

ROHS COMPLIANT



**BOURNS®**

**Features**

- Available sharp click feel with a positive tactile feedback
- Ultra-miniature and lightweight structure suitable for high density mounting
- Economical with high reliability
- RoHS compliant\*

The SDT 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

**SDT Series Tact Switch**

**Electrical Characteristics**

Electrical Life  
 .....500,000 cycles min. for 260 g  
 1,000,000 cycles min. for 100 g, 160 g  
 Rating .....DC 12 V 50 mA  
 Contact Resistance .....100 milliohms max.  
 Insulation Resistance  
 .....100 megohms, DC 500 V min.  
 Dielectric Strength .....250 V AC for 1 minute  
 Contact Arrangement .....1 pole 1 position

**Environmental Characteristics**

Operation Force .....260 g ±50 g,  
 160 g ±50 g, 100 g ±50 g  
 Stop Strength .....Place the switch such  
 that vertical, a static load of 3 kg shall  
 be applied in the direction of actuator  
 operation for a period of 15 sec.

**Stroke**

6mm type .....0.25 + 0.2/- 0.1 mm  
 12mm type .....0.35 ± 0.1 mm  
 Temperature Range .....-20 °C to +70 °C  
 Vibration Test .....Mil-STD-202F,  
 Method 201A

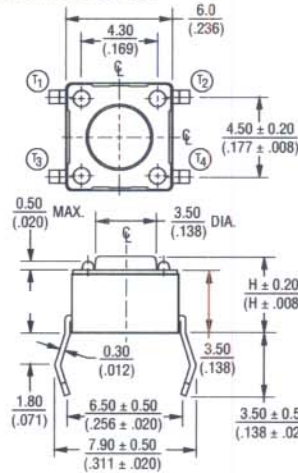
Frequency .....10-55-10 Hz/1 minute  
 Directions .....X,Y,Z, three mutually  
 perpendicular directions  
 Time .....2 hours each direction.  
 High reliability  
 Shock Test .....MIL-STD-202F,  
 Method 213B, Condition A  
 Gravity .....50 G (peak value), 11 msec  
 Direction & Times .....6 sides and  
 3 times in each direction.  
 High reliability

**Physical Characteristics**

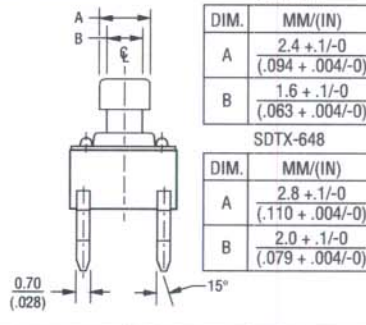
Cover Materials .....Steel  
 Base Materials .....UL94V-0 PBT plus glass  
 fiber reinforced  
 Cover/Base Color .....Black  
 Actuator Materials .....Dulacron POM  
 plus glass fiber reinforced  
 Actuator Color .....Black, brown, red  
 Contact Disc Materials .....Phosphor bronze  
 with silver cladding  
 Terminal Materials  
 .....Brass with silver cladding  
 Hand Soldering Process  
 .....350 °C ±10 °C / 5 seconds max.  
 Wave Soldering Process  
 .....Preheat 100 °C / 60 seconds  
 260 °C ±5 °C / 5 seconds  
 Packaging .....1,000 pieces per bag

**Product Dimensions**

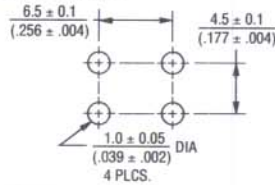
**SDTX-610/620/630/650/660**



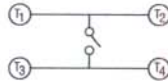
**SDTX-644/648**



**RECOMMENDED PCB LAYOUT**

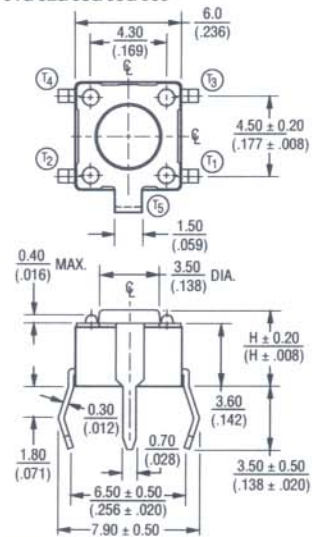


**CIRCUIT DIAGRAM**

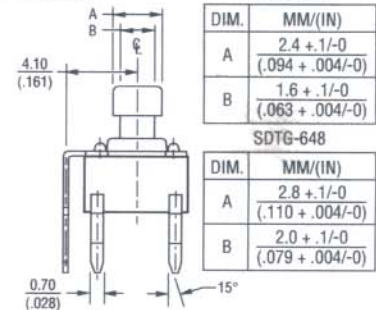


DIMENSIONS: MM (IN)

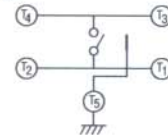
**SDTG-610/620/630/650/660**



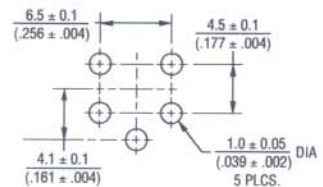
**SDTG-644/648**



**CIRCUIT DIAGRAM**



**RECOMMENDED PCB LAYOUT**



**OBSOLETE**

\*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.

