



**THE DATASHEET OF
SD09H1SB**



SD Series Low Profile DIP Switches



H
DIP

Features/Benefits

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

Typical 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 positions

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 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: 10⁹ ohms min.

DIELECTRIC STRENGTH: 500 V RMS min. @ sea level between adjacent terminals.

STORAGE TEMPERATURE: -40°C to 85°C.

OPERATING TEMPERATURE: -40°C to 85°C.

OPERATING FORCE: 100-700g initial.

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 94V-0)

CONTACTS: BeCu with gold plate.

TERMINALS: Bright tin-plated brass.

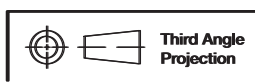
TERMINAL SEAL: All terminals insert molded.

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.

How To Order

The Build-A Switch concept allows you to mix and match options to create the switch you need. Below is a complete listing of options shown in catalog. To order, simply select desired option from each category and place in the appropriate box.



Third Angle
Projection



9 January 2018

Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

SD Series Low Profile DIP Switches

DIP H

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

Process sealed - withstands soldering and cleaning processes



ROHS PART NUMBER	NO. POS.	DIM. 'A'	QUANTITY PER TUBE
SD02H0B	2	.258 (6,55)	85
SD03H0B	3	.358 (9,09)	60
SD04H0B	4	.458 (11,63)	45
SD05H0B	5	.558 (14,17)	40
SD06H0B	6	.658 (16,71)	30
SD07H0B	7	.758 (19,25)	25
SD08H0B	8	.858 (21,79)	25
SD09H0B	9	.958 (24,33)	20
SD10H0B	10	1.058 (26,87)	20
SD12H0B	12	1.258 (31,95)	15

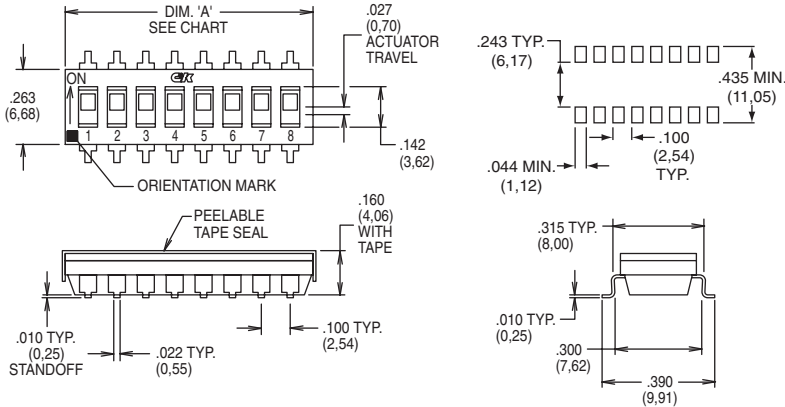
Schematic



SPST

Table applicable to "H0" and "H2" actuator options.

Sealed Flush Actuator – With Top Tape, Surface Mount Terminals



RoHS PART NUMBER	NO. POS.	DIM. 'A'	QUANTITY PER TUBE
SD02H0SB	2	.258 (6,55)	85
SD03H0SB	3	.358 (9,09)	60
SD04H0SB	4	.458 (11,63)	45
SD05H0SB	5	.558 (14,17)	40
SD06H0SB	6	.658 (16,71)	30
SD07H0SB	7	.758 (19,25)	25
SD08H0SB	8	.858 (21,79)	25
SD09H0SB	9	.958 (24,33)	20
SD10H0SB	10	1.058 (26,87)	20
SD12H0SB	12	1.258 (31,95)	15

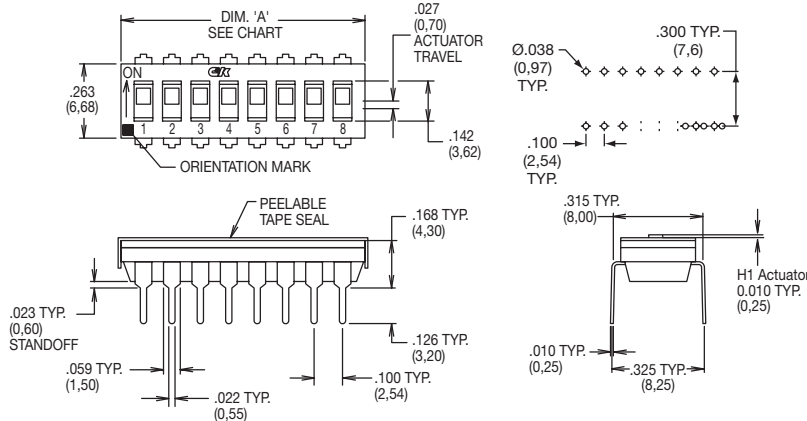
Schematic



SPST

Table applicable to "H0" and "H2" actuator options.

