



## 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\*



- 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

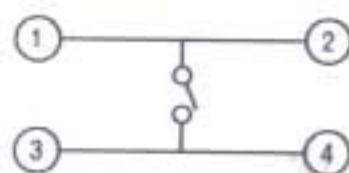
Actuator Materials .....Thermoplastic  
 Nylon UL94V-0 (680, 690)

Color.....Brown (Silver 680 type)

Contact Disc. Materials .....Phosphor  
 bronze with gold cladding

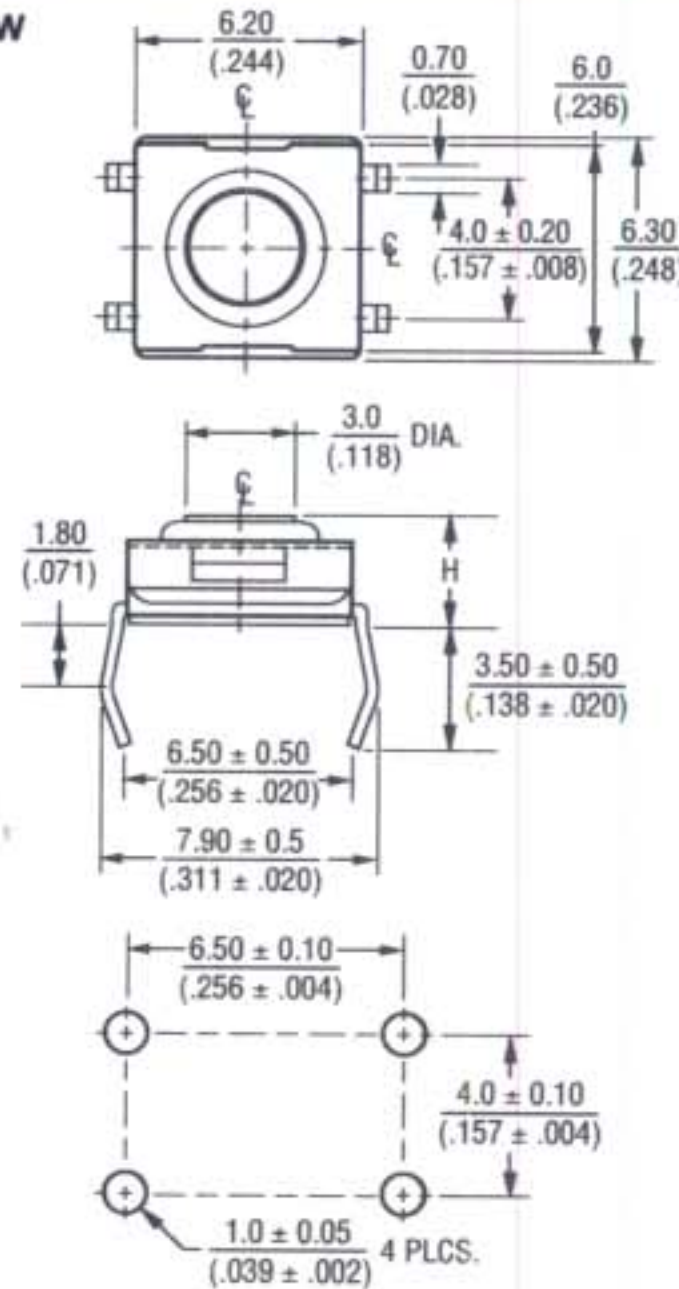
Terminal Materials .....Brass with silver  
 cladding

