

#### **SPECIFICATIONS**

CONTACT RATING: Dependent upon contact material See Page 64.

MECHANICAL LIFE: 30,000 make-and-break cycles. CONTACT RESISTANCE: 10 m  $\Omega$  max. initial @ 2-4VDC 100mA for both silver and gold plated contacts.

**INSULATION RESISTANCE:** 1,000 M $\Omega$  min.

DIELECTRIC STRENGTH: 1.000 Vrms min.@sea level.

OPERATING TEMPERATURE: -30°C to 85°C.

#### **MATERIALS**

CASE & BUSHING: Glass filled nylon 6/6, flame retardant,

heat stabilized (UL94V-0).

ACTUATOR: Nylon, black std. Internal O-ring seal standard

with all actuactors.

FRAME: Spring steel, black std.

SWITCH SUPPORT: Brass or steel,tin plated.

**ACTUATOR PIVOT & MOUNTING BRACKET: Nylon. ACTUATOR PIVOT RETAINER: Stainless steel.** 

TERMINAL/CONTACT: Silver or gold plated copper alloy.

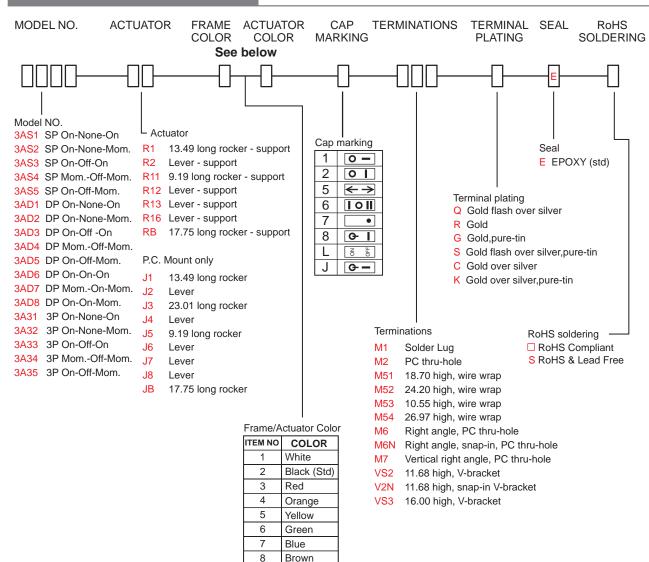
(See Page 64)







## **HOW TO ORDER**



Gray \* Besides standard color,

9

other colors need to check stocks available.

### **SWITCH FUNCTION**



3A Rocker Switches

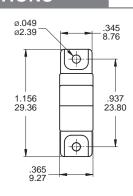
	UL/CSA		SWITCH FUNCTION			CONNECTED TERMINALS / SCHEMATIC		
NO. POLES	MODEL	MODEL NO.	POS.1	POS.2	POS.3	POS.1	POS.2	POS.3
CLLS	NO.	140.	1	7	7	7	7	<b>*</b>
SP	Q13A11	3AS1	ON	NONE	ON	0.0	N1/A	0.4
	Q13A12	3AS2	ON	NONE	MOM	2-3	N/A	2-1
	Q13A13	3AS3	ON	OFF	ON	2.2 (2014)		20 (000,00)
	Q13A14	3AS4	MOM	OFF	МОМ	2 (COMM) 1 • 3	OPEN	2 (COMM) 1 • 3
	Q13A15	3AS5	ON	OFF	МОМ			
DP	Q13A21	3AD1	ON	NONE	ON	2-3,5-6	N/A	2-1,5-4
	Q13A22	3AD2	ON	NONE	МОМ			
	Q13A23	3AD3	ON	OFF	ON			
	Q13A24	3AD4	MOM	OFF	MOM	1 COMM) 5 6	OPEN	2(COMM) 59 1 • 3 4 • 6
	Q13A25	3AD5	ON	OFF	MOM			
	Q13A26	3AD6	ON	ON	ON			
_	Q13A27	3AD7	MOM	ON	MOM	2-3,5-6	2-3,5-4	2-1,5-4
_	Q13A28	3AD8	ON	ON	MOM			
3P	Q13A31	3A31	ON	NONE	ON	2-3,5-6,8-9	N/A	2-1,5-4,8-7
	Q13A32	3A32	ON	NONE	MOM			
	Q13A33	3A33	ON	OFF	ON			
	Q13A34	3A34	MOM	OFF	МОМ	2 5 (COMM) 8 9	OPEN	2 59 (COMM) 89 1 0 3 4 0 6 7 0 9
	Q13A35	3A35	ON	OFF	MOM	. 54 57-19		. 54 5,9