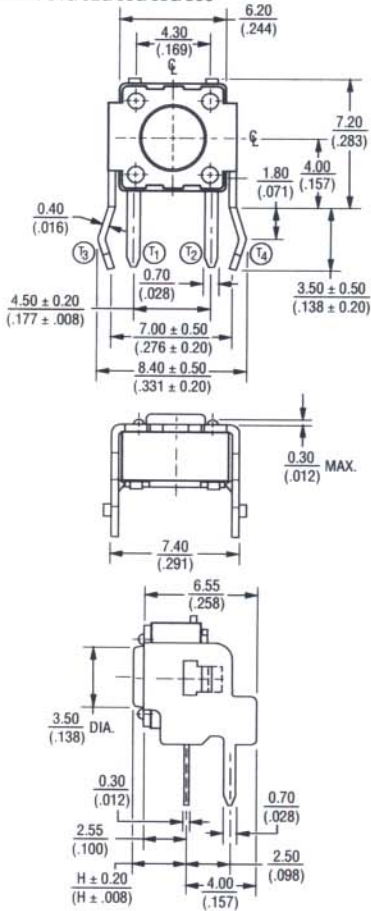
# OBSOLETE

## SDT Series Tact Switch

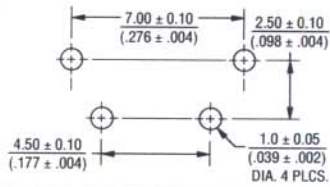
## BOURNS®

### Product Dimensions

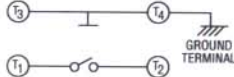
**SDTA-610/620/630/650/660**



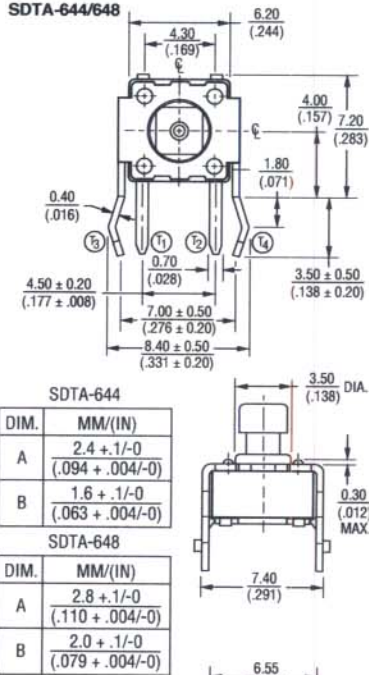
**RECOMMENDED PCB LAYOUT**



**CIRCUIT DIAGRAM**



**SDTA-644/648**

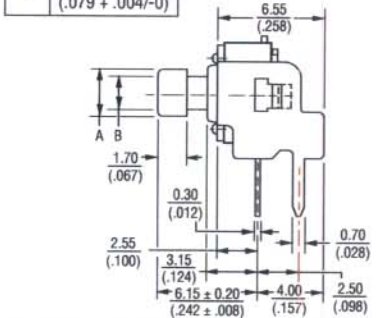


**SDTA-644**

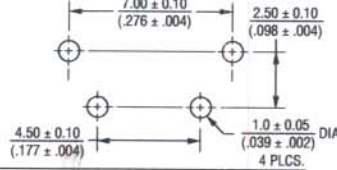
DIM.	MM/(IN)
A	2.4 +.1/-0 (.094 + .004/-0)
B	1.6 +.1/-0 (.063 + .004/-0)

**SDTA-648**

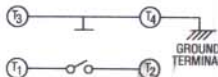
DIM.	MM/(IN)
A	2.8 +.1/-0 (.110 + .004/-0)
B	2.0 +.1/-0 (.079 + .004/-0)



