

BPA Series

Side Actuated DIP Switches



Features/Benefits

- Side actuated contacts
- Available in thru-hole or SMT models
- High pressure contact system does not require tape seal for washing
- RoHS compliant & compatible

Typical Applications

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

Specifications

SWITCH FUNCTION: 1 thru 10 and 12 position available.

CONTACT RATING: 100 mA max. @ 5 V DC or 25 mA max.
@ 24 V DC.

MECHANICAL AND ELECTRICAL LIFE: 1,000 cycles min.
@ 5 V DC 10mA.

CONTACT RESISTANCE: 50 milliohms initial max.

INSULATION RESISTANCE: 100 V DC 100 megohms min.

DIELECTRIC WITHSTAND VOLTAGE: 300 V AC for 1 minute.

STORAGE TEMPERATURE: -40°C to 85°C.

OPERATING TEMPERATURE: -20°C to 85°C.

OPERATING FORCE: 800 grams max.

SOLDERABILITY: Flow solderable and washable
(soldering: 260°C for 10 sec. max.)

PACKAGING: Switches supplied in rigid dispensing tubes in full-tube quantities only, this may affect order quantity. Numbers of switches per tube varies with model. Tape and reel packaging available for SMT options.

Materials

HOUSING: PPS, color black (UL94V-0).

COVER: PPS, color black (UL94V-0).

ACTUATOR: PA-6T (UL94V-0).

CONTACTS: Beryllium Copper with Gold over Nickel plate.

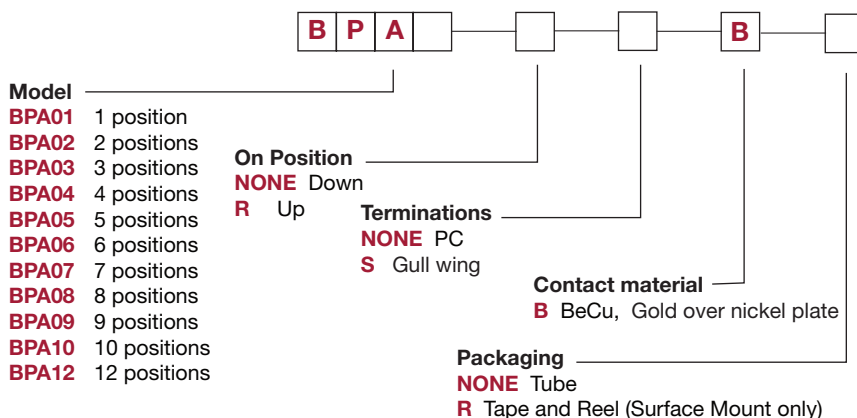
TERMINALS: Brass, Gold over Nickel plate.

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.

All switches supplied in "OFF" position.



Third Angle
Projection

DIP

A black integrated circuit (IC) package, likely a microcontroller or logic device, with 8 pins. The package is labeled 'C&K' and 'BPA08'. The pins are numbered 1 through 8.

Technical drawings of the BPA08 connector, showing dimensions in inches (in) and millimeters (mm).

Top View:

- Connector types: C&K, BPA08, 5B.
- Pin positions: 1, 2, 3, 4, 5, 6, 7, 8.
- Dimensions:
 - Pin pitch: 0.100 (2.54) mm.
 - Overall width: 0.055 (1.4) mm.

Side View:

- Dimensions:
 - Pin height: 0.300 (7.6) mm.
 - Pin diameter: 0.100 (2.54) mm.
 - Pin spacing: 0.032 (0.8) mm (0.8 ± 0.2/0).

Perspective View:

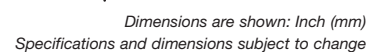
- Dimensions:
 - Pin height: 0.321 (8.15) mm.
 - Pin diameter: 0.173 (4.4) mm.
 - Pin spacing: 0.083 (2.1) mm.
 - Pin diameter: 0.029 (0.75) mm.
 - Pin diameter: 0.039 (1.0) mm.
 - Pin diameter: 0.010 (0.25) mm.
 - Pin diameter: 0.299/0.343 (7.6/8.7) mm.
 - Angle: 25°.

NOTE: Reverse throw available, contact C&K for P/N and quote.

