




## Features

- Eight and four positions available
- Gold plated contacts offer high reliability
- Low contact resistance
- Just 1.5 mm total height
- Half pitch of 1.27 mm (.050 in.)
- RoHS compliant\*

 The SDHH Series is currently available, although not recommended for new designs.

## SDHH Series Half Pitch SMD DIP Switch

### Electrical Characteristics

Electrical Life .....1,000 operation cycles  
per switch min.  
Non-Switching Rating ..100 mA, 50 VDC  
Switching Rating .....25 mA, 24 VDC  
Contact Resistance .....100 mohms max.  
Insulation Resistance ...100 Mohms min.,  
DC 500 V min.

Dielectric Strength  
.....AC 300 V for 1 minute  
Capacitance .....5 pF max.  
between adjacent closed switch  
Circuit .....Single pole single throw

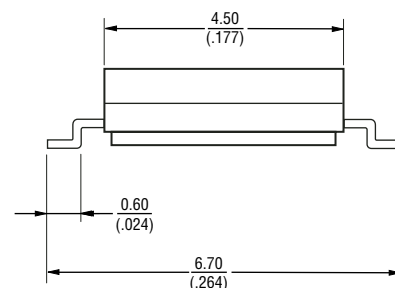
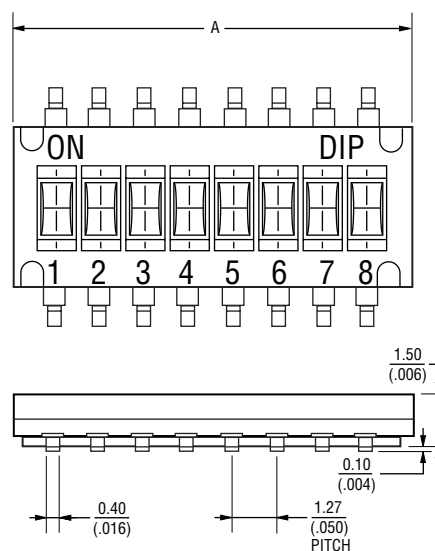
### Environmental Characteristics

Mechanical Life .....1,000 operations  
per switch min.  
Operation Force .....500 g max.  
Stroke.....0.6 mm  
Operating Temp. Range  
.....-40 °C to +85 °C  
Storage Temperature ...-40 °C to +85 °C  
Vibration Test .....MIL-STD-202F,  
Method 201A  
Frequency .....10-50-10 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 .....50 G (peak value), 11 msec  
Direction & Times .....6 sides and  
3 times in each direction.  
High reliability

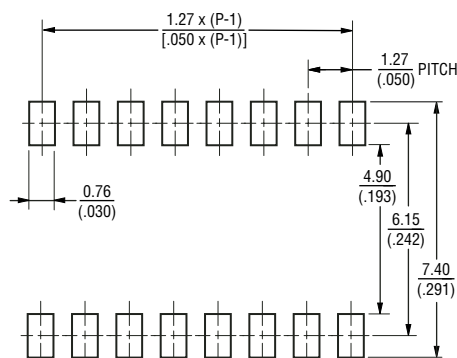
### Physical Characteristics

Cover Materials .....Thermoplastic  
Nylon, UL94V-0; black  
Base Materials.....Thermoplastic  
Nylon, UL94V-0; black  
Actuator Materials .....Thermoplastic  
LCP, UL94V-0; white  
Contact Materials .....Alloy Copper  
Contact Plating.....3 Micro inches gold  
over 40 micro inches nickel  
Terminal Materials .....Brass with  
Gold plating  
Reflow Soldering .....Peak temperature  
or reflow oven should  
be set to 240 °C. max.  
2 sec. while applying solder  
Packaging .....All poles in the  
"off" position

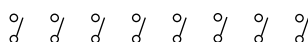
### Product Dimensions



### Recommended PCB Layout



### Circuit Diagram



### SDHH Series Dimensions

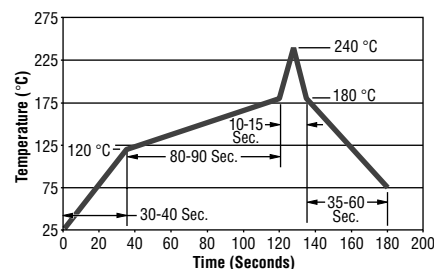
MODEL NO.	POS.	DIM. A	DIM. B
SDHH-4	4	6.31 (.248)	3.81 (.15)
SDHH-8	8	11.39 (.448)	8.89 (.35)

### How to Order

**SDH H - 8 - T R**

Model \_\_\_\_\_  
Actuator \_\_\_\_\_  
H = Recessed  
Number of positions \_\_\_\_\_  
4 = 4 positions  
8 = 8 positions  
Seal \_\_\_\_\_  
T = Top tap sealed (standard)  
Packaging \_\_\_\_\_  
R = Tape and reel

### Reflow Soldering Profile



DIMENSIONS ARE:  $\frac{\text{MM}}{(\text{INCHES})}$

TOLERANCES:  $\pm 2$  EXCEPT WHERE NOTED.

\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.  
Specifications are subject to change without notice.  
Customers should verify actual device performance in their specific applications.

# SDHH Series Half Pitch SMD DIP Switch

**BOURNS®**

## Packaging Specifications

