X0.45	1.51	1.34
25	761-M1272-2545-N	M2.5X0.45	1.52	1.36
14	761-M1261-3005-N	M3X0.5	.94	.84
15	761-M1262-3005-N	M3X0.5	.96	.86
20	761-M1267-3005-N	M3X0.5	1.17	1.04
24	761-M1271-3005-N	M3X0.5	1.51	1.34
25	761-M1272-3005-N	M3X0.5	1.52	1.36

For quantities greater than listed, call for quote.

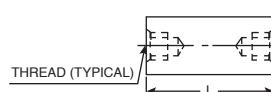
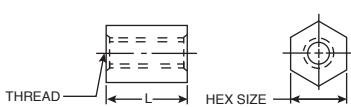
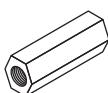
## 3/16 HEX FEMALE STANDOFFS



# RAF HARDWARE Hex Standoffs

**RAF**  
RAF ELECTRONIC  
COMPONENTS  
a Division of MW Industries, Inc.

## 1/4 HEX FEMALE STANDOFFS

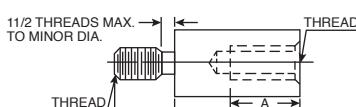


This page of product is RoHS compliant.

“L” (in)	Thread Size	Aluminum Material - Clear Iridite Finish		Stainless Steel Material		Nylon Material		
		MOUSER STOCK NO.	Price Each	MOUSER STOCK NO.	Price Each	MOUSER STOCK NO.	Price Each	
1/8	4-40	761-2098-440-AL-7	.24	.22	-	-	761-2098-440-N	.68 .60
3/16	4-40	761-2099-440-AL-7	.25	.23	761-2099-440-SS	.94 .83	761-2099-440-N	.74 .64
1/4	4-40	761-2100-440-AL-7	.17	.13	761-2100-440-SS	1.00 .88	761-2100-440-N	.62 .54
5/16	4-40	761-2101-440-AL-7	.28	.26	761-2101-440-SS	1.05 .92	761-2101-440-N	.82 .71
3/8	4-40	761-2102-440-AL-7	.19	.15	761-2102-440-SS	1.11 .97	761-2102-440-N	.63 .55
7/16	4-40	761-2103-440-AL-7	.30	.28	761-2103-440-SS	1.16 .101	761-2103-440-N	.90 .79
1/2	4-40	761-2104-440-AL-7	.24	.19	761-2104-440-SS	1.23 1.08	761-2104-440-N	.58 .50
9/16	4-40	761-2105-440-AL-7	.33	.31	761-2105-440-SS	1.41 1.23	761-2105-440-N	1.00 .87
5/8	4-40	761-2106-440-AL-7	.28	.26	761-2106-440-SS	1.56 1.37	761-2106-440-N	.57 .50
11/16	4-40	761-2107-440-AL-7	.38	.35	761-2107-440-SS	1.64 1.44	-	-
3/4	4-40	761-2108-440-AL-7	.24	.22	761-2108-440-SS	1.64 1.44	761-2108-440-N	.67 .59
13/16	4-40	761-2109-440-AL-7	.51	.48	761-2109-440-SS	1.66 1.45	761-2109-440-N	1.63 1.42
7/8	4-40	761-2110-440-AL-7	.40	.36	761-2110-440-SS	1.67 1.46	761-2110-440-N	.65 .57
15/16	4-40	761-2111-440-AL-7	.52	.49	761-2111-440-SS	1.68 1.47	761-2111-440-N	1.70 1.48
1"	4-40	761-2112-440-AL-7	.40	.36	761-2112-440-SS	1.70 1.49	761-2112-440-N	.85 .74
1/8	6-32	761-2098-632-AL-7	.23	.22	-	-	761-2098-632-N	.68 .60
3/16	6-32	761-2099-632-AL-7	.24	.23	761-2099-632-SS	.94 .83	761-2099-632-N	.74 .64
1/4	6-32	761-2100-632-AL-7	.18	.15	761-2100-632-SS	1.00 .88	761-2100-632-N	.62 .54
5/16	6-32	761-2101-632-AL-7	.27	.26	761-2101-632-SS	1.05 .92	761-2101-632-N	.82 .71
3/8	6-32	761-2102-632-AL-7	.17	.13	761-2102-632-SS	1.11 .97	761-2102-632-N	.63 .55
7/16	6-32	761-2103-632-AL-7	.29	.28	761-2103-632-SS	1.16 1.01	761-2103-632-N	.90 .79
1/2	6-32	761-2104-632-AL-7	.19	.15	761-2104-632-SS	1.23 1.08	761-2104-632-N	.66 .58
9/16	6-32	761-2105-632-AL-7	.32	.31	761-2105-632-SS	1.41 1.23	761-2105-632-N	1.00 .87
5/8	6-32	761-2106-632-AL-7	.23	.19	761-2106-632-SS	1.56 1.37	761-2106-632-N	.57 .50
11/16	6-32	761-2107-632-AL-7	.37	.35	-	-	761-2107-632-N	1.45 1.27
3/4	6-32	761-2108-632-AL-7	.24	.20	-	-	761-2108-632-N	.85 .74
13/16	6-32	-	-	-	-	-	761-2109-632-N	1.63 1.42
7/8	6-32	761-2110-632-AL-7	.32	.31	761-2110-632-SS	1.67 1.46	761-2110-632-N	.65 .57
15/16	6-32	761-2111-632-AL-7	.51	.49	761-2111-632-SS	1.68 1.47	761-2111-632-N	1.70 1.48
1"	6-32	761-2112-632-AL-7	.42	.35	761-2112-632-SS	1.70 1.49	761-2112-632-N	.85 .74

## MALE/FEMALE HEX STANDOFFS

Thread Length Code	
Thread	A
B	5/32
2-56	3/16
4-40	1/4
5/16	3/16
6-32	3/8
8-32	7/16
10-32	1/2