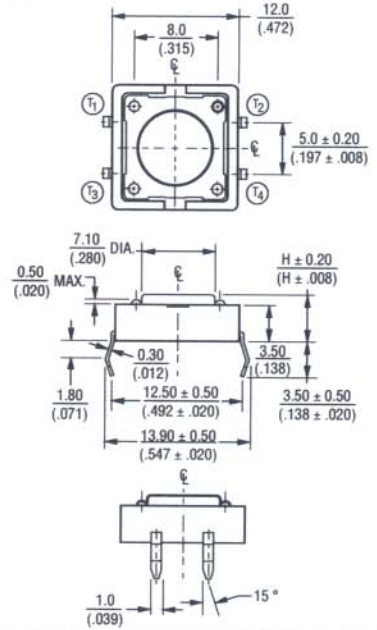
**RECOMMENDED PCB LAYOUT**



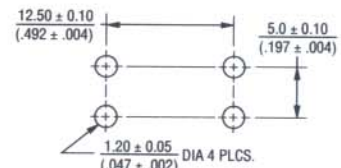
**CIRCUIT DIAGRAM**



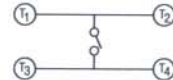
**SDTX-210**



**RECOMMENDED PCB LAYOUT**



**CIRCUIT DIAGRAM**



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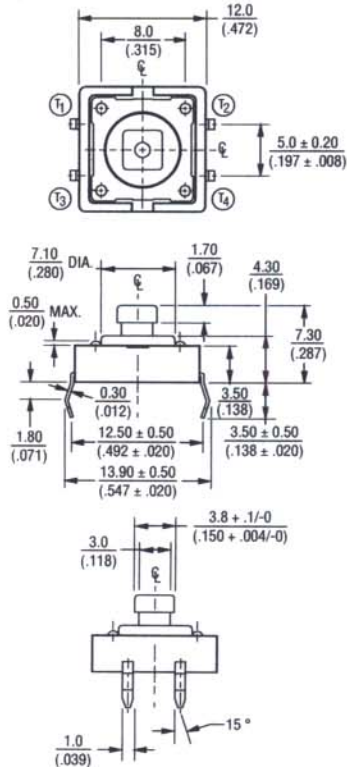


# SDT Series Tact Switch

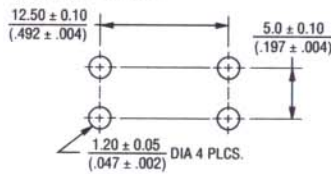
**BOURNS®**

## Product Dimensions

SDTX-244



### RECOMMENDED PCB LAYOUT

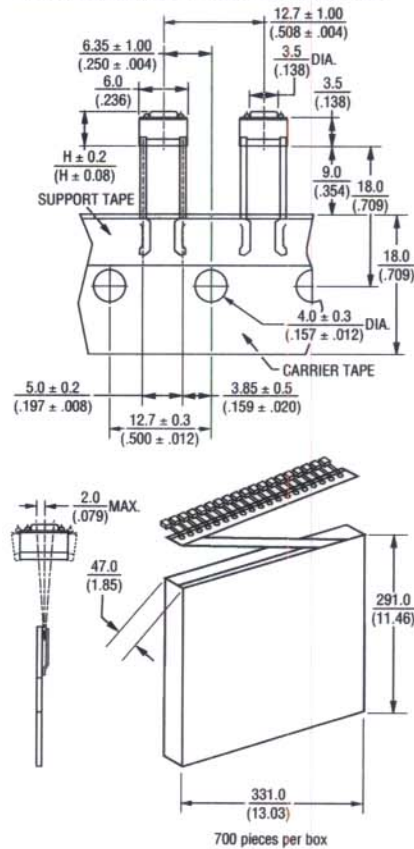


### CIRCUIT DIAGRAM

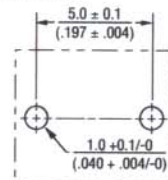


## Packaging Specifications

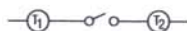
SDTX-610/620/630/644/648/650 Ammo Pack



### RECOMMENDED PCB LAYOUT



### CIRCUIT DIAGRAM



## How to Order

SDT G - 6 10 - K AP

- Model \_\_\_\_\_
- Product Series \_\_\_\_\_
- X = Standard
  - G = Ground Terminal
  - A = Right Angle Type
- Body Size \_\_\_\_\_
- 6 = 6 mm
  - 2 = 12 mm \*
- Distance From First Pin to Top of Head (Right Angle Type) \_\_\_\_\_
- 10 = 3.15 mm
  - 20 = 3.85 mm
  - 30 = 5.85 mm
  - 44 = 6.15 mm (square head)
  - 48 = 6.15 mm (square head)
  - 50 = 8.35 mm
  - 60 = 11.85 mm
- Height (Standard Type) \_\_\_\_\_
- 10 = 4.3 mm
  - 20 = 5.0 mm
  - 30 = 7.0 mm
  - 44 = 7.3 mm x 2.4 mm (square head)
  - 48 = 7.3 mm x 2.8 mm (square head)
  - 50 = 9.5 mm
  - 60 = 13 mm
- Actuating Force \_\_\_\_\_
- K = 100 g (black head - 6 mm only)
  - N = 160 g (brown head)
  - R = 260 g (red head)
  - S = 320 g (salmon head - 6 mm only)
  - Y = 520 g (yellow head - 6 mm only)
- Packaging Option \_\_\_\_\_
- SDTX only
  - AP = Ammo Pack
- \* Options available:
- SDTX-210
  - SDTX-244

**OBSOLETE**

REV. 02/06

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