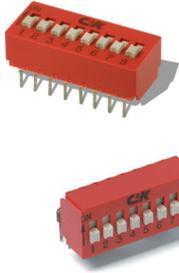# BD Series
Standard Profile DIP Switches

Features/Benefits

- *Traditional full profile DIP switch*
- *Extended actuator for easy actuation*
- *Open bottom construction allows for solder washing without the need for tape seal*
- *RoHS compliant*

Typical Applications

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

Specifications

SWITCH FUNCTION: SPST - 1 thru 12 position available
(except 11 position).

CONTACT RATING:

Carry: 100 mA max. @ 50 V DC.

Switch: 100 mA max. @ 5 V DC or 25 mA max. @ 25 V DC.

MECHANICAL AND ELECTRICAL LIFE: 10,000 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.

CAPACITANCE: 5pF max. between adjacent terminals.

STORAGE & OPERATING TEMPERATURE: -40°C to 85°C.

SHOCK: Withstands 20g 11 ms sawtooth waveform with no contact opening greater than 10 microseconds.

VIBRATION: No contact opening greater than 10 microseconds and no contact closure when exposed to vibration .06 in DA or 5g, whichever is less, from 10 to 55 Hz, and 10g from 55 to 500 Hz.

SOLDERABILITY: Per MIL-STD-202F method 208D, or EIA RS-186E method 9 (1 hour steam aging).

PACKAGING: Switches supplied in rigid dispensing tubes in full-tube quantities only: this may effect order quantity. Number of switches per tube varies with model. Switch position 1 denotes pin number 1. All switch actuators in 'OFF' position, standard.

Materials

CASE & COVER: Glass filled polyester (PBT), flame retardant (UL 94V-0).

ACTUATOR: Glass filled nylon 6/6, flame retardant, heat stabilized (UL 94V-0)
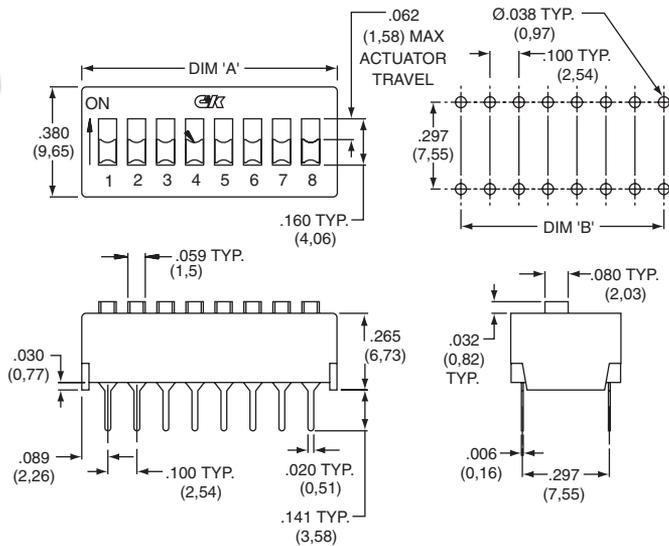
CONTACTS: Gold over nickel over phosphor bronze.

TERMINALS: Matte-tin over nickel over phosphor bronze.

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

Vertical Full Profile DIP

BD08

PART NUMBER	NO.POS.	DIM. 'A'	DIM. 'B'	QUANTITY PER TUBE
BD01	1	.180 (4,57)	NA	115
BD02	2	.280 (7,11)	.100 (2,54)	74
BD03	3	.380 (9,65)	.200 (5,08)	54
BD04	4	.480 (12,19)	.300 (7,62)	43
BD05	5	.580 (14,73)	.400 (10,16)	35
BD06	6	.680 (17,27)	.500 (12,75)	30
BD07	7	.780 (19,81)	.600 (15,24)	26
BD08	8	.880 (22,35)	.700 (17,78)	23
BD09	9	.980 (24,89)	.800 (20,32)	21
BD10	10	1.080 (27,43)	.900 (22,.86)	19
BD12	12	1.280 (32,51)	1.100 (27,94)	16

Schematic

SPST

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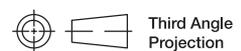
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

www.ckswitches.com

H

DIP

Open Base and AV Right Angle Terminal Style

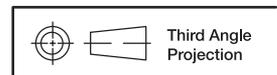| PART NUMBER	NO.POS.	DIM. 'A'	QUANTITY PER TUBE
BD02AV	2	.280 (7,11)	72
BD03AV	3	.380 (9,65)	52
BD04AV	4	.480 (12,19)	42
BD05AV	5	.580 (14,73)	35
BD06AV	6	.680 (17,27)	29
BD07AV	7	.780 (19,81)	26
BD08AV	8	.880 (22,35)	23
BD09AV	9	.980 (24,89)	20
BD10AV	10	1.080 (27,43)	18
BD12AV	12	1.280 (32,51)	15

Schematic

SPST
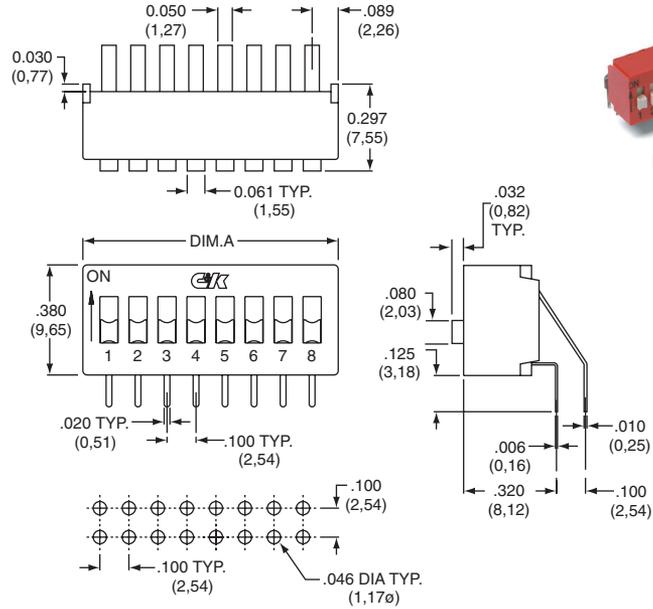
BD08AV

Installation, Soldering and Cleaning

All BD Series Standard Profile DIP Switches can be hand soldered or machine soldered without the use of boot, caps, tapes or special attention. Open base washable models have unique design, allowing solvent cleaners and water/detergent solutions to flush and clean the electrical contacts of the contaminants and fluxes. For best results, follow these directions:

1) Wave soldering recommended at 500° F (260ºC) solder temperature.

2) Hand solder using 30 watt small tip iron controlled at 500° F (260ºC), 10 seconds max./terminal.

3) Open base washable models: Clean flux using forced rinse, high agitation or triple bath cleaning method.

   DO NOT mask or cover switch in any way during cleaning. Switch is designed for easy solvent flush out.

4) All switch actuators must be in 'OFF' position during soldering and cleaning processes.

⊕⊟ **Third Angle Projection**