

RoHS COMPLIANT



**BOURNS®**

## Features

- Through-hole and SMD styles available
- Available sharp click feel with a positive tactile feedback
- Ultra-miniature and lightweight structure suitable for high density mounting
- Designed for washing after soldering
- RoHS compliant\*

The ST(H,M,J,R)W Series is currently available, although not recommended for new designs.

**OBsolete**

- Insert molding in the contact with special treatment prevents flux buildup during soldering and permits autodipping

## ST(H,M,J,R)W Series Sealed Tact Switch

### Electrical Characteristics

Electrical Life.....100,000 cycles min.  
 Rating .....DC 12 V, 50 mA  
 Contact Resistance.....100 mohms max.  
 Insulation Resistance ..100 Mohms min.  
 DC 500 V min.

Dielectric Strength  
 .....AC 250 V for 1 minute  
 Contact Arrangement...1 pole 1 position

### Environmental Characteristics

Mechanical Life.....100,000 cycles min.  
 Operation Force .....160 g, 260 g  
 Tolerance .....±50 g  
 Stop Strength..Place the switch vertical, a static load of 3 kg shall be applied in the direction of actuator operation for a period of 15 seconds  
 Stroke.....0.25 mm (+0.2 mm, -0.1 mm)  
 Operating Temperature Range  
 .....-25 °C to +70 °C

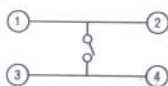
Storage Temperature Range  
 .....-30 °C to +80 °C  
 Vibration Test .....MIL-STD-202F, Method 201A  
 Frequency .....10-55-10 Hz/1 minute  
 Directions .....X,Y,Z 3 mutually perpendicular directions

Time.....2 hours each direction, high reliability  
 Shock Test .....MIL-STD-202F, Method 213B, Condition A  
 Gravity .....50 g (peak value), 11 msec.  
 Directions/Time .....6 sides and 3 times in each direction

### Physical Characteristics

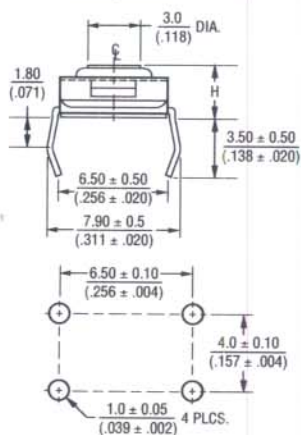
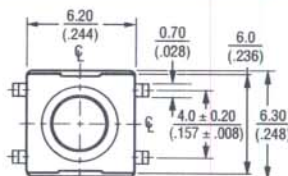
Cover Materials.....Stainless steel  
 Base Materials.....Thermoplastic LCP  
 UL94V-0 black  
 Actuator Materials.....Thermoplastic  
 Nylon UL94V-0 (680, 690)  
 Color.....Brown (Silver 680 type)  
 Contact Disc. Materials.....Phosphor bronze with gold cladding  
 Terminal Materials .....Brass with silver cladding

### CIRCUIT DIAGRAM

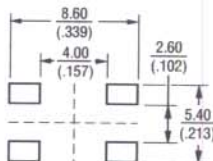
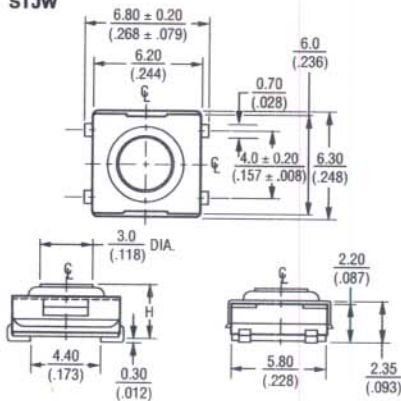


### Product Dimensions

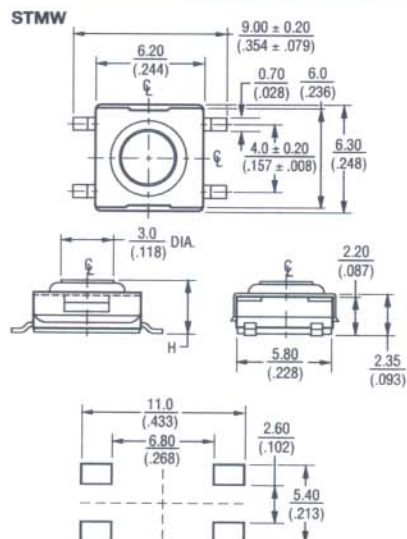
#### STHW



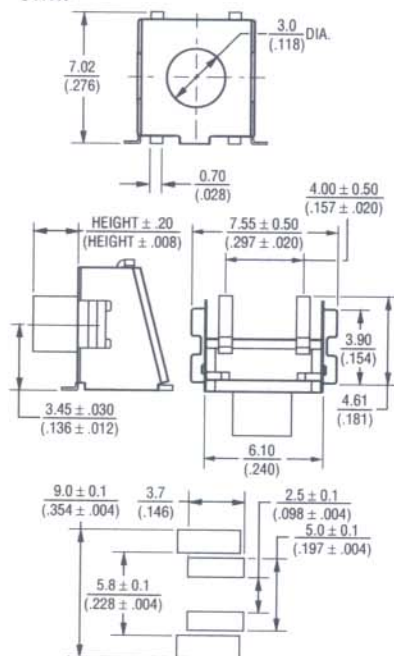
#### STJW



#### STMW



#### STRW



DIMENSIONS: **MM**  
(IN)