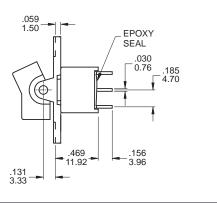
#### MOM=MOMENTARY

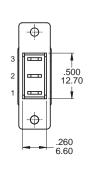
▲ Please check the availability in advance before order

## POLE OPTIONS





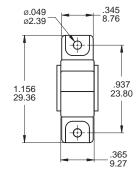




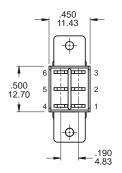
**SPDT** 

Part No. Shown: 3AS1R102M1QE





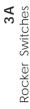
.059 1.50 EPOXY SEAL .030 0.76 .185 4.70



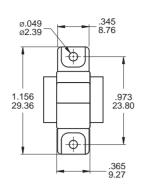
**DPDT** 

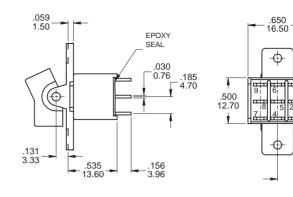
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.190 4.83









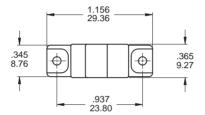
3PDT

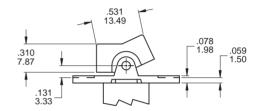
Part No. Shown: 3A31R102M1RE

### ACTUATOR OPTIONS FOR PANEL MOUNT ONLY

R1

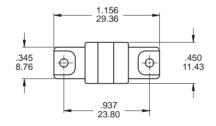


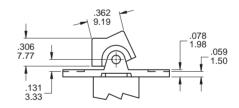




**R11** 

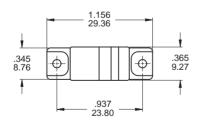


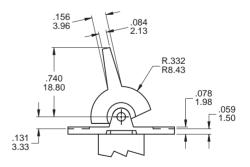




R2

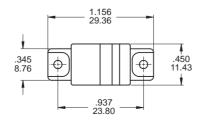


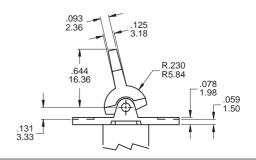




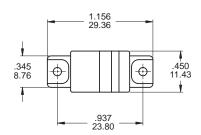
R12

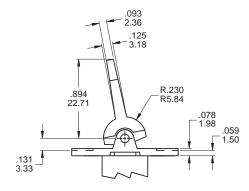






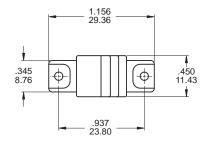


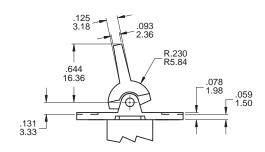




**R16** 

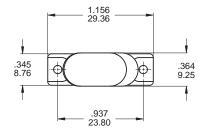


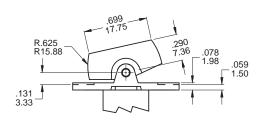




#### **RB**

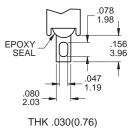


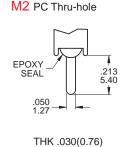


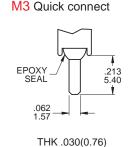


## **TERMINATION OPTIONS**

# M1 Solder lug



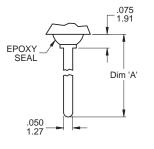




### OTHER TERMINATION OPTIONS

M6 Right angle P.C. Mount
M7 Right angle P.C. Mount
VS2 Vertical bracket P.C. Mount
VS3 Vertical bracket P.C. Mount

