

### Features/Benefits

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

### Typical Applications

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



### How To Order

Complete part numbers for SD Series are shown on pages I-9 through I-11. All switches supplied in "OFF" position in rigid dispensing tubes or tape and reel packaging.

### 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: -20°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: Thru-hole: polyester (PBT). Surface mount: (PPA), flame retardant (UL 94V-0).

ACTUATOR: Nylon, flame retardant (UL 94V-0)

CONTACTS: Copper alloy with gold plate.

TERMINALS:

Non-RoHS (K or KR ending part #'s) = Copper alloy with tin/lead plate.

RoHS version (B or BR ending part #'s) = bright tin-plated BeCu.

TERMINAL SEAL: All terminals insert molded.

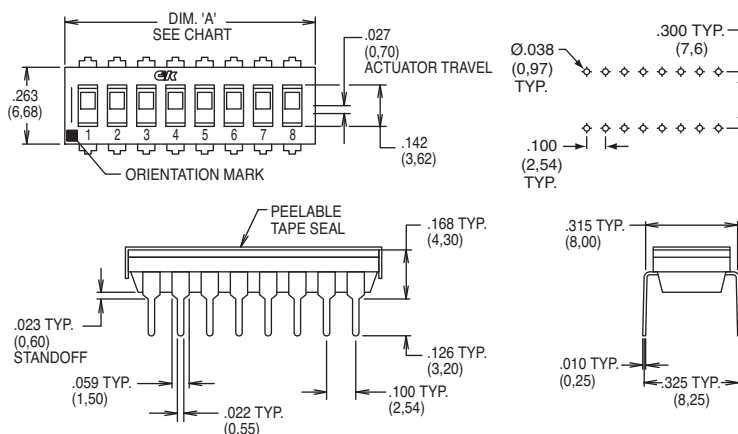
TAPE SEAL: Polyester

**NOTE:** For the latest information regarding RoHS compliance, please go to: [www.ittcannon.com/rohs](http://www.ittcannon.com/rohs).

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

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

Process sealed - withstands soldering and cleaning processes



| ROHS PART NUMBER | TIN LEAD PART NUMBER | NO. POS. | DIM. 'A'      | QUANTITY PER TUBE |
|------------------|----------------------|----------|---------------|-------------------|
| <b>SD02H0B</b>   | <b>SD02H0K</b>       | 2        | .258 (6,55)   | 85                |
| <b>SD03H0B</b>   | <b>SD03H0K</b>       | 3        | .358 (9,09)   | 60                |
| <b>SD04H0B</b>   | <b>SD04H0K</b>       | 4        | .458 (11,63)  | 45                |
| <b>SD05H0B</b>   | <b>SD05H0K</b>       | 5        | .558 (14,17)  | 40                |
| <b>SD06H0B</b>   | <b>SD06H0K</b>       | 6        | .658 (16,71)  | 30                |
| <b>SD07H0B</b>   | <b>SD07H0K</b>       | 7        | .758 (19,25)  | 25                |
| <b>SD08H0B</b>   | <b>SD08H0K</b>       | 8        | .858 (21,79)  | 25                |
| <b>SD09H0B</b>   | <b>SD09H0K</b>       | 9        | .958 (24,33)  | 20                |
| <b>SD10H0B</b>   | <b>SD10H0K</b>       | 10       | 1.058 (26,87) | 20                |
| <b>SD12H0B</b>   | <b>SD12H0K</b>       | 12       | 1.258 (31,95) | 15                |

|           |  |
|-----------|--|
| Schematic |  |
| SPST      |  |

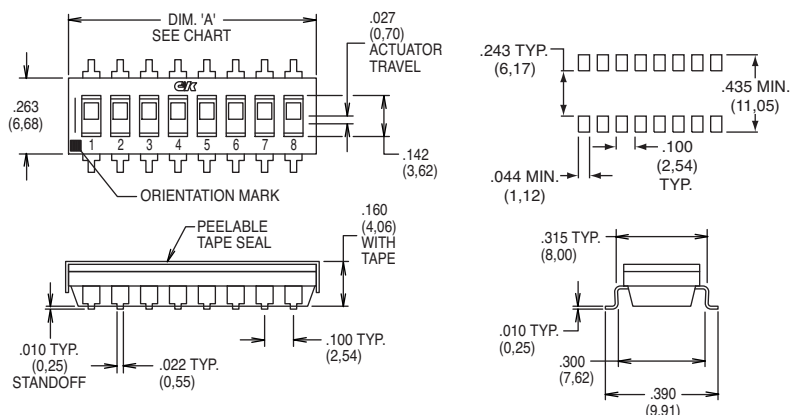
# C&K SD Series Low Profile DIP Switches