### 3/16 Hex

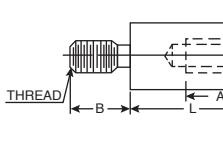
3/16	2-56	761-4500-256-AL-7	.38	.32	761-4500-256-SS	.87 .83	761-4500-256-N	1.35 1.18
1/4	2-56	761-4501-256-AL-7	.39	.33	761-4501-256-SS	.90 .85	761-4501-256-N	1.38 1.20
5/16	2-56	761-4502-256-AL-7	.39	.33	761-4502-256-SS	.93 .88	761-4502-256-N	1.42 1.24
3/8	2-56	761-4503-256-AL-7	.40	.34	761-4503-256-SS	.95 .90	761-4503-256-N	1.44 1.26
7/16	2-56	761-4504-256-AL-7	.41	.34	761-4504-256-SS	.98 .92	761-4504-256-N	1.47 1.29
1/2	2-56	761-4505-256-AL-7	.42	.35	761-4505-256-SS	1.01 .96	761-4505-256-N	1.52 1.33
3/16	4-40	761-4500-440-AL-7	.39	.32	761-4500-440-SS	.86 .81	761-4500-440-N	1.27 1.11
1/4	4-40	761-4501-440-AL-7	.39	.33	761-4501-440-SS	.86 .81	761-4501-440-N	1.31 1.15
5/16	4-40	761-4502-440-AL-7	.40	.33	761-4502-440-SS	.86 .81	761-4502-440-N	1.35 1.18
3/8	4-40	761-4503-440-AL-7	.40	.34	761-4503-440-SS	.89 .84	761-4503-440-N	1.39 1.22
7/16	4-40	761-4504-440-AL-7	.41	.34	761-4504-440-SS	.92 .87	-	-
1/2	4-40	761-4505-440-AL-7	.42	.35	761-4505-440-SS	.94 .89	761-4505-440-N	1.47 1.28
3/16	6-32	761-4500-632-AL-7	.37	.33	761-4500-632-SS	.94 .88	761-4500-632-N	1.31 1.15
1/4	6-32	-	-	-	761-4501-632-SS	.96 .91	-	-
5/16	6-32	761-4502-632-AL-7	.39	.34	-	-	-	-
3/8	6-32	761-4503-632-AL-7	.39	.34	761-4503-632-SS	1.02 .97	-	-
7/16	6-32	761-4504-632-AL-7	.40	.35	-	-	761-4504-632-N	1.47 1.28
1/2	6-32	761-4505-632-AL-7	.40	.35	761-4505-632-SS	1.07 1.01	761-4505-632-N	1.50 1.31

### 1/4 Hex

1/4	4-40	761-4530-440-AL-7	.40	.23	761-4530-440-SS	1.01 .95	761-4530-440-N	.40 .36
5/16	4-40	761-4531-440-AL-7	.47	.36	761-4531-440-SS	1.04 .98	761-4531-440-N	1.40 1.23
3/8	4-40	761-4532-440-AL-7	.35	.27	761-4532-440-SS	1.08 1.02	761-4532-440-N	.45 .39
7/16	4-40	761-4533-440-AL-7	.50	.39	761-4533-440-SS	1.13 1.07	761-4533-440-N	1.50 1.31
1/2	4-40	761-4534-440-AL-7	.50	.39	761-4534-440-SS	1.17 1.10	761-4534-440-N	.47 .41
9/16	4-40	761-4535-440-AL-7	.51	.40	761-4535-440-SS	1.21 1.14	761-4535-440-N	1.58 1.38
5/8	4-40	761-4536-440-AL-7	.53	.41	761-4536-440-SS	1.25 1.19	-	-
11/16	4-40	761-4537-440-AL-7	.54	.42	-	-	761-4537-440-N	1.67 1.46
3/4	4-40	761-4538-440-AL-7	.55	.43	761-4538-440-SS	1.34 1.27	761-4538-440-N	.49 .42
13/16	4-40	-	-	-	761-4539-440-SS	1.38 1.30	761-4539-440-N	1.76 1.54
7/8	4-40	761-4540-440-AL-7	.58	.45	761-4540-440-SS	1.41 1.34	761-4540-440-N	.49 .43
15/16	4-40	761-4541-440-AL-7	.59	.46	761-4541-440-SS	1.47 1.39	-	-
1"	4-40	761-4542-440-AL-7	.60	.47	761-4542-440-SS	1.51 1.42	761-4542-440-N	.50 .44
1/4	6-32	761-4531-632-AL-7	.30	.24	761-4530-632-SS	1.18 1.09	761-4530-632-N	.44 .39
5/16	6-32	761-4531-632-AL-7	.48	.37	761-4531-632-SS	1.22 1.12	761-4531-632-N	1.45 1.27
3/8	6-32	761-4532-632-AL-7	.39	.30	761-4532-632-SS	1.27 1.17	761-4532-632-N	.45 .39
7/16	6-32	761-4533-632-AL-7	.50	.39	761-4533-632-SS	1.30 1.20	761-4533-632-N	1.54 1.34
1/2	6-32	761-4534-632-AL-7	.41	.32	761-4534-632-SS	1.35 1.24	761-4534-632-N	.47 .41
9/16	6-32	761-4535-632-AL-7	.53	.41	761-4535-632-SS	1.39 1.28	-	-
5/8	6-32	761-4536-632-AL-7	.54	.42	761-4536-632-SS	1.47 1.36	761-4536-632-N	.48 .42
11/16	6-32	761-4537-632-AL-7	.55	.43	761-4537-632-SS	1.48 1.37	-	-
3/4	6-32	761-4538-632-AL-7	.57	.44	761-4538-632-SS	1.52 1.40	761-4538-632-N	.49 .42
13/16	6-32	-	-	-	761-4539-632-SS	1.56 1.44	-	-
7/8	6-32	761-4540-632-AL-7	.59	.46	761-4540-632-SS	1.61 1.48	-	-
15/16	6-32	761-4541-632-AL-7	.60	.47	761-4541-632-SS	1.65 1.52	761-4541-632-N	1.89 1.65
1"	6-32	761-4542-632-AL-7	.61	.47	761-4542-632-SS	1.69 1.56	761-4542-632-N	.50 .44

## MALE/MALE STACKING SPACERS - 3/16"

Thread Length Code	
Thread	A
B	5/32
2-56	3/16
4-40	1/4
5/16	3/16
6-32	3/8
8-32	7/16
10-32	1/2

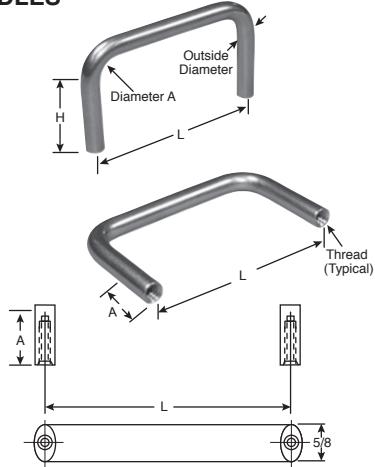


"L" (in)	Thread Size	MOUSER STOCK NO.	Price Each	MOUSER STOCK NO.	Price Each	MOUSER STOCK NO.	Price Each
.600	4-40	761-4000-440-AL-600	.50	.46			
.600	4-40	761-4000-440-NYL-600	1.19	1.10			
Hexagon</td							

# RAF HARDWARE Handles, Nuts and Screws

**RAF**  
ELECTRONIC  
HARDWARE  
a Division of MW Industries, Inc.

## HANDLES



This page of product is RoHS compliant.

