

# SD Series Low Profile DIP Switches



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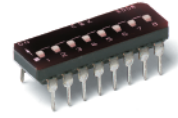
DIP

## 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: 10<sup>9</sup> 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.

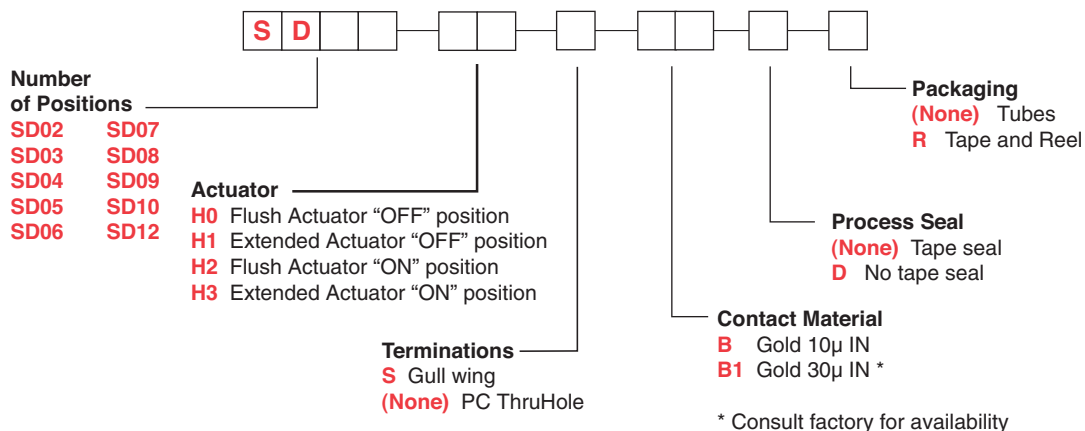
TERMINAL SEAL: All terminals insert molded.

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.



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

# SD Series

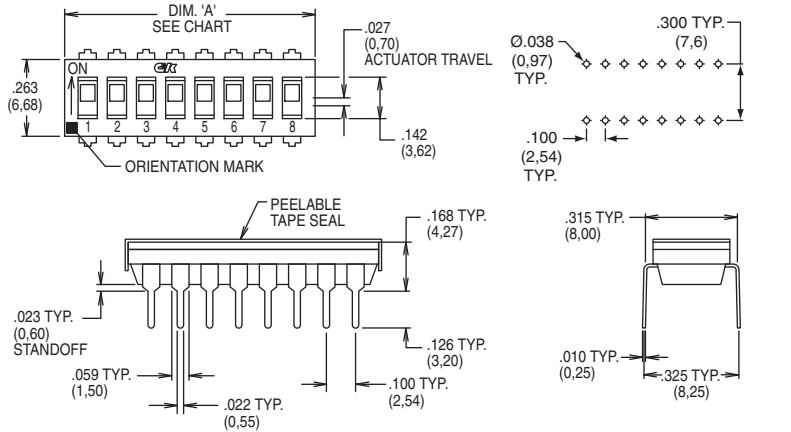
## Low Profile DIP Switches



DIP

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

Process sealed - withstands soldering and cleaning processes



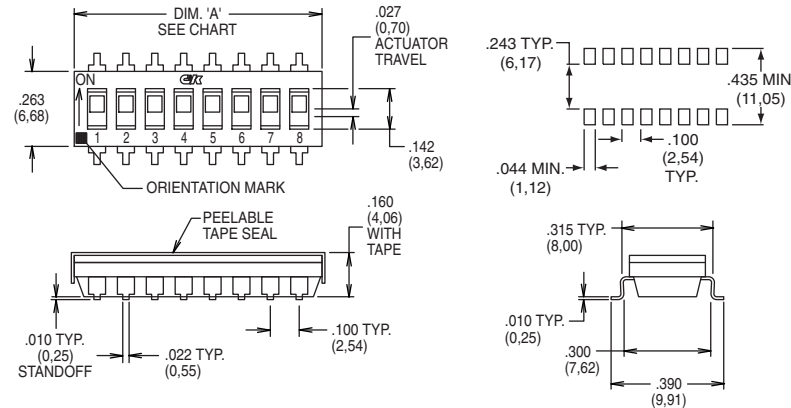
| ROHS<br>PART NUMBER | NO.<br>POS. | DIM. 'A'      | QUANTITY<br>PER TUBE |
|---------------------|-------------|---------------|----------------------|
| <b>SD02H0B</b>      | 2           | .258 (6,55)   | 85                   |
| <b>SD03H0B</b>      | 3           | .358 (9,09)   | 60             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



