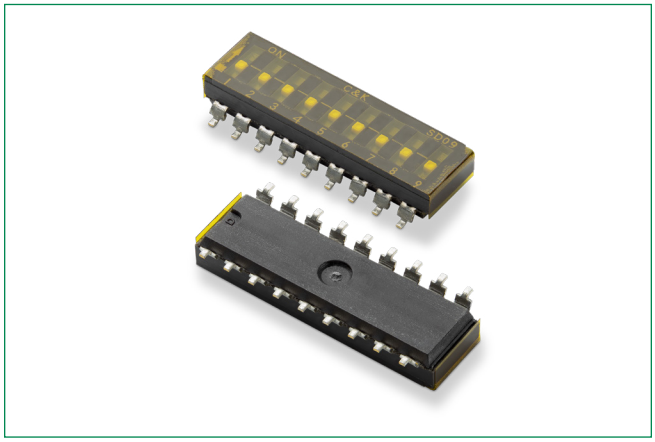
SD Series
Low Profile DIP Switches



Description

The SD series are long lasting, high quality, low profile DIP switches that are available in thru-hole or surface mount models and with tape or reel packaging. The SD series' low-profile design saves space and are perfect to power address switches for industrial controls, logic switching for computers, and various function controls.

Features & Benefits

- Low profile design saves space
- Thru-hole and surface mount models
- Tape and reel packaging available
- Sealed with top tape
- RoHS compliant

Applications

- Address switch for industrial controls
- Logic switching for computers and peripherals
- Function controlling for numerous applications

Specifications

Switch Function	SPST - 2, 3, 4, 5, 6, 7, 8, 9, 10 & 12
Contact Rating	Carry: 100 mA @ 50 V DC max. Switch: 0.1 mA @ 5 V DC min to 100 mA @ 25 V DC max.

Mechanical Specifications

Mechanical and Electrical Life	2,000 make-and-break cycles at full load, each circuit.
Contact Resistance	Below 50 milliohms typ. initial @ 2-4 V DC, 100mA.
Insulation Resistance	10^9 ohms min.
Dielectric Strength	500 V RMS min. @ sea level between adjacent terminals.

Environmental Specifications

Storage Temperature	-40˚C to 85˚C
Operating Temperature	
Operating Force	100-700g initial

Process

Packaging	Thru-hole switches supplied in rigid dispensing tubes in full-tube quantities only: this may effect order quantity. Surface mount switches available in tape and reel packaging by added 'R' to end of part number; 1,000 pieces per reel. Switch position 1 denotes pin number 1. All switch actuators in 'OFF' position, standard.

Materials

Case & Cover	(PPA), flame retardant (UL 94V-0)
Actuator	Nylon, flame retardant (UL 94-0)
Contacts	BeCu with gold plate
Terminals	Bright tin-plated brass
Terminal Seal	All terminals insert molded
Tape Seal	Polyimide

Note: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

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Ordering Number

Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category and and place it in the appropriate box. All switches supplied in "OFF" position.

SDxx - xx - x - x - x - x

Number of Positions
SD02
SD03
SD04
SD05
SD06
SD07
SD08
SD09
SD10
SD12

Actuator
H0: Flush Actuator "OFF" position
H1: Extended Actuator "OFF" position
H2: Flush Actuator "ON" position
H3: Extended Actuator "ON" position

Terminations
None: PC Thru-hole
S: Gull wing
J: J-Bend Terminal[1]

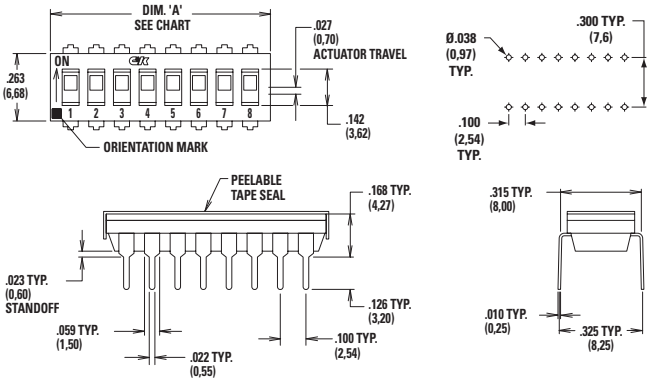
Contact Material
B: Gold 10µ IN

Process Seal
D: No tape seal
None: Tape seal

Packaging
None: Tubes
R: Tape and Reel

Notes:
1. Consult factory for availability

Sealed Flush Actuator – With Top Tape, Thru-hole Terminals
Process sealed - withstands soldering and cleaning processes