### CIRCUIT DIAGRAM

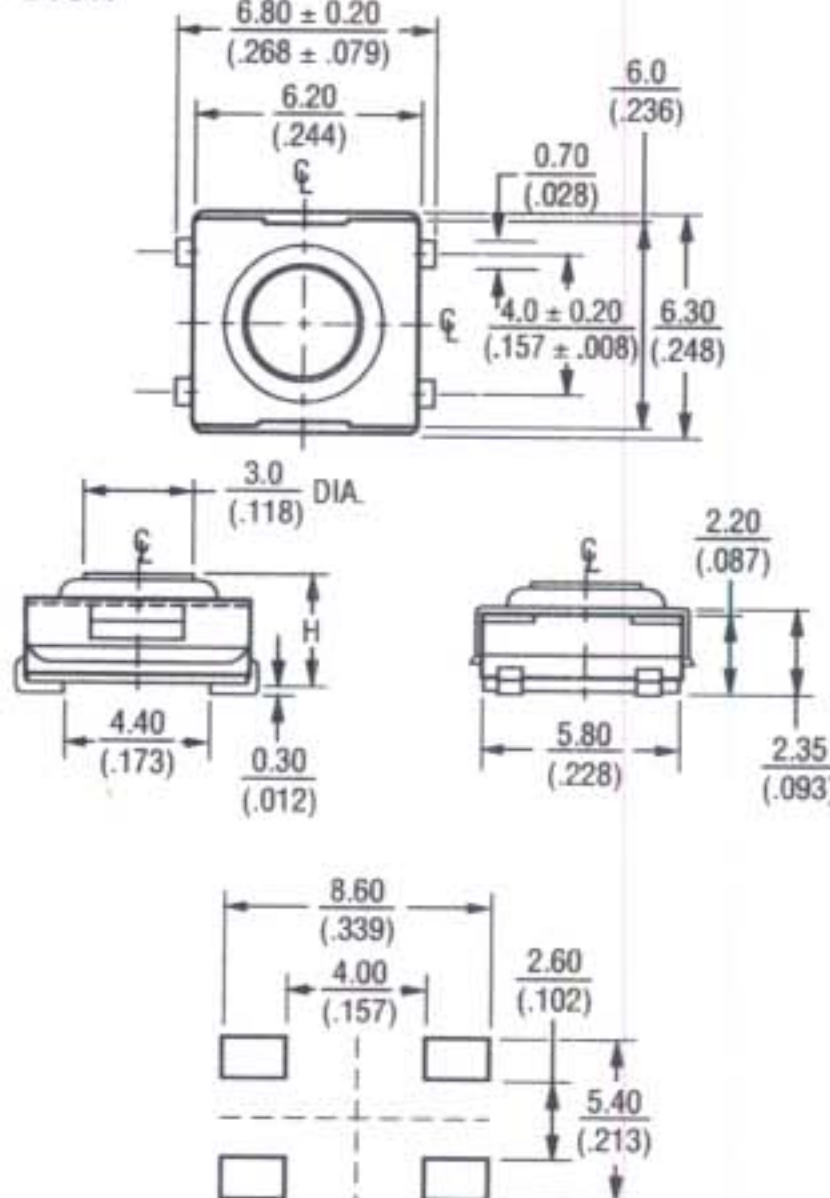


### Product Dimensions

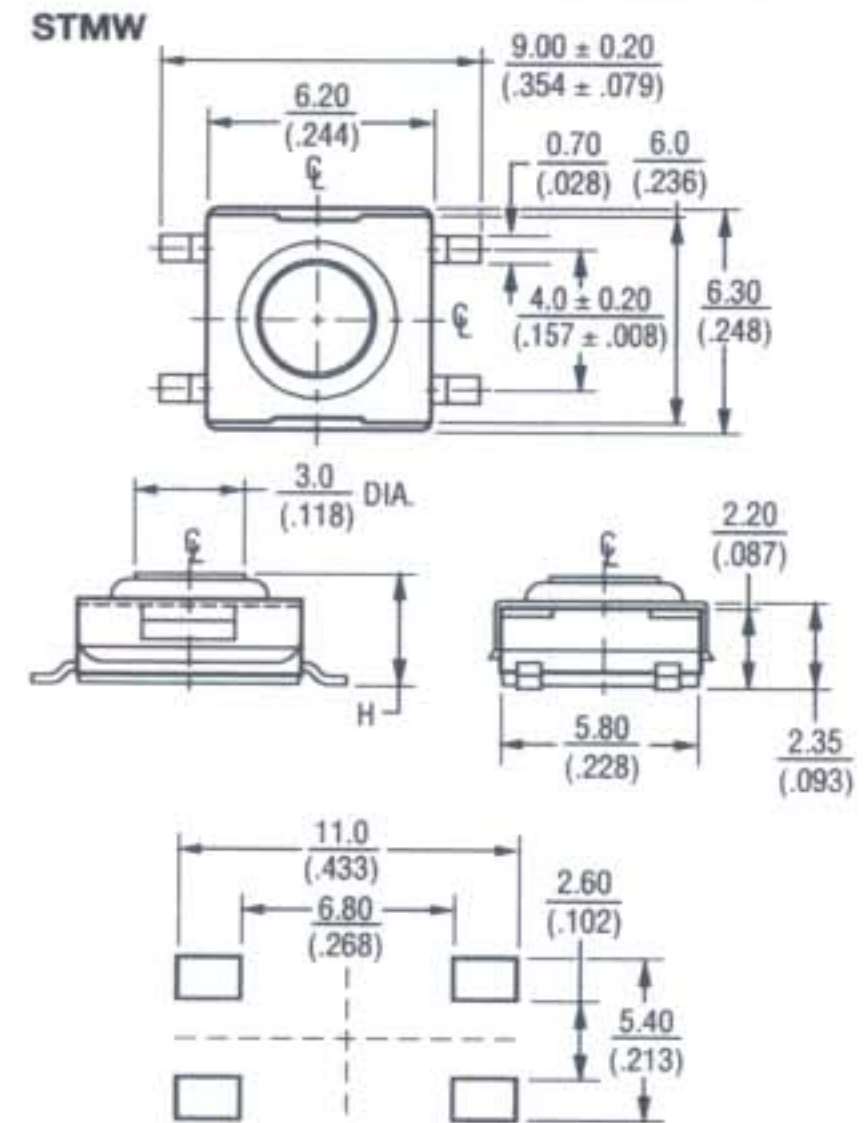
#### STHW



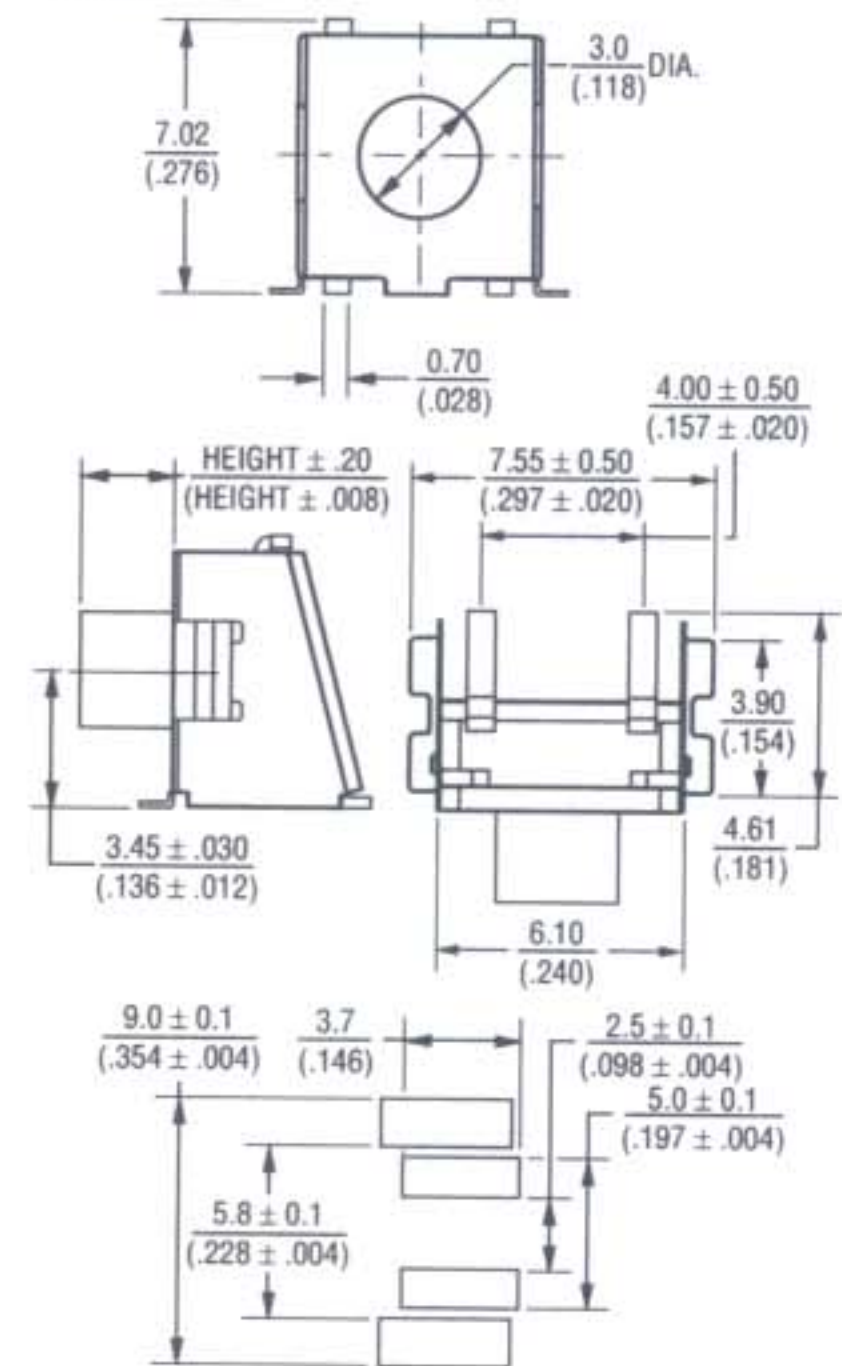
#### STJW



#### STMW



#### STRW



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

\*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.