## Sealed Flush Actuator – With Top Tape, Surface Mount Terminals

| RoHS<br>PART NUMBER | TIN LEAD<br>PART NUMBER | NO.<br>POS. | DIM. 'A'      | QUANTITY<br>PER TUBE |
|---------------------|-------------------------|-------------|---------------|----------------------|
| <b>SD02H0SB</b>     | <b>SD02H0SK</b>         | 2           | .258 (6,55)   | 85                   |
| <b>SD03H0SB</b>     | <b>SD03H0SK</b>         | 3           | .358 (9,09)   | 60                   |
| <b>SD04H0SB</b>     | <b>SD04H0SK</b>         | 4           | .458 (11,63)  | 45                   |
| <b>SD05H0SB</b>     | <b>SD05H0SK</b>         | 5           | .558 (14,17)  | 40                   |
| <b>SD06H0SB</b>     | <b>SD06H0SK</b>         | 6           | .658 (16,71)  | 30                   |
| <b>SD07H0SB</b>     | <b>SD07H0SK</b>         | 7           | .758 (19,25)  | 25                   |
| <b>SD08H0SB</b>     | <b>SD08H0SK</b>         | 8           | .858 (21,79)  | 25                   |
| <b>SD09H0SB</b>     | <b>SD09H0SK</b>         | 9           | .958 (24,33)  | 20                   |
| <b>SD10H0SB</b>     | <b>SD10H0SK</b>         | 10          | 1.058 (26,87) | 20                   |
| <b>SD12H0SB</b>     | <b>SD12H0SK</b>         | 12          | 1.258 (31,95) | 15                   |

Schematic

SPST

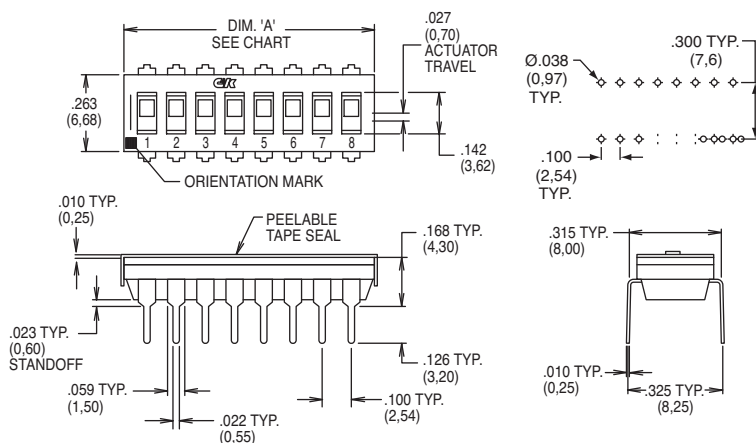


## Sealed Extended Actuator – With Top Tape, Thru-hole Terminals

| RoHS<br>PART NUMBER | TIN LEAD<br>PART NUMBER | NO.<br>POS. | DIM. 'A'      | QUANTITY<br>PER TUBE |
|---------------------|-------------------------|-------------|---------------|----------------------|
| <b>SD02H1B</b>      | <b>SD02H1K</b>          | 2           | .258 (6,55)   | 85                   |
| <b>SD03H1B</b>      | <b>SD03H1K</b>          | 3           | .358 (9,09)   | 60                   |
| <b>SD04H1B</b>      | <b>SD04H1K</b>          | 4           | .458 (11,63)  | 45                   |
| <b>SD05H1B</b>      | <b>SD05H1K</b>          | 5           | .558 (14,17)  | 40                   |
| <b>SD06H1B</b>      | <b>SD06H1K</b>          | 6           | .658 (16,71)  | 30                   |
| <b>SD07H1B</b>      | <b>SD07H1K</b>          | 7           | .758 (19,25)  | 25                   |
| <b>SD08H1B</b>      | <b>SD08H1K</b>          | 8           | .858 (21,79)  | 25                   |
| <b>SD09H1B</b>      | <b>SD09H1K</b>          | 9           | .958 (24,33)  | 20                   |
| <b>SD10H1B</b>      | <b>SD10H1K</b>          | 10          | 1.058 (26,87) | 20                   |
| <b>SD12H1B</b>      | <b>SD12H1K</b>          | 12          | 1.258 (31,95) | 15                   |