### M5 Wire Wrap

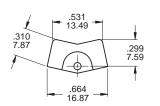


THK .030(0.76)

OPTION CODE	DIM. 'A'
M51	.736 (18.70)
M52	.953 (24.20)
M53	.415 (10.55)
M54	1.062 (26.97)

## **ACTUATOR OPTIONS FOR P.C. MOUNT ONLY**

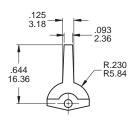
J1

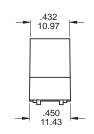


.365 9.27

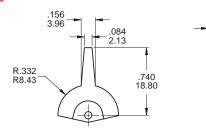
> .365 9.27

J6

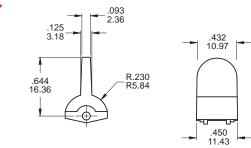




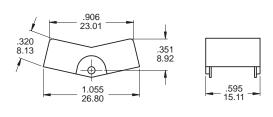
J2



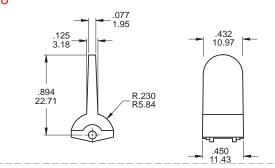
J7



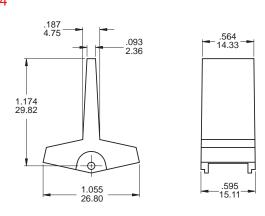
J3



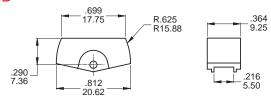
J8



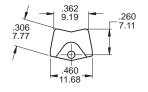
J4



JB



### **J**5





#### **Actuator colors:**

Actuator colors.			
COLOR			
White			
Black ( Std )			
Red			
Orange			
Yellow			
Green			
Blue			
Brown			
Gray			

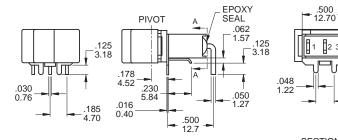
<sup>\*</sup> Besides standard color, other colors need to check stocks available.

# M6



Rocker Switches





ø.073 ø1.85

> .150 3.81

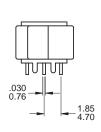
.565 14.35

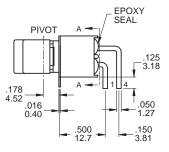
**SPDT** 

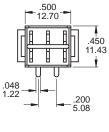
Part No. Shown: 3AS1J102M6QE

M6









SECTION A-A TERM.NOS.FOR REFERENCE ONLY

REFERENCE ONLY

P.C. MOUNTING

P.C. MOUNTING

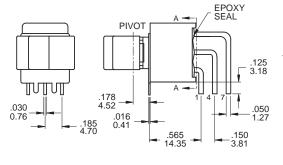
.185 4.70

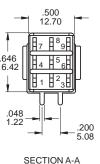
**DPDT** 

Part No. Shown: 3AD1J102M6QE

M6





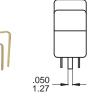


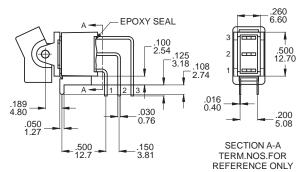
3PDT

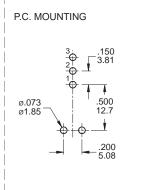
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#### M7



