

**BOURNS®**

## Features

- Normal open contact system
- Low contact resistance
- High reliability
- Self-clean on contact area

## Applications

- PC interface boards
- LANs
- Auto dialing systems
- Remote controlled systems

# SDS/SDP/SDA Series Slide DIP Switch

### Electrical Characteristics

Electrical Life .....2,000 operations min. per switch, 24VDC, 25mA  
 Non-Switching Rating .....100mA, 50VDC  
 Switching Rating .....25mA, 24 VDC  
 Contact Resistance (@ current 100mA) .....50 milliohms max. at initial 100 milliohms max. after life test  
 Insulation Resistance at 500VDC ±15V.....100 megohms min. between adjacent terminals  
 Dielectric Strength .....500VDC/minute  
 Capacitance .....5pF max. between adjacent terminals  
 Circuit .....Single pole single throw

### Environmental Characteristics

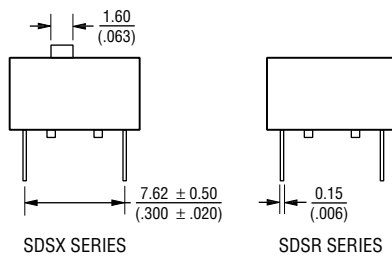
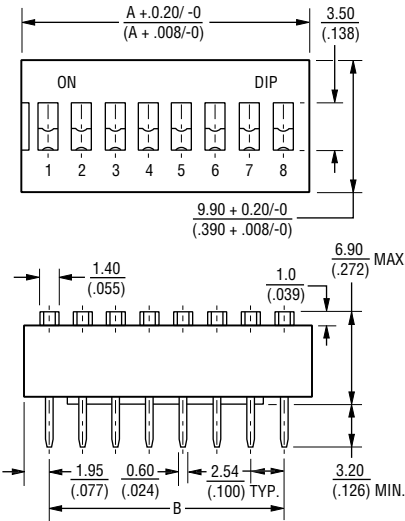
Mechanical Life...2,000 operations per switch  
 Operation Force .....800g max.  
 Stroke.....2.0mm  
 Operating Temp. Range.....-40°C to +85°C  
 Storage Temperature.....-40°C to +85°C  
 Vibration Test .....MIL-STD-202F, Method 201A  
 Frequency .....10-55-10 Hz/1 minute  
 Directions .....X,Y,Z, three mutually perpendicular directions  
 Time .....2 hours each direction. High reliability  
 Shock Test .....MIL-STD-202F, Method 213B, Condition A  
 Gravity .....50G (peak value), 11 msec  
 Direction & Times.....6 sides and 3 times in each direction. High reliability

### Physical Characteristics

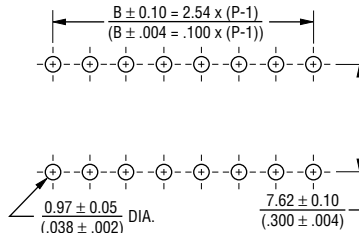
Base and Cover Materials  
 ..UL94V-0 PBT plus glass fiber reinforced  
 Color .....Black base, red cover  
 Actuator Materials.....UL94V-0 PBT plus glass fiber reinforced  
 Color .....White  
 Contact Materials ....Phosphor bronze with 3 micro inches gold plating over nickel  
 Top Seal Materials.....Polyester film  
 Potting Materials.....Epoxy  
 Wave Soldering Process\*  
 .....Recommended solder temp. at 260°C (500°F) max., 5 sec.  
 Hand Soldering Process\*  
 .....Use a soldering iron of 30 watts or less, controlled at 320°C (608°F) for approx. 2 sec. while applying solder  
 Cleaning Process\*  
 .....Flux clean using force rinse, high agitation or triple bath cleaning method. Freon TF or TE give excellent results. When vapor methods are used, do not subject the switch to solvents at temperatures above 51°C (125°F).  
 Standard Packaging  
 .....IC tubes/all poles in the "off" position

### Product Dimensions

#### SDS Series



#### RECOMMENDED PCB LAYOUT

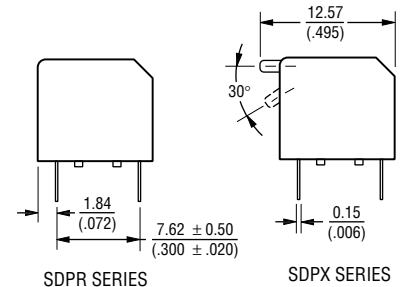
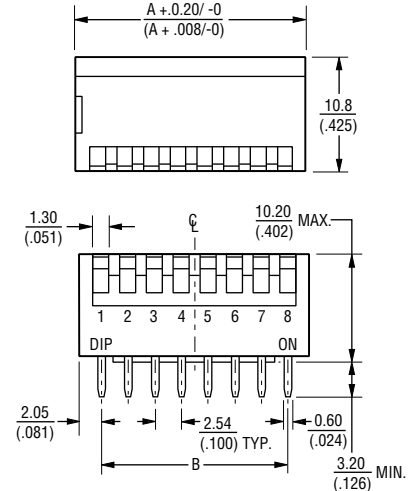


SCHEMATIC (TYP.)  
 2,3,4,5,6,7,8,9,10,12 POSITIONS AVAILABLE

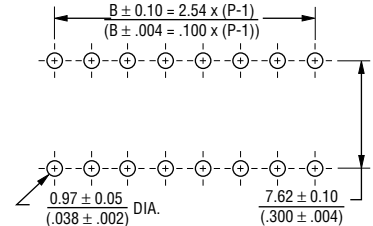


SEE FOLLOWING PAGE FOR A & B DIMENSION CHART.

#### SDP Series



#### RECOMMENDED PCB LAYOUT



SCHEMATIC (TYP.)  
 2,3,4,5,6,7,8,9,10,12 POSITIONS AVAILABLE



SEE FOLLOWING PAGE FOR A & B DIMENSION CHART.

DIMENSIONS:  $\frac{MM}{(IN)}$

\*For best results, keep all switch contacts in their "off" position for all operations.