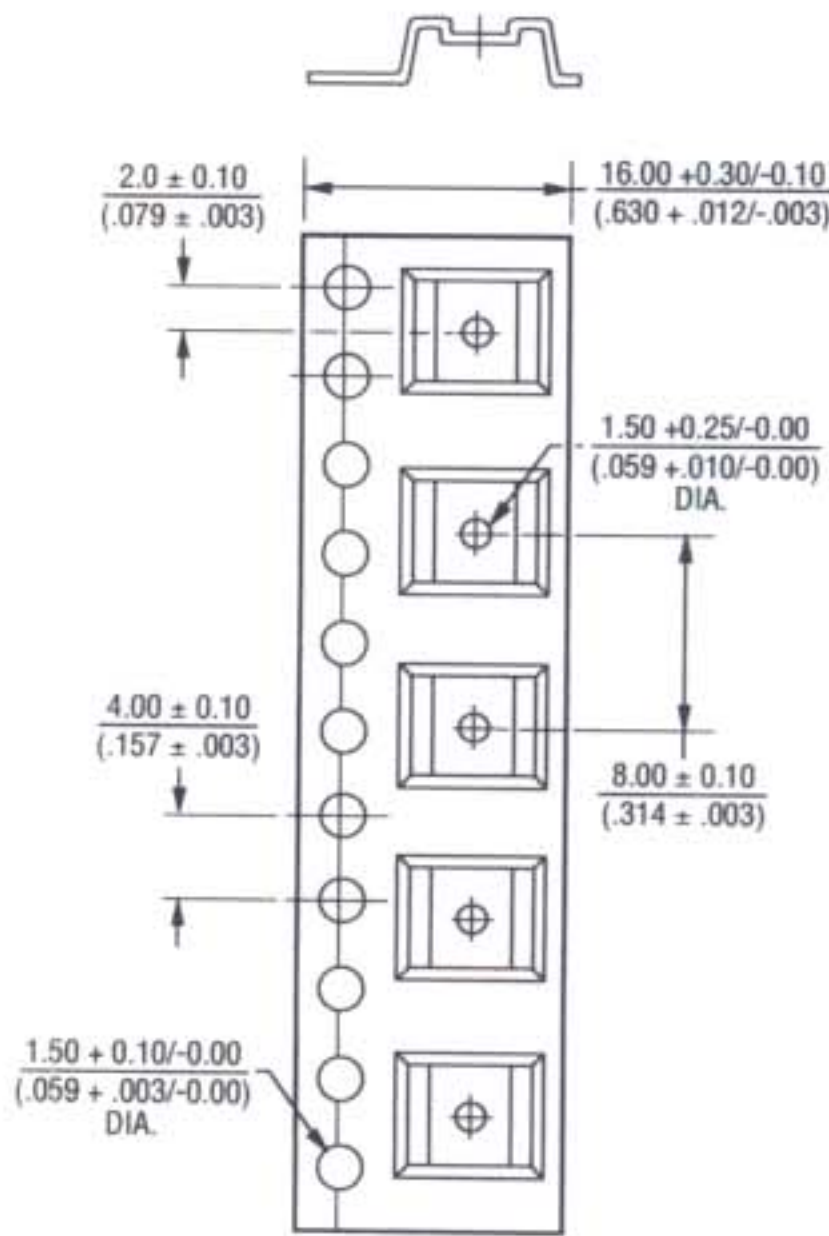


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