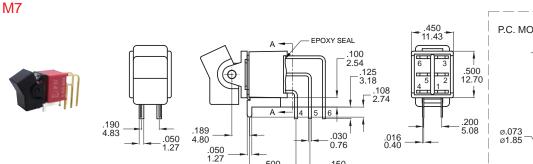






**SPDT** 

Part No. Shown: 3AS1J102M7RE

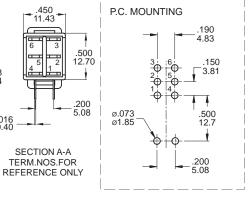


.500 12.7

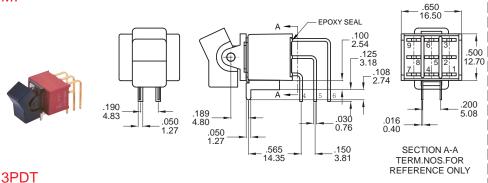
.150 3.81

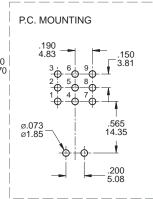
**DPDT** 

Part No. Shown: 3AD1J102M7RE



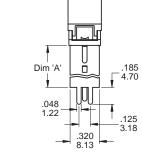




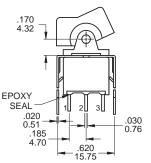


#### **VS2 - VS3**





Part No. Shown: 3A31J102M7RE



OPTION CODE	DIM. 'A'	
VS2	.460 11.68	
VS3	.630 16.00	

SECTION A-A

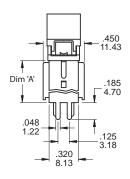
P.C. MOUNTING .125 3.18 .185 4.70 ø.073 ø1.85

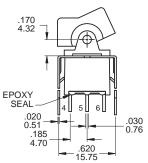
**SPDT** 

Part No. Shown: 3AS1J102VS2QE

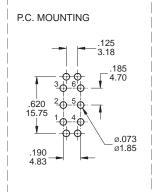
### **VS2 - VS3**







OPTION CODE	DIM. 'A'
VS2	.460 11.68
VS3	.630 16.00

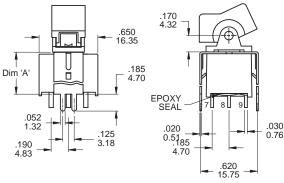


**DPDT** 

Part No. Shown: 3AD1J102VS2QE

#### **VS2 - VS3**

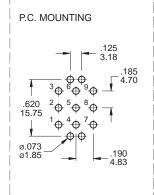




 OPTION CODE
 DIM. 'A'

 VS2
 .460 11.68

 VS3
 .630 16.00



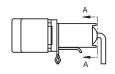
3PDT

Rocker Switches

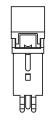
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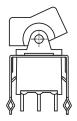
### **SNAP-IN TERMINATION OPTIONS**

M6N V2N









## **CONTACT MATERIAL OPTIONS**

	CONTACT PLATING TERMINAL PLATING		RATINGS	
Q	Silver	Q = Gold flash over silver		
S	Silvei	S = Gold flash over silver,pure - tin	5 Amps with resistant load @ 120VAC or 28VDC	
С	Gold over Silver	C = Gold over silver	2 Amps with resistant load @ 250VAC	
K	Gold over Sliver	K = Gold over silver,pure - tin		
R	Gold	R = Gold	0.4 Volt - Amps ( VA ) max. @ 20V max. ( AC or DC )	
G		G = Gold,pure - tin	1 0.4 Voit - Amps ( VA ) max. @ 20V max. ( AC of DC )	

### **SOLDERING PROCESSES**

MANUAL SOLDERING: Use soldering iron of 30 watts, controlled at 350°C

approximately 5 seconds while applying solder.

WAVE SOLDERING: Recommended Soldering Temperature: 260 ± 5°C

Duration of Solder Immersion: Max 5 sec. (PCB is 1.6mm in thickness)