

# C&K BPA Series Side Actuated DIP Switches

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DIP



## Features/Benefits

- Side actuated contacts
- Available in thru-hole or SMT models
- High pressure contact system does not require tape seal
- 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 BPA Series are shown on pages I-14 thru I-15. All switches supplied in "OFF" position.

## Specifications

SWITCH FUNCTION: 2 thru 10 position available (except 3 position).  
 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: 235°C ± 5°C for 5 sec.)

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.

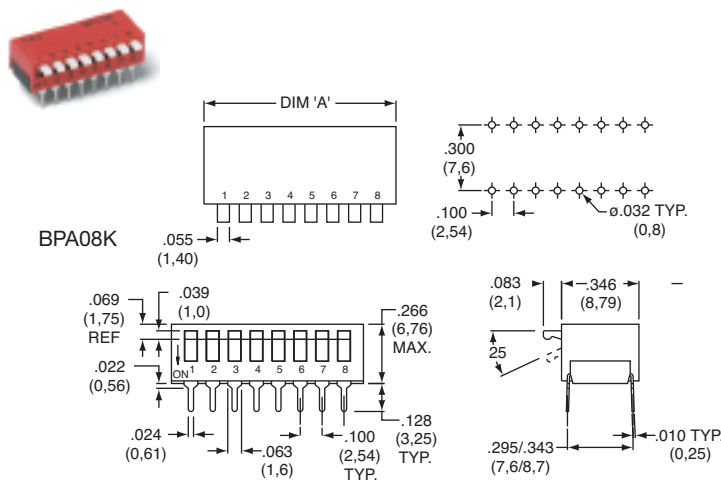
## Materials

HOUSING: PBT (thru-hole) color: Black. PPA (SMT) color: Red  
 RoHS, Version (thru-hole and SMT) PPS, color black (UL94V-0).  
 COVER: PBT (thru-hole) color: Red. PPA (SMT) color: Red  
 RoHS, Version (thru-hole and SMT) PPS, color black (UL94V-0).  
 ACTUATOR: PBT (thru-hole): PA-6T (SMT) (UL94V-0).  
 CONTACTS: Beryllium copper with gold plate.  
 TERMINALS: Brass/Tin-lead plated. RoHS, Version brass, gold plate over nickel plate.

**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.

## Side Actuator – Thru-hole Terminals



| ROHS PART NUMBER | TIN LEAD PART NUMBER | NO. POS. | DIM. 'A'     | QUANTITY PER TUBE |
|------------------|----------------------|----------|--------------|-------------------|
| <b>BPA02B</b>    | <b>BPA02K</b>        | 2        | .276 (7,0)   | 60                |
| <b>BPA03B</b>    |                      | 3        | .376 (9,6)   | 45                |
| <b>BPA04B</b>    | <b>BPA04K</b>        | 4        | .476 (12,1)  | 35                |
| <b>BPA05B</b>    | <b>BPA05K</b>        | 5        | .575 (14,6)  | 30                |
| <b>BPA06B</b>    | <b>BPA06K</b>        | 6        | .677 (17,2)  | 25                |
| <b>BPA07B</b>    | <b>BPA07K</b>        | 7        | .776 (19,7)  | 20                |
| <b>BPA08B</b>    | <b>BPA08K</b>        | 8        | .878 (22,3)  | 20                |
| <b>BPA09B</b>    | <b>BPA09K</b>        | 9        | .976 (24,8)  | 15                |
| <b>BPA10B</b>    | <b>BPA10K</b>        | 10       | 1.075 (27,3) | 15                |

Schematic

SPST

**NOTE:** Reverse throw available, contact ITT for P/N and quote.



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

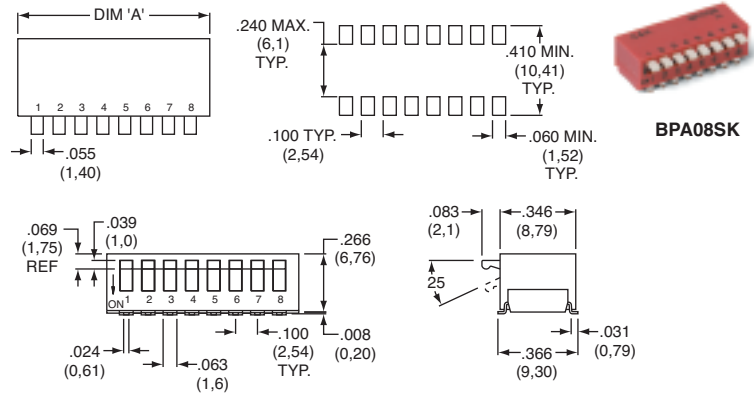
# C&K BPA Series Side Actuated DIP Switches