MOUSER STOCK NO.	Thread Size	Dim. A	Outside Diameter	Length	Leg Height	Price Each	
						1	100
<b>Round Handles</b>							
761-8074-440-A-24	4-40	1/4	3/16	2"	1"	2.80	2.60
761-8076-440-A-24	4-40	1/4	3/16	4"	1"	4.43	4.12
761-8077-440-A-24	4-40	1/4	3/16	5"	1"	4.66	4.34
761-8074-632-A-24	6-32	5/16 - 3/8	3/16	2"	1"	4.04	3.76
761-8075-632-A-24	6-32	5/16 - 3/8	3/16	3"	1"	4.24	3.86
761-8076-632-A-24	6-32	5/16 - 3/8	3/16	4"	1"	4.43	4.12
761-8102-632-A-24	6-32	3/8	1/4	1-1/8	1"	4.11	3.82
761-8103-632-A-24	6-32	3/8	1/4	1-1/4	1"	4.11	3.82
761-8106-632-A-24	6-32	3/8	1/4	2"	1"	4.27	3.97
761-8102-832-A-24	8-32	7/16 - 9/16	1/4	1-1/8	1"	4.11	3.82
761-8103-832-A-24	8-32	7/16 - 9/16	1/4	1-1/4	1"	4.11	3.82
761-8105-832-A-24	8-32	7/16 - 9/16	1/4	1-3/4	1"	4.20	3.91
761-8106-832-A-24	8-32	7/16 - 9/16	1/4	2"	1"	4.27	3.97
<b>Oval Handles</b>							
761-8358-1032-A-24	10-32	5/16 - 5/8	5/8 x 9/32	3"	1-9/32	6.51	6.06
761-8359-1032-A-24	10-32	5/16 - 5/8	5/8 x 9/32	4"	1-9/32	6.85	6.37
761-8360-1032-A-24	10-32	5/16 - 5/8	5/8 x 9/32	4-1/4	1-9/32	6.92	6.44
761-8368-1032-A-24	10-32	5/16 - 5/8	5/8 X 9/32	4"	1-1/2	6.99	6.50
761-8370-1032-A-24	10-32	5/16 - 5/8	5/8 X 9/32	4-1/2	1-1/2	7.24	6.73
761-8371-1032-A-24	10-32	5/16 - 5/8	5/8 X 9/32	4-9/16	1-1/2	7.24	6.73
761-8372-1032-A-24	10-32	5/16 - 5/8	5/8 X 9/32	5"	1-1/2	7.35	6.84
761-8373-1032-A-24	10-32	5/16 - 5/8	5/8 X 9/32	6"	1-1/2	7.73	7.19
761-8376-1032-A-24	10-32	5/16 - 5/8	5/8 X 9/32	3"	1-3/4	6.85	6.37
761-8377-1032-A-24	10-32	5/16 - 5/8	5/8 X 9/32	4"	1-3/4	7.24	6.73

## PLAIN THUMB SCREWS

MOUSER STOCK NO.	RAF Hardware Part No.	Fig.	Thread Size	For quantities greater than listed, call for quote.				
				A .020-.000	B .015	C .015	D .010	Price Each
Aluminum								
761-7120-AL	7120-AL	A	4-40	5/16	3/16	1/2	5/16	.62
761-7121-AL	7121-AL	A	4-40	5/16	3/16	9/16	3/8	.63
761-7122-AL	7122-AL	A	4-40	5/16	3/16	5/8	7/16	.65
761-7123-AL	7123-AL	A	4-40	5/16	3/16	11/16	1/2	.66
761-7124-AL	7124-AL	A	6-32	5/16	3/16	1/2	5/16	.63
761-7126-AL	7126-AL	A	6-32	5/16	3/16	5/8	7/16	.66
761-7127-AL	7127-AL	A	6-32	5/16	3/16	11/16	1/2	.68
Stainless Steel								
761-7120-SS	7120-SS	A	4-40	5/16	3/16	1/2	5/16	1.77
761-7122-SS	7122-SS	A	4-40	5/16	3/16	5/8	7/16	1.91
761-7124-SS	7124-SS	A	6-32	5/16	3/16	1/2	5/16	1.80

## WASHER FACE THUMB SCREWS

MOUSER STOCK NO.	RAF Hardware Part No.	Fig.	Thread Size	For quantities greater than listed, call for quote.				
				A .020-.000	B .015	C .015	D .010	Price Each
Aluminum								
761-7100-AL	7100-AL	B	4-40	3/8	3/16	5/8	5/16	.78
761-7101-AL	7101-AL	B	4-40	3/8	3/16	11/16	3/8	.80
761-7103-AL	7103-AL	B	6-32	3/8	3/16	11/16	3/8	.82
761-7106-AL	7106-AL	B	8-32	7/16	3/16	11/16	3/8	1.02
761-7108-AL	7108-AL	B	8-32	7/16	3/16	15/16	5/8	1.16
761-7109-AL	7109-AL	B	10-32	7/16	3/16	11/16	3/8	1.02
761-7110-AL	7110-AL	B	10-32	7/16	3/16	13/16	1/2	1.10
761-7112-AL	7112-AL	B	1/4-20	1/2	1/4	3/4	3/8	1.28
761-7113-AL	7113-AL	B	1/4-20	1/2	1/4	7/8	1/2	1.38
761-7114-AL	7114-AL	B	1/4-20	1/2	1/4	1	5/8	1.51
761-7115-AL	7115-AL	B	1/4-20	1/2	1/4	1-1/8	3/4	1.60
Stainless Steel								
761-7100-SS	7100-SS	B	4-40	3/8	3/16	5/8	5/16	1.64
761-7101-SS	7101-SS	B	4-40	3/8	3/16	11/16	3/8	1.71
761-7103-SS	7103-SS	B	6-32	3/8	3/16	11/16	3/8	1.84
761-7105-SS	7105-SS	B	6-32	3/8	3/16	13/16	1/2	2.06
761-7106-SS	7106-SS	B	8-32	7/16	3/16	11/16	3/8	2.42
761-7107-SS	7107-SS	B	8-32	7/16	3/16	13/16	1/2	2.70
761-7108-SS	7108-SS	B	8-32	7/16	3/16	15/16	5/8	2.92
761-7110-SS	7110-SS	B	10-32	7/16	3/16	13/16	1/2	2.70
761-7111-SS	7111-SS	B	10-32	7/16	3/16	15/16	5/8	2.92
761-7113-SS	7113-SS	B	1/4-20	1/2	1/4	7/8	1/2	3.52