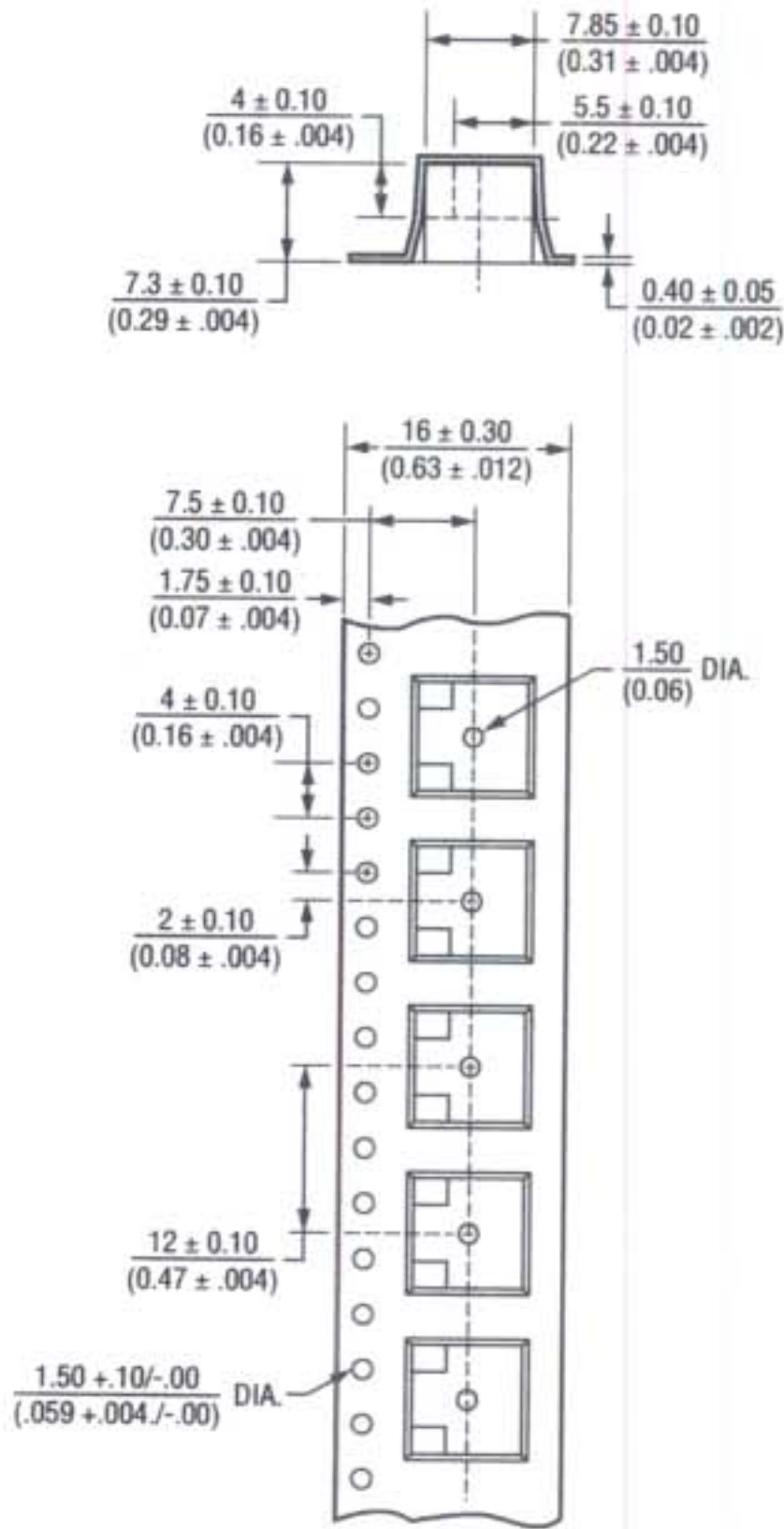
**BOURNS®**