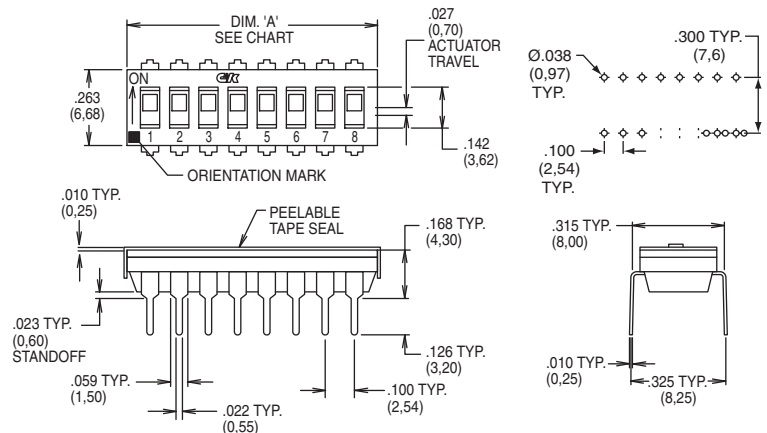
| RoHS<br>PART NUMBER | NO.<br>POS. | DIM. 'A'      | QUANTITY<br>PER TUBE |
|---------------------|-------------|---------------|----------------------|
| <b>SD02H0SB</b>     | 2           | .258 (6,55)   | 85                   |
| <b>SD03H0SB</b>     | 3           | .358 (9,09)   | 60             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

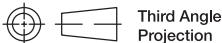


| RoHS<br>PART NUMBER | NO.<br>POS. | DIM. 'A'      | QUANTITY<br>PER TUBE |
|---------------------|-------------|---------------|----------------------|
| <b>SD02H1B</b>      | 2           | .258 (6,55)   | 85                   |
| <b>SD03H1B</b>      | 3           | .358 (9,09)   | 60             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

Schematic

SPST

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



Third Angle  
Projection

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



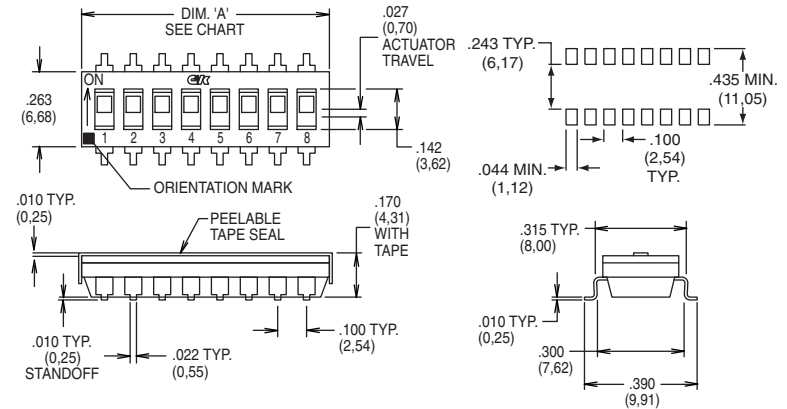


DIP

| RoHS<br>PART NUMBER | NO.<br>POS. | DIM. 'A'      | QUANTITY<br>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

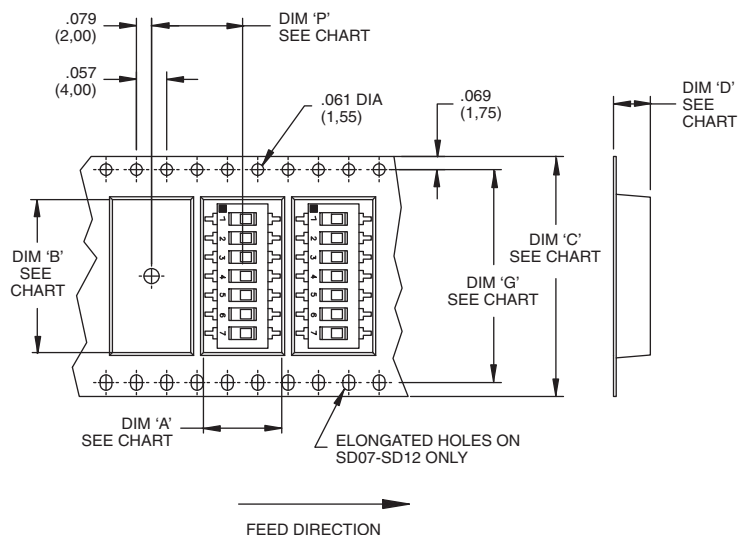


## TAPE & REEL PACKAGING – SURFACE MOUNT OPTIONS ONLY

| RoHS<br>PART NUMBER | NO.<br>POS. | DIM. 'A'      | QUANTITY<br>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



| SWITCH NO. | DIM 'A'<br>POCKET<br>LENGTH<br>@ BOTTOM | DIM 'B'<br>POCKET<br>LENGTH<br>@ BOTTOM | DIM 'C'<br>TAPE<br>WIDTH | DIM 'D'<br>POCKET<br>DEPTH | DIM 'G'<br>SPROCKET<br>HOLE<br>SPACING | DIM 'P'<br>PITCH<br>BETWEEN<br>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)                             |



Third Angle Projection