Schematic

SPST

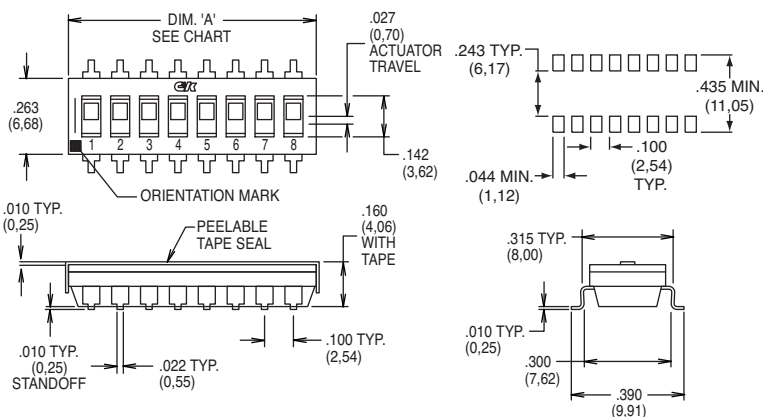


## Sealed Extended Actuator – With Top Tape, Surface Mount Terminals

| RoHS<br>PART NUMBER | TIN LEAD<br>PART NUMBER | NO.<br>POS. | DIM. 'A'      | QUANTITY<br>PER TUBE |
|---------------------|-------------------------|-------------|---------------|----------------------|
| <b>SD02H1SB</b>     | <b>SD02H1SK</b>         | 2           | .258 (6,55)   | 85                   |
| <b>SD03H1SB</b>     | <b>SD03H1SK</b>         | 3           | .358 (9,09)   | 60                   |
| <b>SD04H1SB</b>     | <b>SD04H1SK</b>         | 4           | .458 (11,63)  | 45                   |
| <b>SD05H1SB</b>     | <b>SD05H1SK</b>         | 5           | .558 (14,17)  | 40                   |
| <b>SD06H1SB</b>     | <b>SD06H1SK</b>         | 6           | .658 (16,71)  | 30                   |
| <b>SD07H1SB</b>     | <b>SD07H1SK</b>         | 7           | .758 (19,25)  | 25                   |
| <b>SD08H1SB</b>     | <b>SD08H1SK</b>         | 8           | .858 (21,79)  | 25                   |
| <b>SD09H1SB</b>     | <b>SD09H1SK</b>         | 9           | .958 (24,33)  | 20                   |
| <b>SD10H1SB</b>     | <b>SD10H1SK</b>         | 10          | 1.058 (26,87) | 20                   |
| <b>SD12H1SB</b>     | <b>SD12H1SK</b>         | 12          | 1.258 (31,95) | 15                   |

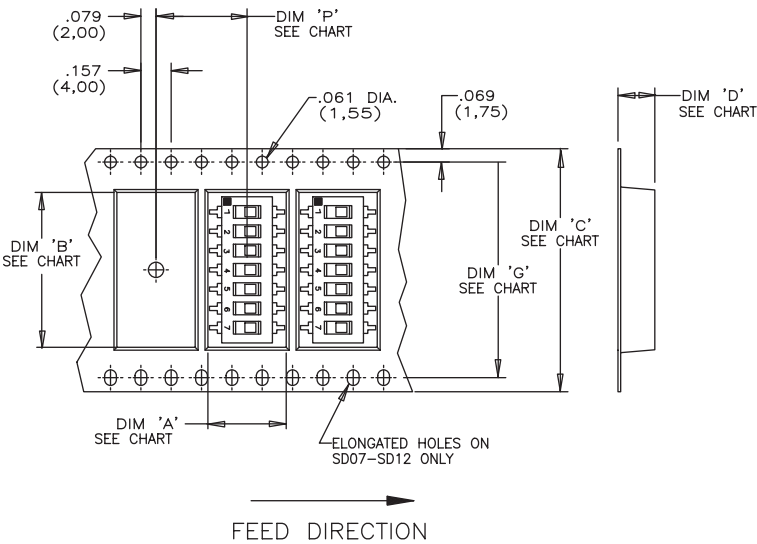
Schematic

SPST



# C&K SD Series Low Profile DIP Switches

## TAPE & REEL PACKAGING – SURFACE MOUNT OPTIONS ONLY



| RoHS<br>PART NUMBER | TIN LEAD<br>PART NUMBER | NO.<br>POS. | DIM. 'A'      | QUANTITY<br>PER REEL |
|---------------------|-------------------------|-------------|---------------|----------------------|
| <b>SD02H0SBR</b>    | <b>SD02H0SKR</b>        | 2           | .258 (6,55)   | 100                  |
| <b>SD03H0SBR</b>    | <b>SD03H0SKR</b>        | 3           | .358 (9,09)   | 100                  |
| <b>SD04H0SBR</b>    | <b>SD04H0SKR</b>        | 4           | .458 (11,63)  | 100                  |
| <b>SD05H0SBR</b>    | <b>SD05H0SKR</b>        | 5           | .558 (14,17)  | 100                  |
| <b>SD06H0SBR</b>    | <b>SD06H0SKR</b>        | 6           | .658 (16,71)  | 100                  |
| <b>SD07H0SBR</b>    | <b>SD07H0SKR</b>        | 7           | .758 (19,25)  | 100                  |
| <b>SD08H0SBR</b>    | <b>SD08H0SKR</b>        | 8           | .858 (21,79)  | 100                  |
| <b>SD09H0SBR</b>    | <b>SD09H0SKR</b>        | 9           | .958 (24,33)  | 100                  |
| <b>SD10H0SBR</b>    | <b>SD10H0SKR</b>        | 10          | 1.058 (26,87) | 100                  |
| <b>SD12H0SBR</b>    | <b>SD12H0SKR</b>        | 12          | 1.258 (31,95) | 100                  |

|           |  |
|-----------|--|
| Schematic |  |
| SPST      |  |

| SWITCH NO. | DIM 'A'<br>POCKET<br>LENGTH<br>⑥ BOTTOM | DIM 'B'<br>POCKET<br>LENGTH<br>⑥ 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)                             |

### Reel Information

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