The image contains three mechanical drawings of the BPA08 package:

- Top View:** Shows the package layout with pins numbered 1 to 8. Labels include "C&K", "BPA08", and "5B". Dimensions include a pin pitch of 0.055 (1,4) and a total width of 0.236 (6,0).
- Side View:** Shows the package profile with dimensions for height (0.100 (2,54) PITCH), pin height (0.063 (1,6+0/-0,2)), and pin thickness (0.024 (0,6+0/-0,1)).
- P.C. MOUNTING View:** Shows the package from the perspective of a printed circuit board. Dimensions include a total length of 0.321 (8,15), a mounting hole diameter of 0.083 (2,1), a hole-to-hole distance of 0.173 (4,4), a hole-to-pin distance of 0.029 (0,75), a pin diameter of 0.039 (1,0), a pin thickness of 0.010 (0,25), a mounting hole diameter of 0.031 (0,8), and a total width of 0.366 (9,3). A 25° angle is indicated for the mounting hole.

NOTE: Tape and reel packaging available by adding "R" to end of project number.



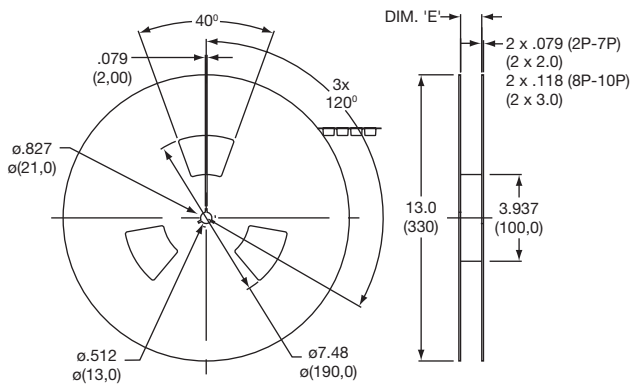
BPA Series

Side Actuated DIP Switches

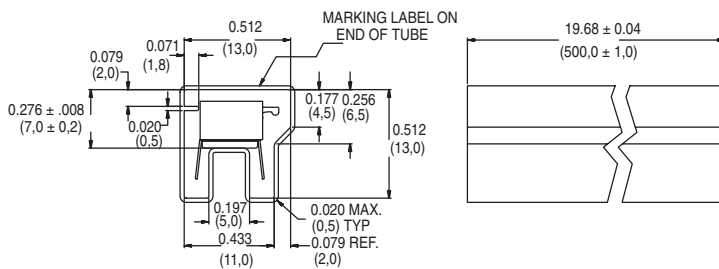
Tape & Reel Packaging – Surface Mount Options Only

QTY/ REEL	POLES	DIM. 'A'	DIM. 'B'	DIM. 'C'	DIM. 'D'	DIM. 'E'
500	1	.453 (11,5)	—	.945 (24,0)	.530 (13,45)	.960 (24,4)
500	2	.453 (11,5)	—	.945 (24,0)	.311 (7,9)	.960 (24,4)
500	3	.453 (11,5)	—	.945 (24,0)	.409 (10,4)	.960 (24,4)
500	4	.453 (11,5)	—	.945 (24,0)	.508 (12,9)	.960 (24,4)
500	5	.453 (11,5)	—	.945 (24,0)	.606 (15,4)	.960 (24,4)
500	6	.559 (14,2)	1.118 (28,4)	1.260 (32,0)	.709 (18,0)	1.275 (32,4)
500	7	.559 (14,2)	1.118 (28,4)	1.260 (32,0)	.807 (20,5)	1.275 (32,4)
500	8	.795 (20,2)	1.590 (40,4)	1.732 (44,0)	.894 (22,7)	1.748 (44,4)
500	9	.795 (20,2)	1.590 (40,4)	1.732 (44,0)	1.004 (25,5)	1.748 (44,4)
500	10	.795 (20,2)	1.590 (40,4)	1.732 (44,0)	1.106 (28,1)	1.748 (44,4)
500	12	.795 (20,2)	1.590 (40,4)	1.732 (44,0)	1.311 (33,3)	1.748 (44,4)

