

# SPA Series Single In-line Package Switches



H  
DIP

## Features/Benefits

- **Thin Single In-line Packaging saves PCB space**
- **Retention feature holds part to PCB prior to soldering**
- **Available in vertical or right angle models**
- **High pressure contact system does not require tape sealing**
- **RoHS compliant**

## Typical Applications

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



## Specifications

### CONTACT RATING:

Carry: 10 mA @ 5VDC

Switching: 0.1 mA @ 0.1m VDC min.

MECHANICAL AND ELECTRICAL LIFE: 1,000 cycles min.

CONTACT RESISTANCE: 50 mΩ max. @ 20 V DC 10mA.

INSULATION RESISTANCE: 100 MΩ min. @ 100 V DC.

DIELECTRIC STRENGTH: 1 minute @ 300 V AC.

CAPACITANCE: 5pF max. between adjacent terminals.

OPERATING TEMPERATURE: -40°C to 85°C.

STORAGE TEMPERATURE: -40°C to 85°C.

OPERATING FORCE: 5.9N max.

SOLDERABILITY: Dip & look solderability testing per C&K spec.

#448. Unplated edges of terminals permitted.

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.

## Materials

BASE: PPS (UL94V-0).

COVER: PBT (UL94V-0).

ACTUATOR: 4/6 Nylon (UL 94V-0).

MOVABLE CONTACT: Beryllium copper alloy, gold over nickel plate.

FIXED CONTACT: Copper alloy, gold over nickel plate.

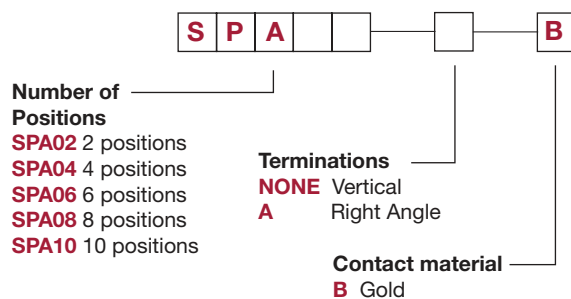
CLIP: Phosphor bronze wire. Phosphor bronze, Tin over nickel plate.

**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.



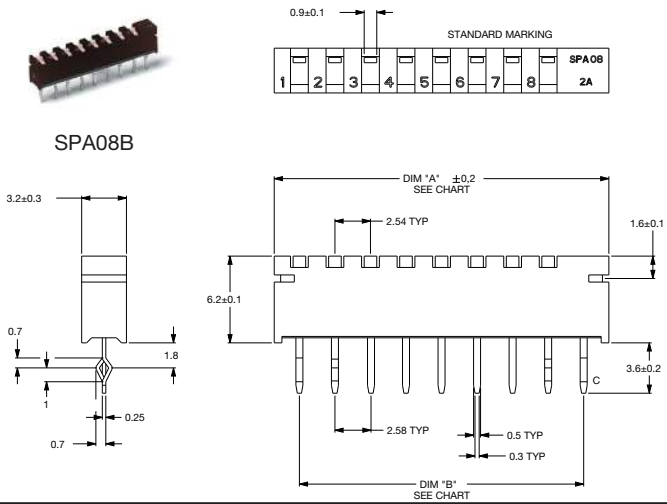
Dimensions are shown: Inch (mm)  
Specifications and dimensions subject to change

# SPA Series Single In-line Package Switches

## Vertical

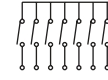


SPA08B

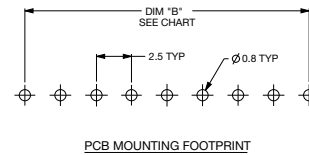


ROHS PART NUMBER	NO. POS.	DIM. 'A'	DIM. 'B'	QUANTITY PER TUBE
<b>SPA02B</b>	2	.342 (8,68)	.200 (5,08)	50
<b>SPA04B</b>	4	.542 (13,76)	.400 (10,16)	30
<b>SPA06B</b>	6	.742 (18,84)	.600 (15,24)	25
<b>SPA08B</b>	8	.942 (23,92)	.800 (20,32)	20
<b>SPA10B</b>	10	1.142 (29,00)	1.000 (25,40)	15

Schematic



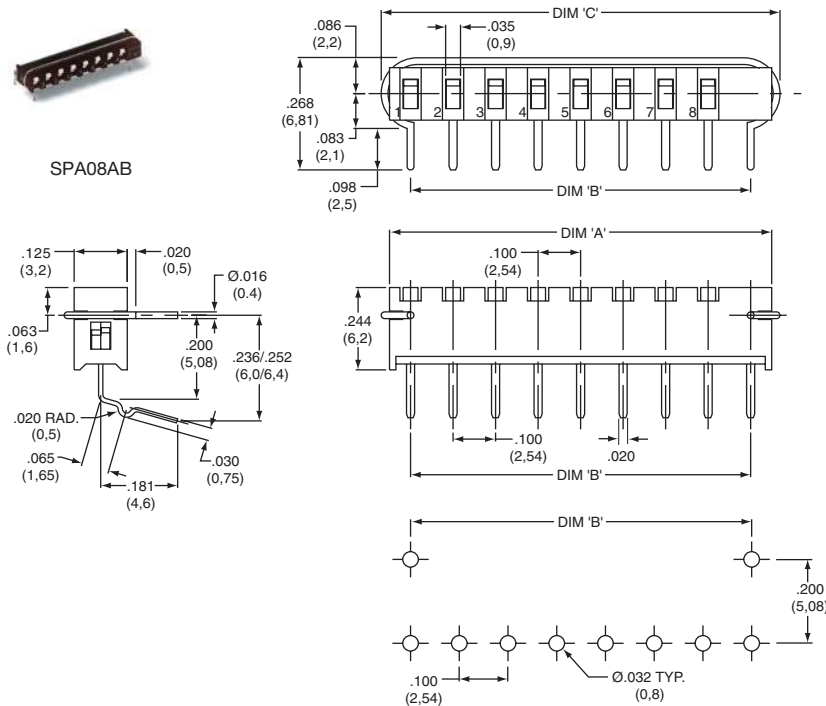
SPST



PCB MOUNTING FOOTPRINT

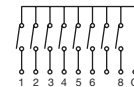


SPA08AB

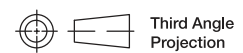


ROHS PART #	NO. POS.	DIM. 'A'	DIM. 'B'	DIM. 'C'	QTY PER TUBE
<b>SPA02AB</b>	2	.342 (8,68)	.200 (5,08)	.339 (8,6)	50
<b>SPA04AB</b>	4	.542 (13,76)	.400 (10,16)	.540 (13,7)	30
<b>SPA06AB</b>	6	.742 (18,84)	.600 (15,24)	.736 (18,7)	25
<b>SPA08AB</b>	8	.942 (23,92)	.800 (20,32)	.937 (23,8)	20
<b>SPA10AB</b>	10	1.142 (29,00)	1.000 (25,40)	1.138 (28,9)	15

Schematic



SPST



Third Angle  
Projection