## Packaging Specifications

STJW  
STMW

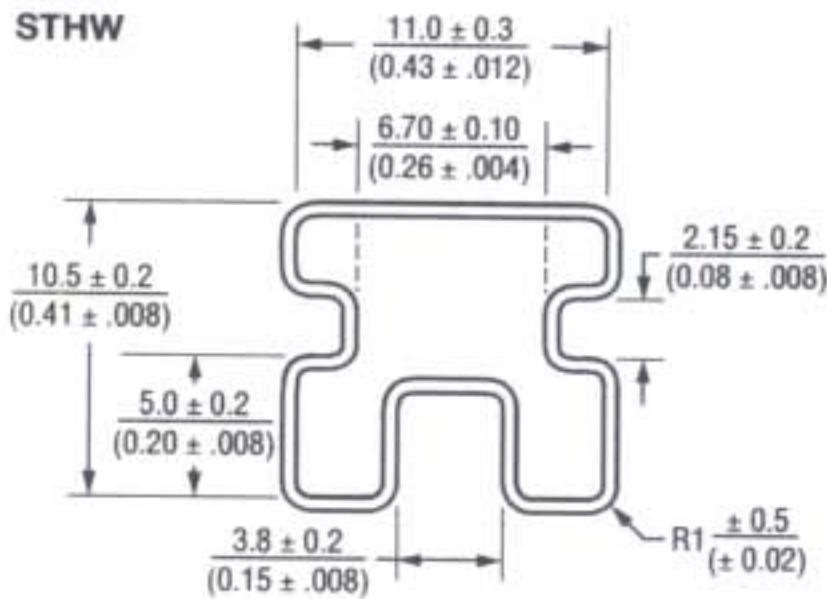


STRW



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

STMW  
STJW  
STHW



**OBSOLETE**

## 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.

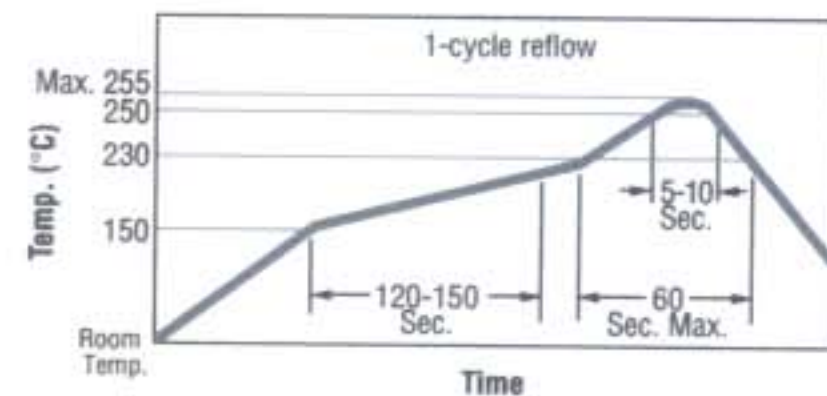
667 = 900 pcs.

680 = 2000 pcs.

690 = 1900 pcs.

\_\_\_ = 75 pcs./tube (STM, STJ, STH only)

## Reflow Soldering Profile



REV. 02/06

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