## ROUND THUMB NUTS

MOUSER STOCK NO.	RAF Hardware Part No.	Fig.	Thread Size	For quantities greater than listed, call for quote.					
				A .020-.000	B .015	C .015	D .010	E .031	
Aluminum									
761-7210-AL	7210-AL	C	2-56	1/4	1/8	1/4	1/8	3/16	.42
761-7211-AL	7211-AL	C	4-40	5/16	1/8	1/4	1/8	4-40	.42
761-7212-AL	7212-AL	C	6-32	3/8	1/8	9/32	5/32	11/32	.48
761-7213-AL	7213-AL	C	8-32	7/16	1/8	9/32	3/8	17/32	.62
Stainless Steel									
761-7210-SS	7210-SS	C	2-56	1/4	1/8	1/4	1/8	3/16	.87
761-7211-SS	7211-SS	C	4-40	5/16	1/8	1/4	1/8	13/32	.99
761-7212-SS	7212-SS	C	6-32	3/8	1/8	9/32	5/32	11/32	1.31
761-7213-SS	7213-SS	C	8-32	7/16	1/8	9/32	3/8	17/32	1.54
761-7214-SS	7214-SS	C	10-24	1/2	5/32	11/32	3/16	13/32	2.17
761-7215-SS	7215-SS	C	10-32	1/2	5/32	11/32	3/16	13/32	1.90

## JACK SCREWS - 3/16 HEX

MOUSER STOCK NO.	RAF Hardware Part No.	Fig.	Length (B) (in.)		Price Each		
			1	100	500		
761-4750-1	4750-1	D	3/16		.66	.50	.462
761-4750-2	4750-2	D	1/4		.66	.50	.462
761-4750-3	4750-3	D	5/16		.48	.36	.333
761-4750-4	4750-4	D	3/8		.71	.54	.50
761-4750-5	4750-5	D	7/16		.76	.57	.533
761-4750-6	4750-6	D	1/2		.87	.65	.609
761-4750-7	4750-7	D	9/16		1.00	.75	.701
761-4750-8	4750-8	D	5/8		2.00	1.45	1.15

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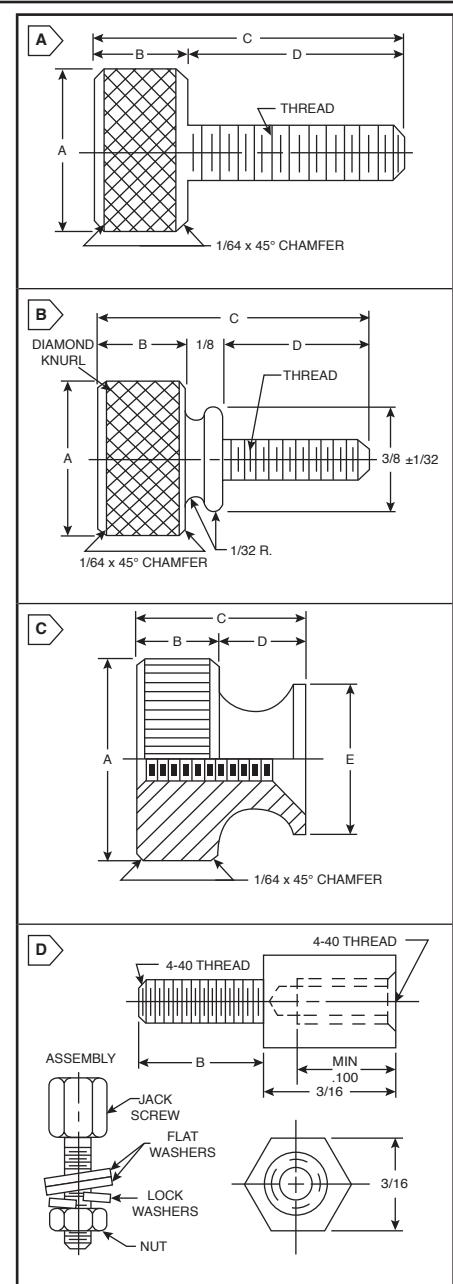
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# RAF HARDWARE Metric Screws, Nuts and Standoffs

RoHS Compliant



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## STAINLESS STEEL METRIC PLAIN THUMB SCREWS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	RAF Hardware Part No.	Fig.	Thread Size	A +0.5-0.0	B ±0.5	C ±0.5	D ±0.5	Price Each		
								1	100	500
761-M3465-SS	M3465-SS	A	M3X0.5	8	5	13	8	1.51	1.42	1.23
761-M3467-SS	M3467-SS	A	M3X0.5	8	5	16	11	1.62	1.52	1.32
761-M3468-SS	M3468-SS	A	M3X0.5	8	5	18	13	1.70	1.59	1.38
761-M3469-SS	M3469-SS	A	M3.5X0.6	8	5	13	8	1.53	1.44	1.24
761-M3471-SS	M3471-SS	A	M3.5X0.6	8	5	16	11	1.64	1.54	1.34
761-M3473-SS	M3473-SS	A	M4X0.7	10	5	14	9	2.01	1.88	1.63
761-M3474-SS	M3474-SS	A	M4X0.7	10	5	16	11	2.13	2.00	1.73
761-M3476-SS	M3476-SS	A	M4X0.7	10	5	19	14	2.36	2.21	1.92
761-M3477-SS	M3477-SS	A	M4X0.7	10	5	21	16	2.58	2.42	2.10
761-M3478-SS	M3478-SS	A	M5X0.8	11	5	14	9	2.62	2.46	2.13
761-M3482-SS	M3482-SS	A	M5X0.8	11	5	21	16	3.27	3.06	2.66
761-M3483-SS	M3483-SS	A	M6X1	13	6	19	13	3.99	3.74	3.24
761-M3487-SS	M3487-SS	A	M6X1	13	6	25	19	4.70	4.40	3.82

## STAINLESS STEEL CAPTIVE SCREWS

Invaluable for equipment panels where mounting hardware is subject to loss, these captive screws and retainers assure easy and secure assembly. In addition to standard models, users choose variations such as slotted, unslotted, or hex heads, washers for oval head styles, plus retainer spring and washer sets.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	RAF Hardware Part No.	Fig.	Thread Size	H.D. ±0.4	H.L. ±0.4	L. ±0.4	T.L. ±0.4	S.D. ±0.2	S.L. ±0.3	W. +0.2/ -0.0	D. +0.3/ -0.0	Price Each		
												1	100	500
761-M0100-SS	M0100-SS	B	M3X0.5	8	5	16.5	7	2	9.5	1	1.5	2.20	2.07	1.79
761-M0102-SS	M0102-SS	B	M3X0.5	8	5	20	7	2	13	1	1.5	2.40	2.25	1.95

