

### Features

- Available sharp click feel with a positive tactile feedback
- Ultra-miniature and lightweight structure suitable for high density mounting
- Very economical with high reliability
- Insert molding in the contact with special treatment prevents flux buildup during soldering and permits autodipping
- RoHS compliant\*

## SDTM Series SMD Tact Switch

### Electrical Characteristics

Electrical Life  
 .....50,000 cycles min. for 260 g  
 500,000 cycles min. for 100 g, 160 g  
 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

Operation Force.....100 g, 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)  
 Temperature Range.....-25 °C to +70 °C  
 Vibration Test .....MIL-STD-202F,  
 Method 201A  
 Frequency .....10-50-10Hz/1minute  
 Directions.....X,Y,Z 3 mutually per  
 pendicular directions  
 Time.....2 hours each direction,  
 high reliability  
 Shock Test .....MIL-STD-202F,  
 Method 213A, Condition A  
 Gravity.....50 g (peak value), 11 msec.  
 Directions/Time.....6 sides and 3 times  
 in each direction

### Physical Characteristics

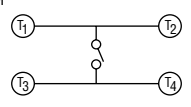
Cover Materials .....Steel, tin plated  
 Base Materials .....Thermoplastic Nylon  
 FG 101, UL94V-0  
 Actuator Materials .....Thermoplastic  
 Nylon UL94V-0  
 Color .....Black, brown, red  
 Contact Disc. Materials .....Phosphor  
 bronze with silver cladding  
 Terminal Materials .....Brass with silver  
 cladding

### How To Order

**SDT M - 6 10 - K TR**

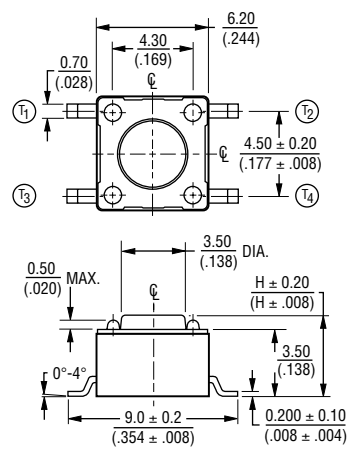
Model \_\_\_\_\_  
 Product Code \_\_\_\_\_  
 M = SMD  
 Size \_\_\_\_\_  
 6 = 6 mm  
 Height \_\_\_\_\_  
 10 = 4.3 mm  
 20 = 5.0 mm  
 30 = 7.0 mm  
 44 = 7.3 mm (square head)  
 48 = 7.3 mm (square head)  
 50 = 9.5 mm  
 60 = 13 mm  
 Actuating Force \_\_\_\_\_  
 K = 100 g (black head)  
 N = 160 g (brown head)  
 R = 260 g (red head)  
 S = 320 g (salmon head)  
 Y = 520 g (yellow head)  
 Packaging Option \_\_\_\_\_  
 TR = Embossed tape\*  
 610 = 1000 pcs.  
 620 = 900 pcs.  
 630 = 700 pcs.  
 644, 648 = 500 pcs.  
 650 = 380 pcs.  
 \_\_\_\_\_ = Tube  
 All models = 77 pcs.  
 \*not applicable to Model 660.

### CIRCUIT DIAGRAM

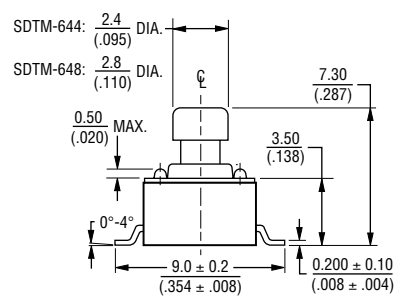
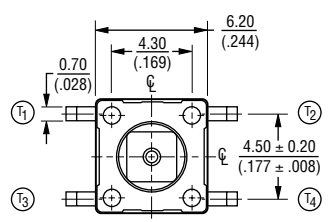


### Product Dimensions

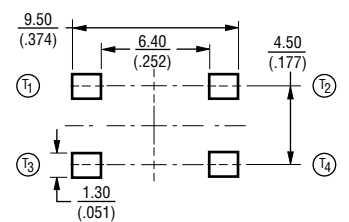
#### SDTM-610/620/630/650/660



#### SDTM-644/648



### RECOMMENDED PCB LAYOUT



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

TOLERANCES:  $\frac{0.2}{(.008)}$  EXCEPT WHERE NOTED.

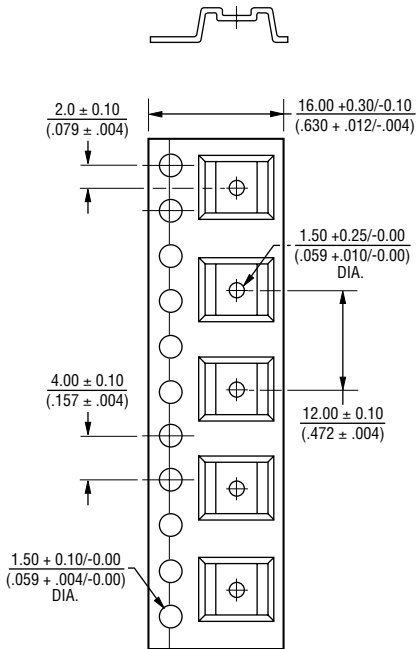
\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

# SDTM Series SMD Tact Switch

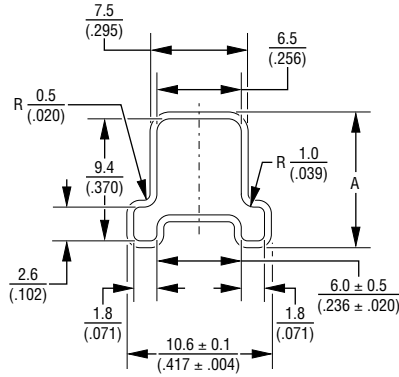
**BOURNS®**

## Packaging Specifications

SDTM-610/620/630/644/648/650(TR)

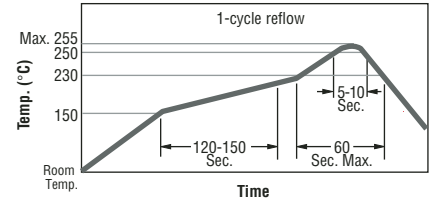


SDTM-610/620/630/644/648/650/660(TUBE)



MODEL NO.	DIM. A
SDTM-630, 644, 648	$\frac{10.40}{(.409)}$
SDTM-650, 660	$\frac{15.9 \pm 0.1}{(.626 \pm .004)}$
SDTM-610, 620	$\frac{5.5}{(.217)}$

## Reflow Soldering Profile



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

TOLERANCES:  $\frac{0.2}{(.008)}$  EXCEPT WHERE NOTED.