## Side Actuator – Surface Mount Terminals

| ROHS PART NUMBER | TIN LEAD PART NUMBER | NO. POS. | DIM. 'A'     | QUANTITY PER TUBE |
|------------------|----------------------|----------|--------------|-------------------|
| <b>BPA02SB</b>   | <b>BPA02SK</b>       | 2        | .276 (7,0)   | 60                |
| <b>BPA03SB</b>   |                      | 3        | .376 (9,6)   | 45                |
| <b>BPA04SB</b>   | <b>BPA04SK</b>       | 4        | .476 (12,1)  | 35                |
| <b>BPA05SB</b>   | <b>BPA05SK</b>       | 5        | .575 (14,6)  | 30                |
| <b>BPA06SB</b>   | <b>BPA06SK</b>       | 6        | .677 (17,2)  | 25                |
| <b>BPA07SB</b>   | <b>BPA07SK</b>       | 7        | .776 (19,7)  | 20                |
| <b>BPA08SB</b>   | <b>BPA08SK</b>       | 8        | .878 (22,3)  | 20                |
| <b>BPA09SB</b>   | <b>BPA09SK</b>       | 9        | .976 (24,8)  | 15                |
| <b>BPA10SB</b>   | <b>BPA10SK</b>       | 10       | 1.075 (27,3) | 15                |

Schematic

SPST

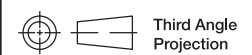
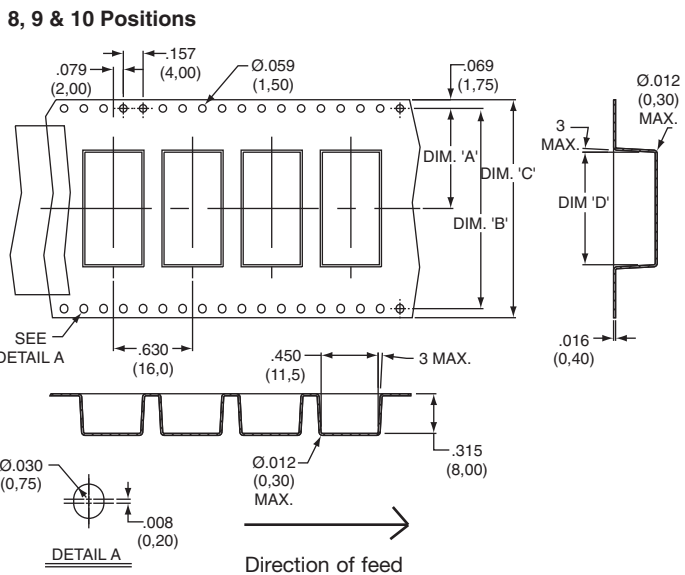
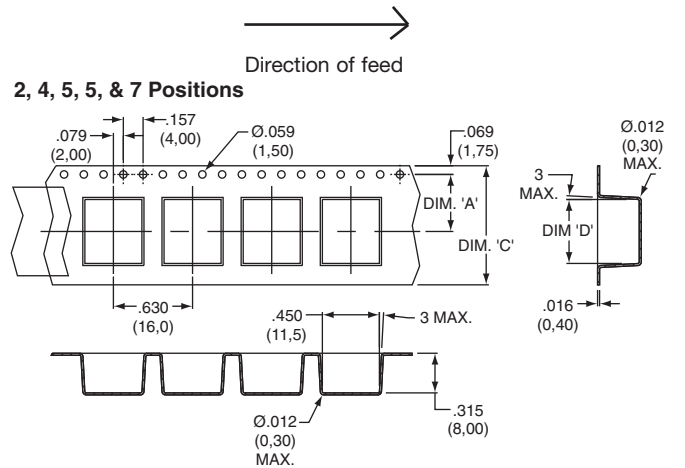
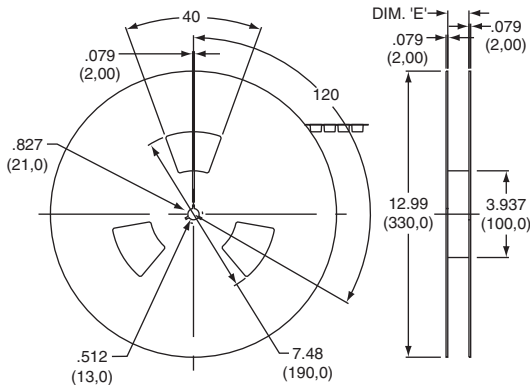


**NOTE:** Tape and reel packaging available by adding "R" to end of project number.

## Tape & Reel Packaging – Surface Mount Options Only

| QTY/ REEL | POLES | DIM. 'A'    | DIM. 'B'     | DIM. 'C'     | DIM. 'D'     | DIM. 'E'     |
|-----------|-------|-------------|--------------|--------------|--------------|--------------|
| 500       | 2     | .453 (11,5) | —            | .945 (24,0)  | .311 (7,9)   | .961 (24,4)  |
| 500       | 3     | .453 (11,5) | —            | .945 (24,0)  | .409 (10,4)  | .961 (24,4)  |
| 500       | 4     | .453 (11,5) | —            | .945 (24,0)  | .508 (12,9)  | .961 (24,4)  |
| 500       | 5     | .453 (11,5) | —            | .945 (24,0)  | .606 (15,4)  | .961 (24,4)  |
| 500       | 6     | .559 (14,2) | 1.118 (28,4) | 1.260 (32,0) | .709 (18,0)  | 1.276 (32,4) |
| 500       | 7     | .559 (14,2) | 1.118 (28,4) | 1.260 (32,0) | .807 (20,5)  | 1.276 (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) |

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



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