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	RAF Hardware Part No.	Fig.	Thread Size	H.D. +0.5/ -0.2	H.L. ±0.3	L. ±0.5	T.L. +0.0/ -0.4	S.D. ±0.15	S.L. ±0.3	P.D. +0.0/ -0.3	P.L. ±0.4	W. +0.2/ -0.0	D. +0.3/ -0.0	Price Each		
														1	100	500
761-M0170-SS	M0170-SS	C	M3X0.5	6.5	6.5	9.5	3.2	2	4.3	2	2	1.2	2	1.44	1.35	1.17
761-M0171-SS	M0171-SS	C	M3X0.5	6.5	6.5	11	3.2	2	5.8	2	2	1.2	2	1.46	1.37	1.19
761-M0172-SS	M0172-SS	C	M3X0.5	6.5	6.5	13	3.2	2	7.8	2	2	1.2	2	1.51	1.42	1.23
761-M0174-SS	M0174-SS	C	M3X0.5	6.5	6.5	16	3.2	2	10.8	2	2	1.2	2	1.77	1.66	1.44
761-M0182-SS	M0182-SS	C	M3X0.5	8	8	11	3.2	2	5.8	2	2	1.2	2	1.76	1.65	1.43
761-M0185-SS	M0185-SS	C	M3X0.5	8	8	16	3.2	2	10.8	2	2	1.2	2	2.14	2.01	1.74
761-M0193-SS	M0193-SS	C	M3.5X0.6	8	8	13	5.5	2.5	5	2.5	2.5	1.2	2	1.94	1.82	1.57

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	RAF Hardware Part No.	Fig.	Thread Size	H.D. ±0.2	H.L. +0.0/ -0.4	L. ±0.5	T.L. ±0.3	S.D. ±0.15	S.L. ±0.3	W.L. +0.0/ -0.3	W. +0.0/ -0.4	D. +0.0/ -0.4	Price Each		
													1	100	500
761-M0274-SS	M0274-SS	D	M2.5X0.45	4	2.5	6.5	4	1.8	2.5	1.8	0.9	1.1	1.12	1.05	.907
761-M0275-SS	M0275-SS	D	M2.5X0.45	4	2.5	8	4	1.8	4	1.8	0.9	1.1	1.14	1.07	.926
761-M0276-SS	M0276-SS	D	M2.5X0.45	4	2.5	9.5	4	1.8	5.5	1.8	0.9	1.1	1.25	1.17	1.02
761-M0277-SS	M0277-SS	D	M2.5X0.45	4	2.5	11	4	1.8	7	1.8	0.9	1.1	1.27	1.19	1.03
761-M0278-SS	M0278-SS	D	M2.5X0.45	4	2.5	13	4	1.8	9	1.8	0.9	1.1	1.30	1.22	1.05
761-M0279-SS	M0279-SS	D	M2.5X0.45	4	2.5	14.5	4	1.8	10.5	1.8	0.9	1.1	1.32	1.24	1.07
761-M0280-SS	M0280-SS	D	M2.5X0.45	4	2.5	16	4	1.8	12	1.8	0.9	1.1	1.33	1.25	1.08
761-M0281-SS	M0281-SS	D	M2.5X0.45	4	2.5	17.5	4	1.8	13.5	1.8	0.9	1.1	1.36	1.27	1.10
761-M0282-SS	M0282-SS	D	M2.5X0.45	4	2.5	19	4	1.8	15	1.8	0.9	1.1	1.67	1.57	1.36
761-M0284-SS	M0284-SS	D	M3X0.5	4.3	2.7	8	4.8	2	3.2	2	1	1.2	1.14	1.07	.926
761-M0285-SS	M0285-SS	D	M3X0.5	4.3	2.7	9.5	4.8	2	4.7	2	1	1.2	1.25	1.17	1.02
761-M0286-SS	M0286-SS	D	M3X0.5	4.3	2.7	11	4.8	2	6.2	2	1	1.2	1.27	1.19	1.03
761-M0288-SS	M0288-SS	D	M3X0.5	4.3	2.7	14.5	4.8	2	9.7	2	1	1.2	1.32	1.24	1.07
761-M0289-SS	M0289-SS	D	M3X0.5	4.3	2.7	16	4.8	2	11.2	2	1	1.2	1.33	1.25	1.08

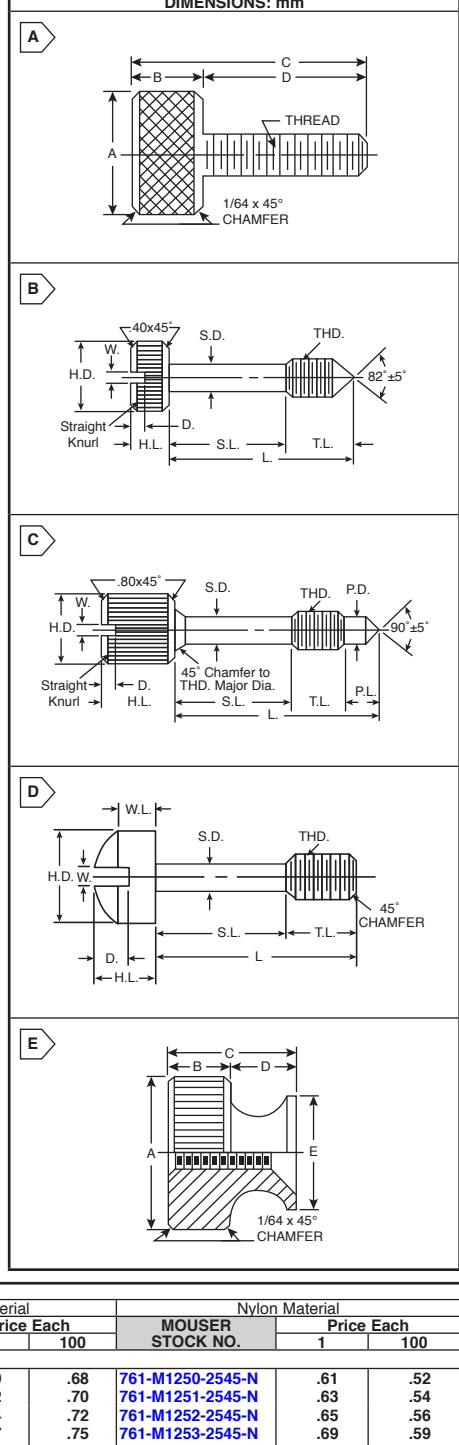
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	RAF Hardware Part No.	Fig.	Thread Size	A +0.5-0.0	B ±0.5	C Ref.	D ±0.5	E ±0.5	Price Each		
									1	100	500
761-M3560-B-12	M3560-B-12	E	M2.5X0.45	6	3	6	3	5	.79	.74	.64
761-M3561-B-12	M3561-B-12	E	M3X0.5	8	3	6	3	6	.92	.86	.74
761-M3563-B-12	M3563-B-12	E	M4X0.7	10	3	7	4	9	1.58	1.48	1.28
761-M3564-SS	M3564-SS	E	M5X0.8	13	4	9	5	11	2.56	2.40	2.08
761-M3565-SS	M3565-SS	E	M6X1	13	4	9	5	12	2.56	2.40	2.08

