



## 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
- RoHS compliant\*



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

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

## 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

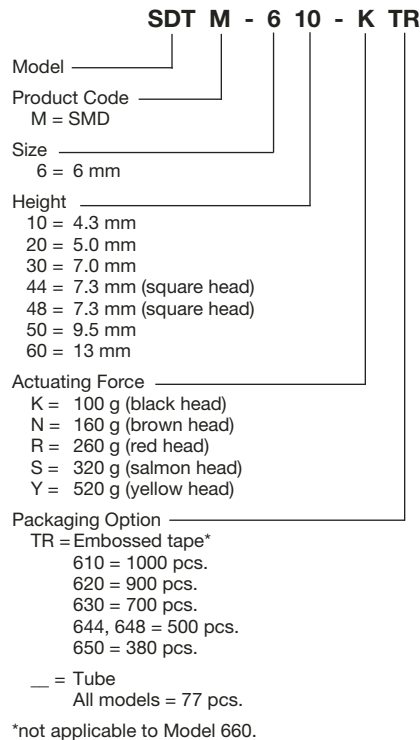
### Environmental Characteristics

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

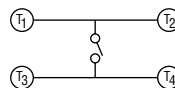
### Physical Characteristics

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

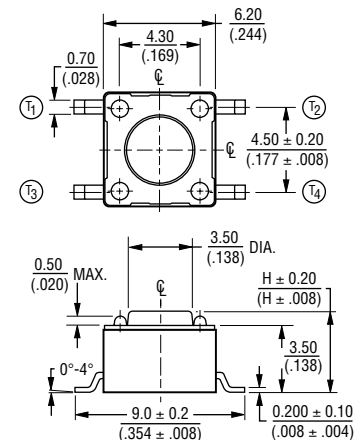


### CIRCUIT DIAGRAM

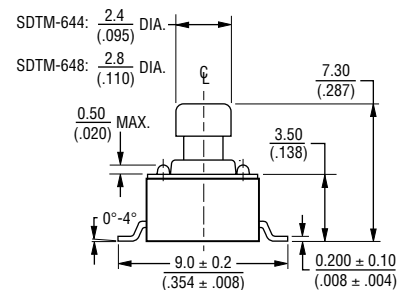
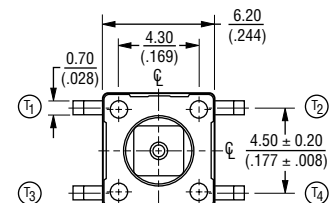


### Product Dimensions

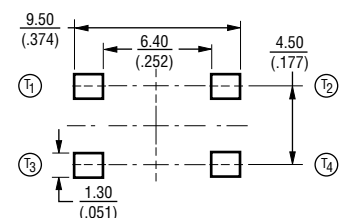
#### SDTM-610/620/630/650/660



#### SDTM-644/648



### RECOMMENDED PCB LAYOUT



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

TOLERANCES:  $\frac{0.2}{(0.008)}$  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.

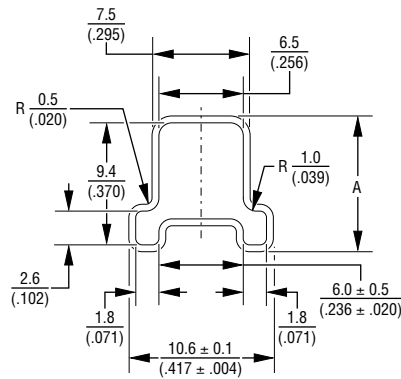
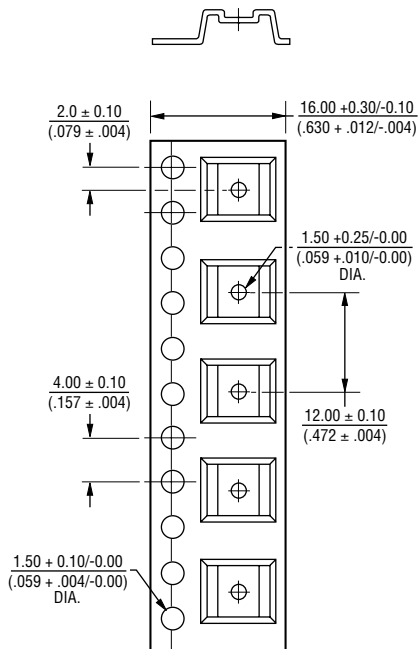
# SDTM Series SMD Tact Switch

**BOURNS®**

## Packaging Specifications

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

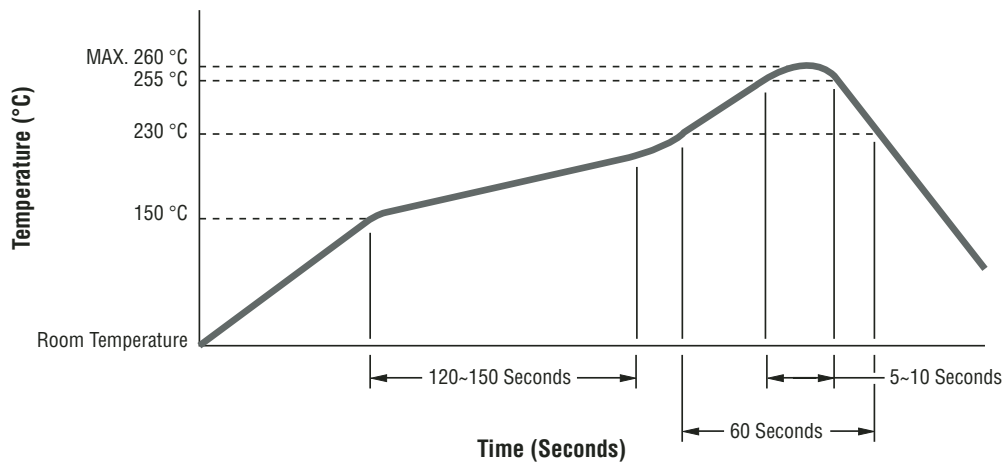
SDTM-610/620/630/644/648/650/660(TUBE)



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	$\frac{5.5}{(.217)}$

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

## Reflow Soldering Profile



REV. 08/06

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