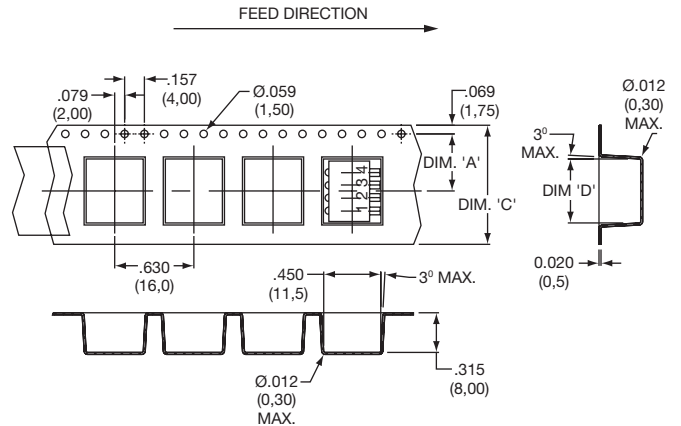
Note: For tape and reel packaging, add 'R' to end of part number.



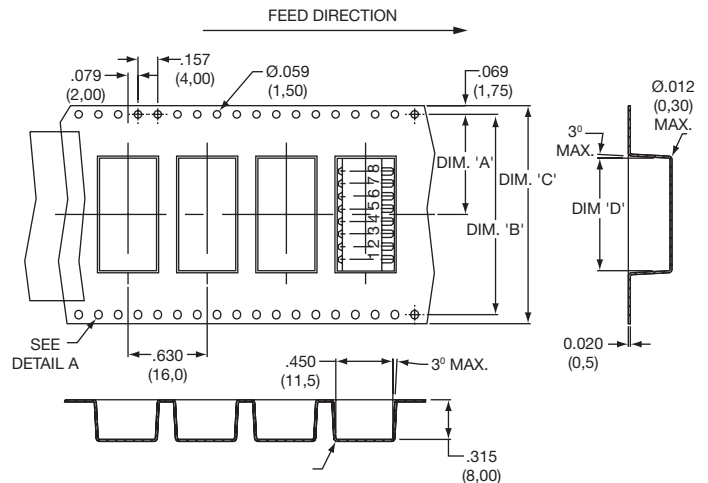
Tube Packaging



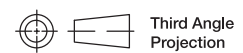
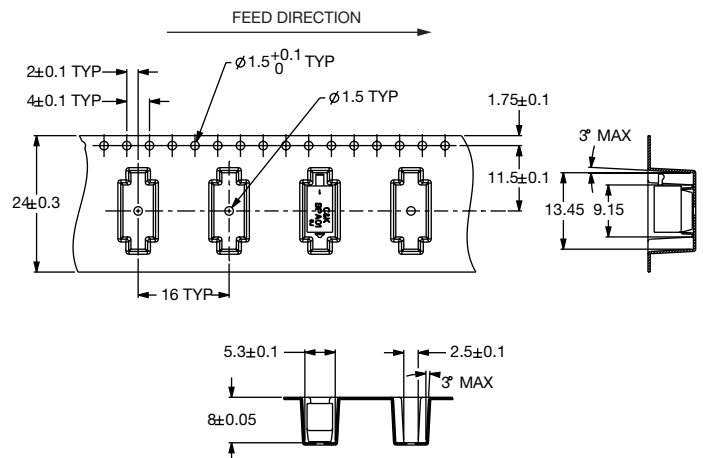
2, 3, 4 & 5 Positions



6, 7, 8, 9, 10 & 12 Positions



1 Position



Third Angle
Projection

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

C&K Switches:

[BPA02B](#) [BPA02SB](#) [BPA04B](#) [BPA04SB](#) [BPA05B](#) [BPA05SB](#) [BPA06B](#) [BPA06SB](#) [BPA07B](#) [BPA07SB](#) [BPA08B](#)
[BPA08SB](#) [BPA09B](#) [BPA09SB](#) [BPA10B](#) [BPA10SB](#) [BPA01B](#) [BPA02SBR](#) [BPA03B](#) [BPA03SB](#) [BPA04SBR](#)
[BPA08RB](#) [BPA01SB](#) [BPA08SBR](#) [BPA04RSB](#) [BPA02RB](#) [BPA01RB](#) [BPA10SBR](#) [BPA04RB](#) [BPA10RB](#) [BPA06SBR](#)
[BPA03SBR](#) [BPA07SBR](#) [BPA05SBR](#) [BPA06RB](#) [BPA12B](#) [BPA01RSB](#) [BPA09SBR](#) [BPA05RB](#) [BPA09RB](#)
[BPA12SB](#) [BPA07RB](#) [BPA12SBR](#) [BPA04RSBR](#) [BPA01SBR](#)