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	RAF Hardware Part No.	Fig.	Thread Size	A +0.5-0.0	B ±0.5	C Ref.	D ±0.5	E ±0.5	Price Each		
									1	100	500
761-M3560-SS	M3560-SS	E	M2.5X0.45	6	3	6	3	5	.79	.77	.64
761-M3561-SS	M3561-SS	E	M3X0.5	8	3	6	3	6	1.32	1.24	1.07
761-M3563-SS	M3563-SS	E	M4X0.7	10	3	7	4	9	1.58	1.48	1.28
761-M3564-SS	M3564-SS	E	M5X0.8	13	4	9	5	11	2.56	2.40	2.08
761-M3565-SS	M3565-SS	E	M6X1	13	4	9	5	12	2.56	2.40	2.08

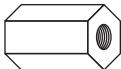
For quantities greater than listed, call for quote.



# RAF HARDWARE Metric Standoffs and Spacers



## METRIC HEX FEMALE STANDOFFS 6MM



## METRIC FEMALE ROUND SPACERS 4.5MM



RAF

Hardware

## METRIC FEMALE ROUND SPACERS 6MM - 8MM



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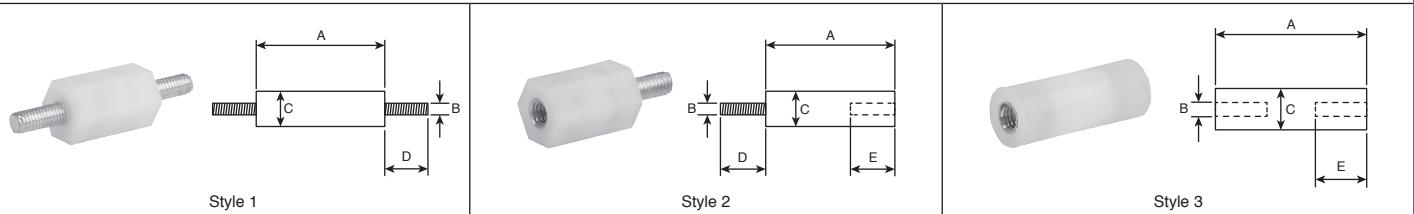
"L" (mm)	Aluminum Material		Stainless Steel Material		Nylon Material			
	MOUSER STOCK NO.	Price Each	MOUSER STOCK NO.	Price Each	MOUSER STOCK NO.	Price Each		
	1	100		1	100		1	100
<b>M3x0.5 Thread</b>								
3	761-M1300-3005-AL	.37	.32	761-M1300-3005-SS	.88	.75	-	-
4	761-M1301-3005-AL	.38	.33	761-M1301-3005-SS	.91	.78	761-M1301-3005-N	.70 .60
5	-	-	761-M1302-3005-SS	.95	.82	761-M1302-3005-N	.74 .63	
6	761-M1303-3005-AL	.42	.36	761-M1303-3005-SS	.99	.85	761-M1303-3005-N	.78 .67
7	-	-	761-M1304-3005-SS	1.03	.88	761-M1304-3005-N	.81 .69	
8	761-M1305-3005-AL	.43	.37	761-M1305-3005-SS	1.06	.91	761-M1305-3005-N	.84 .72
9	761-M1306-3005-AL	.45	.38	-	-	-	-	-
10	761-M1307-3005-AL	.46	.39	761-M1307-3005-SS	1.12	.96	761-M1307-3005-N	.92 .79
11	-	-	761-M1308-3005-SS	1.13	.97	-	-	-
12	761-M1309-3005-AL	.52	.41	761-M1309-3005-SS	1.15	.99	761-M1309-3005-N	.99 .85
13	761-M1310-3005-AL	.52	.44	-	-	761-M1310-3005-N	1.03 .88	
<b>M4x0.7 Thread</b>								
5	761-M1302-4007-AL	.40	.35	-	-	-	-	-
6	761-M1303-4007-AL	.42	.36	-	-	-	-	-
7	-	-	761-M1304-4007-SS	1.03	.88	-	-	-
9	-	-	761-M1306-4007-SS	1.11	.95	-	-	-
10	761-M1307-4007-AL	.46	.39	-	-	761-M1307-4007-N	.79 .74	
11	761-M1308-4007-AL	.47	.40	761-M1308-4007-SS	1.13	.97	-	-
12	761-M1309-4007-AL	.48	.41	-	-	-	-	-
13	761-M1310-4007-AL	.52	.44	-	-	761-M1310-4007-N	.88 .82	
<b>M2.5 Thread</b>								
1	761-M0500-25-AL	.36	.31	-	-	761-M0500-25-N	.47 .42	
2	761-M0501-25-AL	.36	.31	-	-	761-M0501-25-N	.48 .42	
3	761-M0502-25-AL	.37	.32	761-M0502-25-SS	.57	.49	761-M0502-25-N	.49 .43
4	761-M0503-25-AL	.37	.32	761-M0503-25-SS	.58	.50	761-M0503-25-N	.49 .44
5	761-M0504-25-AL	.37	.33	761-M0504-25-SS	.60	.51	761-M0504-25-N	.50 .44
6	761-M0505-25-AL	.40	.35	761-M0505-25-SS	.61	.53	761-M0505-25-N	.51 .45
7	761-M0506-25-AL	.40	.35	-	-	761-M0506-25-N	.52 .46	
8	761-M0507-25-AL	.41	.36	761-M0507-25-SS	.65	.56	761-M0507-25-N	.53 .47
9	761-M0508-25-AL	.41	.36	-	-	761-M0508-25-N	.54 .48	
10	761-M0509-25-AL	.42	.36	761-M0509-25-SS	.74	.63	-	-