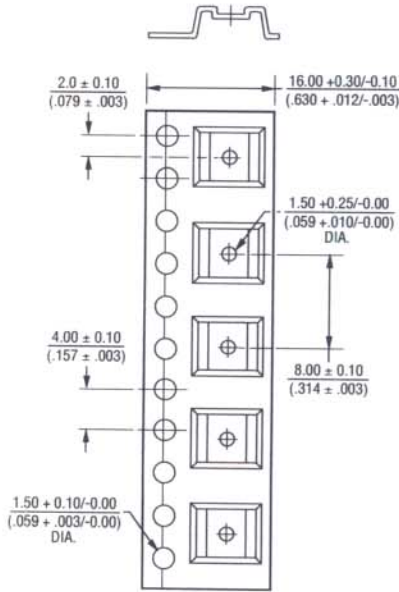
\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex. Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications.

# ST(H,M,J,R)W Series Sealed Tact Switch

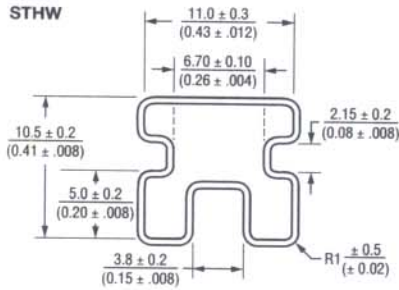
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## Packaging Specifications

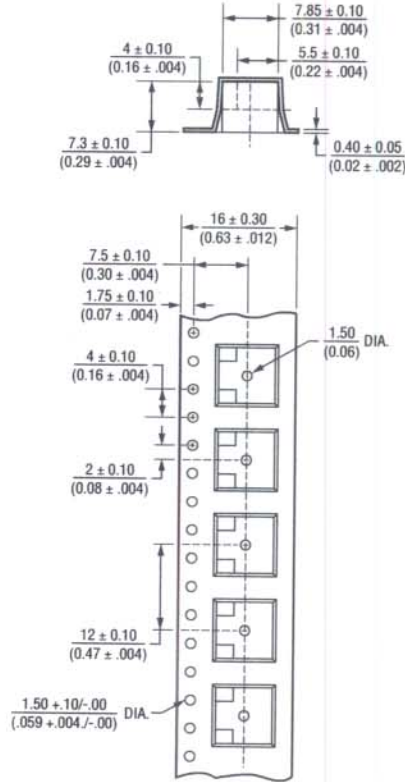
STJW  
STMW



STMW  
STJW  
STHW



STRW



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

## How to Order

STM W - 6 60 - N TR

Model \_\_\_\_\_  
 STM = SMD "G" style  
 STH = Through-hole  
 STJ = SMD "J" style  
 STR = SMD right angle

Product Type \_\_\_\_\_  
 W = Washable

Size \_\_\_\_\_  
 6 = 6 mm

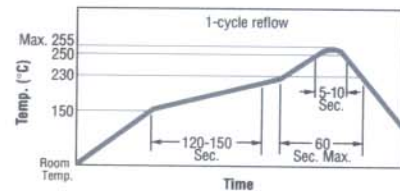
Height (STM, STH, STJ) \_\_\_\_\_  
 50 =  $\frac{3.5}{(0.14)}$  (N, R, V)  
 60 =  $\frac{3.1}{(0.12)}$  (N)  
 67 =  $\frac{5.2}{(0.20)}$  (N, R, V)  
 80 =  $\frac{2.3}{(0.09)}$  (S)  
 90 =  $\frac{3.8}{(0.15)}$  (N, R, V)

Height (STR) \_\_\_\_\_  
 10 = 0 (N, R)  
 20 = 0.8 (N, R)  
 30 = 1.0 (N, R)  
 40 = 2.3 (N, R)

Actuating Force \_\_\_\_\_  
 S = 160 g (Silver head)  
 N = 160 g (Brown head)  
 R = 260 g (Red head)  
 V = 360 g (Clear head)

Packaging Option \_\_\_\_\_  
 TR = Embossed tape (STM, STJ, STR only)  
 610/620/630/640 = 700 pcs.  
 650 = 1900 pcs.  
 660 = 2000 pcs.  
 667 = 900 pcs.  
 680 = 2000 pcs.  
 690 = 1900 pcs.  
 \_\_\_ = 75 pcs./tube (STM, STJ, STH only)

## Reflow Soldering Profile



REV. 02/06

Specifications are subject to change without notice.  
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**OBSOLETE**