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



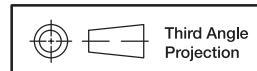
RoHS PART NUMBER	NO. POS.	DIM. 'A'	QUANTITY PER TUBE
SD02H1B	2	.258 (6,55)	85
SD03H1B	3	.358 (9,09)	60
SD04H1B	4	.458 (11,63)	45
SD05H1B	5	.558 (14,17)	40
SD06H1B	6	.658 (16,71)	30
SD07H1B	7	.758 (19,25)	25
SD08H1B	8	.858 (21,79)	25
SD09H1B	9	.958 (24,33)	20
SD10H1B	10	1.058 (26,87)	20
SD12H1B	12	1.258 (31,95)	15

Schematic



SPST

Table applicable to "H1" and "H3" actuator options.



Third Angle Projection

SD Series Low Profile DIP Switches

H DIP

Sealed Extended Actuator – With Top Tape, Surface Mount Terminals

RoHS PART NUMBER	NO. POS.	DIM. 'A'	QUANTITY PER TUBE
SD02H1SB	2	.258 (6,55)	85
SD03H1SB	3	.358 (9,09)	60
SD04H1SB	4	.458 (11,63)	45
SD05H1SB	5	.558 (14,17)	40
SD06H1SB	6	.658 (16,71)	30
SD07H1SB	7	.758 (19,25)	25
SD08H1SB	8	.858 (21,79)	25
SD09H1SB	9	.958 (24,33)	20
SD10H1SB	10	1.058 (26,87)	20
SD12H1SB	12	1.258 (31,95)	15

Schematic

SPST

Table applicable to "H1" and "H3" actuator options.



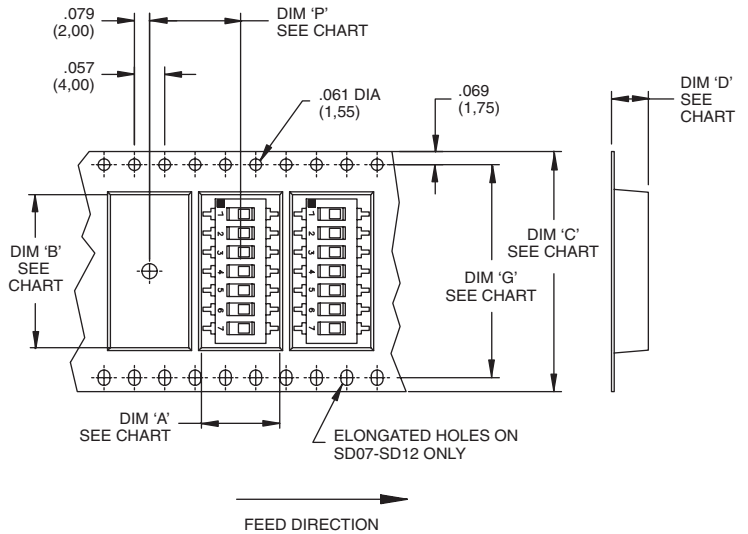
TAPE & REEL PACKAGING – SURFACE MOUNT OPTIONS ONLY

RoHS PART NUMBER	NO. POS.	DIM. 'A'	QUANTITY PER REEL
SD02H0SBR	2	.258 (6,55)	1000
SD03H0SBR	3	.358 (9,09)	1000
SD04H0SBR	4	.458 (11,63)	1000
SD05H0SBR	5	.558 (14,17)	1000
SD06H0SBR	6	.658 (16,71)	1000
SD07H0SBR	7	.758 (19,25)	1000
SD08H0SBR	8	.858 (21,79)	1000
SD09H0SBR	9	.958 (24,33)	1000
SD10H0SBR	10	1.058 (26,87)	1000
SD12H0SBR	12	1.258 (31,95)	1000

Schematic

SPST

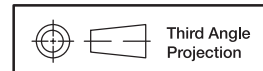
Table applicable to "H0" and "H2" actuator options.



SWITCH NO.	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	.413(10,5)	.315(8,0)	.630(16,0)	.177(4,5)	N/A	.472(12,0)
SD03	.406(10,3)	.406(10,3)	.630(16,0)	.177(4,5)	N/A	.472(12,0)
SD04	.429(10,9)	.476(12,1)	.954(24,0)	.177(4,5)	N/A	.472(12,0)
SD05	.406(10,3)	.602(15,3)	.954(24,0)	.177(4,5)	N/A	.472(12,0)
SD06	.406(10,3)	.701(17,8)	.954(24,0)	.177(4,5)	N/A	.472(12,0)
SD07	.406(10,3)	.803(20,4)	1.260(32,0)	.177(4,5)	1.118(28,4)	.472(12,0)
SD08	.406(10,3)	.854(21,7)	1.732(44,0)	.177(4,5)	1.591(40,4)	.472(12,0)
SD09	.406(10,3)	1.028(26,1)	1.732(44,0)	.177(4,5)	1.591(40,4)	.472(12,0)
SD10	.406(10,3)	1.055(26,8)	1.732(44,0)	.177(4,5)	1.591(40,4)	.472(12,0)
SD12	.406(10,3)	1.303(33,1)	1.732(44,0)	.177(4,5)	1.591(40,4)	.472(12,0)

Reel Information

Outside diameter 13.00 (333,0)
Pilot hole .512 (13,0)





Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change



9 January 2018

Looking for pricing, stock, or lifecycle information?

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