11	761-M0510-25-AL	.42	.37	-	-	-	-	-
12	761-M0511-25-AL	.42	.37	-	-	761-M0511-25-N	.60 .54	
<b>M3 Thread</b>								
1	761-M0500-3-AL	.36	.31	761-M0500-3-SS	.55	.47	761-M0500-3-N	.36 .31
2	761-M0501-3-AL	.36	.31	761-M0501-3-SS	.55	.47	761-M0501-3-N	.37 .32
3	761-M0502-3-AL	.37	.32	-	-	761-M0502-3-N	.38 .32	
4	761-M0503-3-AL	.37	.32	-	-	-	-	-
5	761-M0504-3-AL	.37	.33	-	-	761-M0504-3-N	.39 .33	
6	761-M0505-3-AL	.40	.35	761-M0505-3-SS	.61	.53	761-M0505-3-N	.40 .34
8	761-M0507-3-AL	.41	.36	-	-	761-M0507-3-N	.41 .35	
10	761-M0509-3-AL	.42	.36	-	-	-	-	-
11	761-M0510-3-AL	.42	.37	-	-	761-M0510-3-N	.43 .37	
12	761-M0511-3-AL	.42	.37	-	-	761-M0511-3-N	.47 .40	
13	761-M0512-3-AL	.45	.40	761-M0512-3-SS	.77	.66	-	-
<b>M3 Thread - 6mm</b>								
2	761-M0531-3-AL	.33	.28	761-M0531-3-SS	.57	.49	761-M0531-3-N	.46 .44
3	761-M0532-3-AL	.33	.29	-	-	761-M0532-3-N	.48 .45	
4	761-M0533-3-AL	.34	.29	761-M0533-3-SS	.62	.53	761-M0533-3-N	.49 .46
5	761-M0534-3-AL	.34	.29	-	-	761-M0534-3-N	.50 .47	
6	761-M0535-3-AL	.35	.30	761-M0535-3-SS	.65	.56	761-M0535-3-N	.52 .48
7	761-M0536-3-AL	.35	.30	-	-	-	-	-
8	761-M0537-3-AL	.36	.31	761-M0537-3-SS	.69	.59	761-M0537-3-N	.53 .50
9	761-M0538-3-AL	.37	.32	-	-	761-M0538-3-N	.54 .51	
10	761-M0539-3-AL	.38	.33	761-M0539-3-SS	.70	.60	-	-
11	761-M0540-3-AL	.39	.33	-	-	-	-	-
12	761-M0541-3-AL	.39	.34	-	-	761-M0541-3-N	.58 .54	
13	761-M0542-3-AL	.41	.35	761-M0542-3-SS	.72	.62	761-M0542-3-N	.59 .55
<b>M4 Thread - 6mm</b>								
2	761-M0531-4-AL	.33	.28	-	-	-	-	-
3	-	-	-	761-M0532-4-SS	.60	.51	761-M0532-4-N	.48 .45
4	761-M0533-4-AL	.34	.29	761-M0533-4-SS	.62	.53	761-M0533-4-N	.49 .46
5	761-M0534-4-AL	.34	.29	-	-	761-M0534-4-N	.50 .47	
6	-	-	-	-	-	761-M0535-4-N	.52 .48	
7	-	-	-	-	-	761-M0536-4-N	.52 .49	
8	-	-	-	-	-	761-M0537-4-N	.53 .50	
9	761-M0538-4-AL	.37	.32	-	-	-	-	-
12	-	-	-	-	-	761-M0541-4-N	.58 .54	
13	761-M0542-4-AL	.41	.35	-	-	-	-	-
<b>M3 Thread - 8mm</b>								
2	761-M0591-3-AL	.33	.29	-	-	-	-	-
3	-	-	-	-	-	761-M0592-3-N	.42 .36	
4	-	-	-	-	-	761-M0593-3-N	.43 .37	
5	761-M0594-3-AL	.35	.30	-	-	-	-	-
9	761-M0598-3-AL	.39	.34	-	-	-	-	-
10	761-M0599-3-AL	.40	.34	-	-	761-M0599-3-N	.49 .42	
12	761-M0601-3-AL	.42	.36	-	-	-	-	-
<b>M4 Thread - 8mm</b>								
2	-	-	-	-	-	761-M0591-4-N	.42 .36	
3	-	-	-	-	-	761-M0592-4-N	.42 .36	
5	761-M0594-4-AL	.35	.30	761-M0594-4-SS	.71	.61	761-M0594-4-N	.44 .38
6	-	-	-	-	-	761-M0595-4-N	.45 .39	
7	-	-	-	-	-	761-M0596-4-N	.46 .39	
8	-	-	-	761-M0597-4-SS	.78	.67	-	-
<b>M5 Thread - 8mm</b>								
3	-	-	-	-	-	761-M0592-5-N	.42 .36	
5	761-M0594-5-AL	.35	.30	-	-	761-M0594-5-N	.44 .38	
6	-	-	-	761-M0595-5-SS	.74	.63	-	-
8	761-M0597-5-AL	.37	.32	-	-	761-M0597-5-N	.47 .40	
10	-	-	-	-	-	761-M0599-5-N	.49 .42	
12	-	-	-	761-M0601-5-SS	.97	.83	-	-
13	761-M0602-5-AL	.42	.36	-	-	-	-	-

