

BOURNS®

SDTM Series – SMD Tact Switch

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†

Electrical Characteristics

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

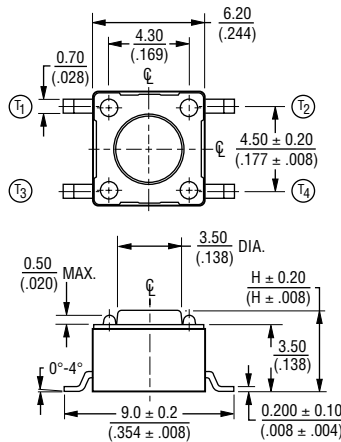
Operation Force100 g, 160 g, 260 g
 Tolerance..... ±50 g
 Stop Strength.....Place the switch vertical,
 a static load of 3 kg shall be
 applied in the direction of actuator
 operation for a period of 15 seconds
 Stroke.....0.25 mm (+0.2 mm, -0.1 mm)
 Temperature Range.....-25 °C to +70 °C
 Vibration TestMIL-STD-202F,
 Method 201A
 Frequency10-50-10 Hz/1 minute
 Directions.....X,Y,Z 3 mutually
 perpendicular directions
 Time.....2 hours each direction,
 high reliability
 Shock TestMIL-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

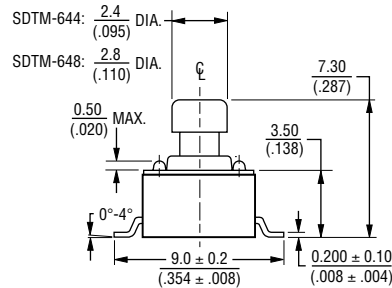
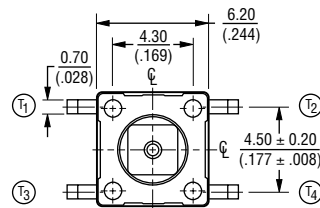
Cover Materials.....Steel, tin plated
 Base MaterialsThermoplastic Nylon
 FG 101, UL94V-0
 Actuator MaterialsThermoplastic
 Nylon UL94V-0
 ColorBlack, brown, red
 Contact Disc. MaterialsPhosphor
 bronze with silver cladding
 Terminal Materials.....Brass with silver
 cladding

Product Dimensions

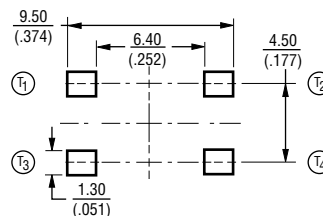
SDTM-610/620/630/650/660



SDTM-644/648



RECOMMENDED PCB LAYOUT



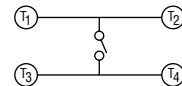
DIMENSIONS: MM/(INCHES)
 TOLERANCES: ±.2/(±.008) EXCEPT WHERE NOTED

How To Order

SDT M - 6 10 - K TR

Model _____
 Product Code _____
 M = SMD
 Body 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)
 N = 160 g (brown)
 R = 260 g (red)
 Packaging Option _____
 TR = Embossed Tape*
 610 = 1000 pcs.
 620 = 900 pcs.
 630, 644, 648 = 500 pcs.
 650 = 380 pcs.
 — = Tube
 All models = 77 pcs.
 *Not applicable to Model 660.

CIRCUIT DIAGRAM

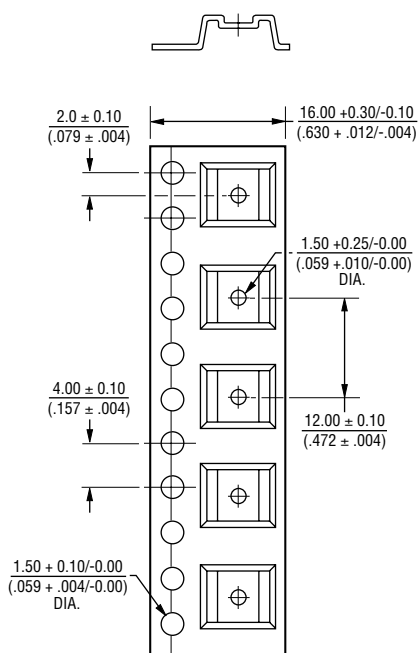


Specifications are subject to change without notice.
 †RoHS Directive 2002/95/EC Jan 27 2003 including Annex.
 Customers should verify actual device performance in
 their specific applications. REV 09/04

SDTM Series – Packaging Specifications

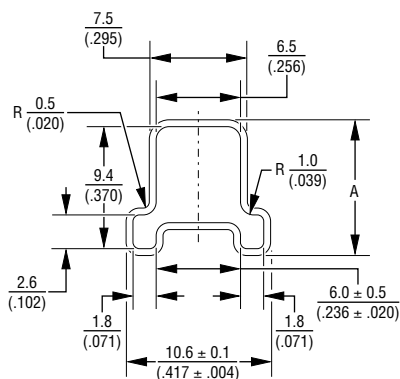
Packaging Specifications

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



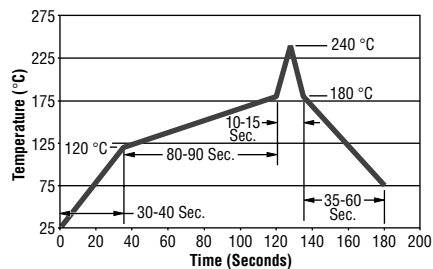
DIMENSIONS: MM/(INCHES)
TOLERANCES: ± 0.2 (± 0.008) EXCEPT WHERE NOTED

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



Model Number	Dimension A
SDTM-630, 644, 648	10.40 $(.409)$
SDTM-650, 660	15.9 ± 0.1 $(.626 \pm .004)$
SDTM-610, 620	5.5 $(.217)$

Reflow Soldering Profile



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