ROHS Part #	No. Pos.	DIM 'A'	Quantity per Tube
SD02H0B	2	0.258 (6.55)	85
SD03H0B	3	0.358 (9.09)	60
SD04H0B	4	0.458 (11.63)	45
SD05H0B	5	0.558 (14.17)	40
SD06H0B	6	0.658 (16.71)	30
SD07H0B	7	0.758 (19.25)	25
SD08H0B	8	0.858 (21.79)	25
SD09H0B	9	0.958 (24.33)	20
SD10H0B	10	1.058 (26.87)	20
SD12H0B	12	1.258 (31.95)	15

Schematic SPST

Notes: Table applicable to "H0" and "H2" actuator option.

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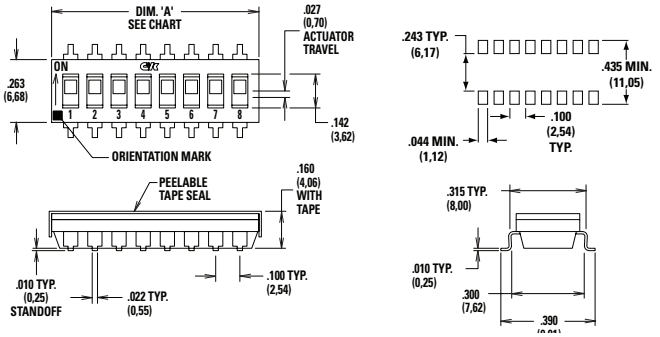
SD Series
Low Profile DIP Switches

Sealed Flush Actuator – With Top Tape, Surface Mount Terminals

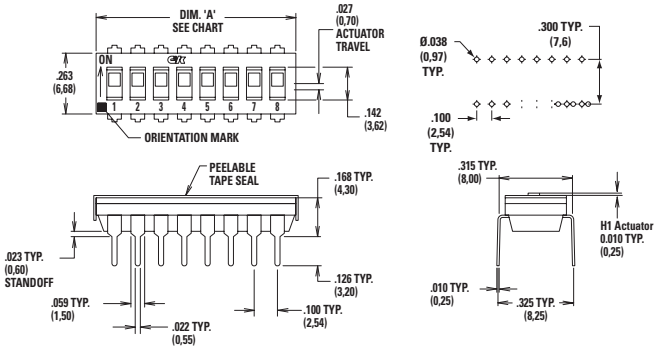


ROHS Part #	No. Pos.	DIM 'A'	Quantity per Tube
SD02H0SB	2	0.258 (6.55)	85
SD03H0SB	3	0.358 (9.09)	60
SD04H0SB	4	0.458 (11.63)	45
SD05H0SB	5	0.558 (14.17)	40
SD06H0SB	6	0.658 (16.71)	30
SD07H0SB	7	0.758 (19.25)	25
SD08H0SB	8	0.858 (21.79)	25
SD09H0SB	9	0.958 (24.33)	20
SD10H0SB	10	1.058 (26.87)	20
SD12H0SB	12	1.258 (31.95)	15

Schematic SPST

Notes: Table applicable to "H0" and "H2" actuator option.

Sealed Extended Actuator – With Top Tape, Thru-hole Terminals



ROHS Part #	No. Pos.	DIM 'A'	Quantity per Tube
SD02H1B	2	0.258 (6.55)	85
SD03H1B	3	0.358 (9.09)	60
SD04H1B	4	0.458 (11.63)	45
SD05H1B	5	0.558 (14.17)	40
SD06H1B	6	0.658 (16.71)	30
SD07H1B	7	0.758 (19.25)	25
SD08H1B	8	0.858 (21.79)	25
SD09H1B	9	0.958 (24.33)	20
SD10H1B	10	1.058 (26.87)	20
SD12H1B	12	1.258 (31.95)	15

Schematic SPST

Notes: Table applicable to "H1" and "H3" actuator option.