# Transipillars and Spacers

 This page of product is RoHS compliant.

 **SCHURTER** TRANSIPILLARS  
ELECTRONIC COMPONENTS

## DIMENSIONS: mm



Style 1

Style 2

Style 3

### Features:

- Versatile and rugged insulation mounting system
- Various combination of stud and insert
- Metric threads and lengths
- Studs and inserts moulded into nylon pillar
- Body hexagonal or cylindric
- Custom specific versions on request



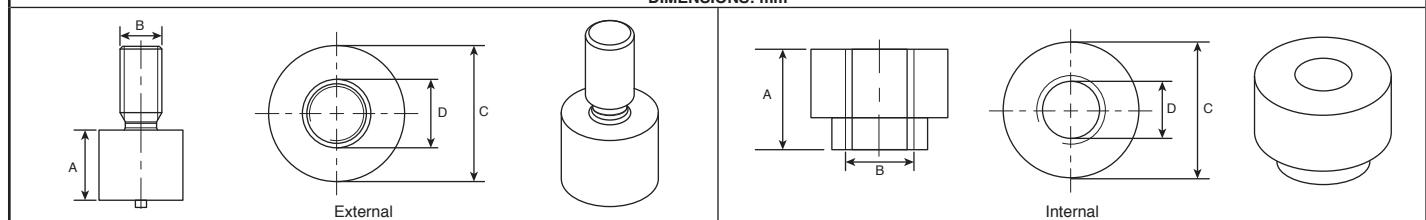
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Schurter Part No.	Form	Style	Length (A)	Thread Size (B)	Diameter (C)	Stud Length (D)	Insert Depth (E)	Price Each			
									1	10	25	50
693-9631.31	9631.3100	Hexagonal	1	13	M3	7	6.5	-	.58	.526	.482	.464
693-9665.1200	9665.1200	Hexagonal	2	51	M6	16	12.5	12.5	1.34	1.21	1.11	1.03
693-9643.8200	9643.8200	Hexagonal	2	38	M4	10	9.5	6.5	.71	.65	.60	.55
693-9653.8200	9653.8200	Hexagonal	2	38	M5	13	12.5	8	.82	.75	.68	.63
693-9663.8200	9663.8200	Hexagonal	2	38	M6	16	12.5	12.5	1.24	1.13	1.04	.96
693-9663.2200	9663.2200	Hexagonal	2	32	M6	16	12.5	12.5	1.18	1.08	.99	.91
693-9632.5200	9632.5200	Hexagonal	2	25	M3	7	6.5	4.5	.67	.61	.56	.51
693-9642.5200	9642.5200	Hexagonal	2	25	M4	10	9.5	6.5	.68	.62	.57	.53
693-9631.3200	9631.3200	Hexagonal	2	13	M3	7	6.5	4.5	.67	.61	.56	.51
693-9641.6200	9641.6200	Hexagonal	2	16	M4	10	9.5	6.5	.67	.61	.56	.52
693-9843.8200	9843.8200	Cylindrical	2	38	M4	9.5	9.5	6.5	.71	.65	.60	.55
693-9865.1200	9865.1200	Cylindrical	2	51	M6	16	12.5	12.5	1.00	.91	.84	.77
693-9853.8200	9853.8200	Cylindrical	2	38	M5	12.5	12.5	8	.75	.69	.63	.58
693-9855.1200	9855.1200	Cylindrical	2	51	M5	12.5	12.5	8	.80	.73	.67	.62
693-9863.2200	9863.2200	Cylindrical	2	32	M6	16	12.5	12.5	.94	.86	.79	.72
693-9832.5200	9832.5200	Cylindrical	2	25	M3	7	6.5	4.5	.76	.69	.63	.58
693-9842.5200	9842.5200	Cylindrical	2	25	M4	9.5	9.5	6.5	.76	.69	.63	.58
693-9852.5200	9852.5200	Cylindrical	2	25	M5	12.5	12.5	8	.75	.69	.63	.58
693-9831.3200	9831.3200	Cylindrical	2	13	M3	7	6.5	4.5	.60	.55	.50	.46
693-9841.6200	9841.6200	Cylindrical	2	16	M4	9.5	9.5	6.5	.67	.61	.56	.52
693-9656.4300	9656.4300	Hexagonal	3	64	M5	13	-	8	.69	.62	.57	.53
693-9633.8300	9633.8300	Hexagonal	3	38	M3	7	-	4.5	.75	.69	.63	.58
693-9645.1300	9645.1300	Hexagonal	3	51	M4	10	-	6.5	.90	.81	.75	.69
693-9633.2300	9633.2300	Hexagonal	3	32	M3	7	-	4.5	.72	.65	.60	.55
693-9632.5300	9632.5300	Hexagonal	3	25	M3	7	-	4.5	.72	.65	.60	.55
693-9631.3300	9631.3300	Hexagonal	3	13	M3	7	-	4.5	.68	.62	.57	.53
693-9641.6300	9641.6300	Hexagonal	3	16	M4	10	-	6.5	.71	.64	.59	.54
693-9833.8300	9833.8300	Cylindrical	3	38	M3	7	-	4.5	.75	.69	.63	.58
693-9833.2300	9833.2300	Cylindrical	3	32	M3	7	-	4.5	.72	.65	.60	.55
693-9832.5300	9832.5300	Cylindrical	3	25	M3	7	-	4.5	.72	.65	.60	.55
693-9842.5300	9842.5300	Cylindrical	3	25	M4	9.5	-	6.5	.71	.65	.60	.55
693-9831.3300	9831.3300	Cylindrical	3	13	M3	7	-	4.5	.49	.44	.41	.38



## SMD STEEL SPACERS WA-SMSE SERIES

### DIMENSIONS: mm



External

Internal

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Wurth Part No.	Form	Length (A)	Thread Size (B)	Outside Diameter (C)	Inside Diameter (D)	Plating	Material	Price Each		
									1	10	50
<b>External</b>											
710-9771050360R	9771050360R	Cylindrical	5	M3	6	0.8	Tin	Steel	1.98	1.85	1.55
710-9771060360R	9771060360R	Cylindrical	12	M3	6	0.8	Tin	Steel	1.98	1.85	1.55
710-9771070360R	9771070360R	Cylindrical	13	M3	6	0.8	Tin	Steel	1.98	1.85	1.55
710-9771080360R	9771080360R	Cylindrical	14	M3	6	0.8	Tin	Steel	1.98	1.85	1.55
710-9771090360R	9771090360R	Cylindrical	15	M3	6	0.8	Tin	Steel	1.98	1.85	1.55
710-9771100360R	9771100360R	Cylindrical	16	M3	6	0.8	Tin	Steel	1.98	1.85	1.55
710-9771110360R	9771110360R	Cylindrical	17	M3	6	0.8	Tin	Steel	1.98	1.85	1.55
710-9771120360R	9771120360R	Cylindrical	18	M3	6	0.8	Tin	Steel	1.98	1.85	1.55
710-9771130360R	9771130360R	Cylindrical	19	M3	6	0.8	Tin	Steel	1.98	1.85	1.55
710-9771140360R	9771140360R	Cylindrical	20	M3	6	0.8	Tin	Steel	1.98	1.85	1.55
710-9771150360R	9771150360R	Cylindrical	21	M3	6	0.8	Tin	Steel	1.98	1.85	1.55
<b>Internal</b>											
710-9774030360R	9774030360R	Cylindrical	4.4	M3	6	4.2	Tin	Steel	1.98	1.85	1.55
710-9774040360R	9774040360R	Cylindrical	5.4	M3	6	4.4	Tin	Steel	1.98	1.85	1.55
710-9774050360R	9774050360R	Cylindrical	6.4	M3	6	4.4	Tin	Steel	1.98	1.85	1.55
710-9774060360R	9774060360R	Cylindrical	7.4	M3	6	4.2	Tin	Steel	1.98	1.85	1.55
710-9774070360R	9774070360R	Cylindrical	8.4	M3	6	4.4	Tin	Steel	1.98	1.85	1.55
710-9774080360R	9774080360R	Cylindrical	9.4	M3	6	4.4	Tin	Steel	1.98	1.85	1.55
710-9774090360R	9774090360R	Cylindrical	10.4	M3	6	4.4	Tin	Steel	1.98	1.85	1.55
710-9774110360R	9774110360R	Cylindrical	12.4	M3	6	4.4	Tin	Steel	1.98	1.85	1.55
710-9774120360R	9774120360R	Cylindrical	13.4	M3	6	4.4	Tin	Steel	1.98	1.85	1.55
710-9774130360R	9774130360R	Cylindrical	14.4	M3	6	4.4	Tin	Steel	1.98	1.85	1.55
710-9774140360R	9774140360R	Cylindrical	15.4	M3	6	4.4	Tin	Steel	1.98	1.85	1.55
710-9774150360R	9774150360R	Cylindrical	16.4	M3	6	4.4	Tin	Steel	1.98	1.85	1.55
710-9774100360R	9774100360R	Cylindrical	11.4	M3	6	4.4	Tin	Steel	1.98	1.85	1.55