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SD Series
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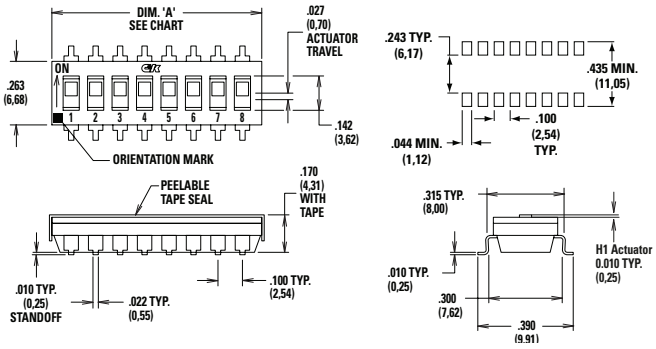
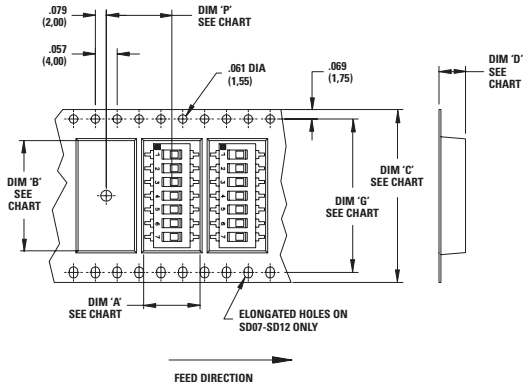
Sealed Extended Actuator – With Top Tape, Surface Mount Terminals



ROHS Part #	No. Pos.	DIM 'A'	Quantity per Tube
SD02H1SB	2	0.258 (6.55)	85
SD03H1SB	3	0.358 (9.09)	60
SD04H1SB	4	0.458 (11.63)	45
SD05H1SB	5	0.558 (14.17)	40
SD06H1SB	6	0.658 (16.71)	30
SD07H1SB	7	0.758 (19.25)	25
SD08H1SB	8	0.858 (21.79)	25
SD09H1SB	9	0.958 (24.33)	20
SD10H1SB	10	1.058 (26.87)	20
SD12H1SB	12	1.258 (31.95)	15
Schematic SPST			

Notes: Table applicable to "H1" and "H3" actuator option.

Tape & Reel Packaging – Surface Mount Options Only



ROHS Part #	No. Pos.	DIM 'A'	Quantity per Tube
SD02H0SBR	2	0.258 (6.55)	1000
SD03H0SBR	3	0.358 (9.09)	1000
SD04H0SBR	4	0.458 (11.63)	1000
SD05H0SBR	5	0.558 (14.17)	1000
SD06H0SBR	6	0.658 (16.71)	1000
SD07H0SBR	7	0.758 (19.25)	1000
SD08H0SBR	8	0.858 (21.79)	1000
SD09H0SBR	9	0.958 (24.33)	1000
SD10H0SBR	10	1.058 (26.87)	1000
SD12H0SBR	12	1.258 (31.95)	1000
Schematic SPST			

Notes: Table applicable to "H0" and "H2" actuator option.

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Reel Information

Switch #	DIM 'A' Pocket Length @ Bottom	DIM 'B' Pocket Length @ Bottom	DIM 'C' Tape Width	DIM 'D' Pocket Depth	DIM 'G' Sprocket Hole Spacing	DIM 'P' Pitch Between Pockets
SD02	0.413 (10.3)	0.315 (8.0)	0.630 (16.0)	0.177 (4.5)	N/A	0.472 (12.0)
SD03	0.406 (10.3)	0.406 (10.3)				
SD04	0.429 (10.9)	0.476 (12.1)	0.954 (24.0)	0.177 (4.5)	N/A	0.472 (12.0)
SD05	0.406 (10.3)	0.602 (15.3)				
SD06	0.406 (10.3)	0.701 (17.8)				
SD07	0.406 (10.3)	0.803 (20.4)	1.260 (32.0)	0.177 (4.5)	1.118 (28.4)	0.472 (12.0)
SD08	0.406 (10.3)	0.854 (21.7)	1.732 (44.0)	0.177 (4.5)	1.591 (40.4)	0.472 (12.0)
SD09		1.028 (26.1)				
SD10		1.055 (26.8)				
SD12		1.258 (31.95)				

Notes:
Outside diameter 13.00 (333.0) Pilot hole. 512 (13.0)

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