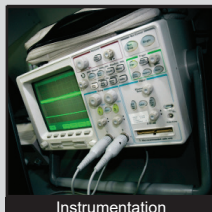
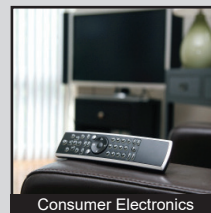
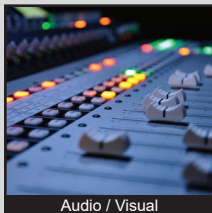


# TL6170 SERIES TACT SWITCH

ANTI-VANDAL SWITCHES  
 DETECTOR SWITCHES  
 DIP SWITCHES  
 KEYLOCK SWITCHES  
 NAVIGATION SWITCHES  
 PUSHBUTTON SWITCHES  
 ROCKER SWITCHES  
 ROTARY SWITCHES  
 SLIDE SWITCHES  
 SNAP ACTION SWITCHES  
**TACTILE SWITCHES**  
 TOGGLE SWITCHES  
 CAP OPTIONS



## APPLICATIONS / MARKETS



**RoHS**

## SPECIFICATIONS

**Electrical Rating:** 50mA, 12VDC  
**Electrical Life:** 300,000 Cycles  
**Contact Resistance:** 100mΩ Max. (Initial)  
**Insulation Resistance:** 10MΩ Min. at 100VDC  
**Dielectric Strength:** 250VAC for 1 Minute  
**Operating Temperature:** -40°C to 85°C  
**Operating Force:** 250gf ± 80gf, or 180gf ± 80gf  
**Travel:** 0.40mm ± 0.20mm  
**Dust/Moisture Protection:** IP67  
**Function:** SPST, Off-(On)  
**Bounce:** 10msec Max.  
**Contact Material:** Silver  
**Packaging:** Tape and Reel; 800 pcs/reel

## FEATURES & BENEFITS

- Up to 300,000 cycle life expectancy
- Tape and Reel packaging
- IP67 rating
- Surface mount design
- Actuation force options

## PART NUMBER CONFIGURATOR

Series	Circuit	Actuator	Force	Plating	Termination
TL	6170	A - 7.20 B - 7.70	F180 - 180 gf - Red F250 - 250 gf - Black	Q - Silver	G - Gull Wing

*Specifications subject to change without notice 3.29.2022*



**E-SWITCH®**

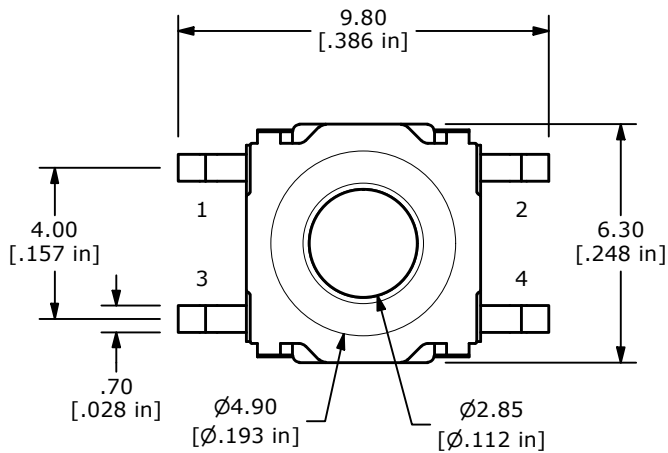
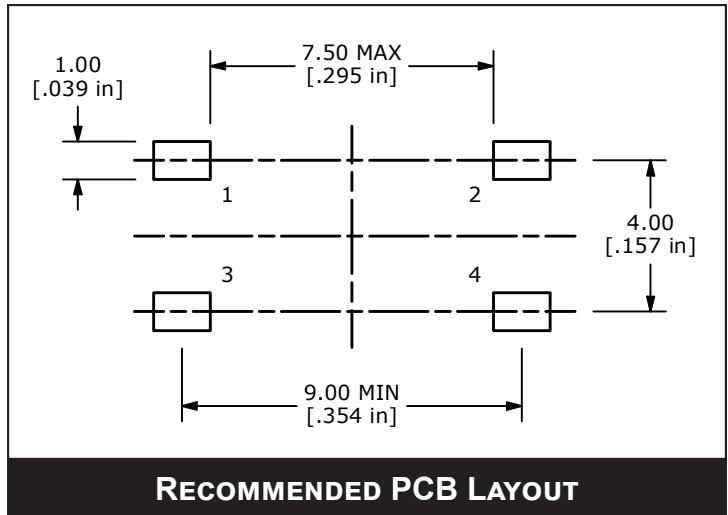
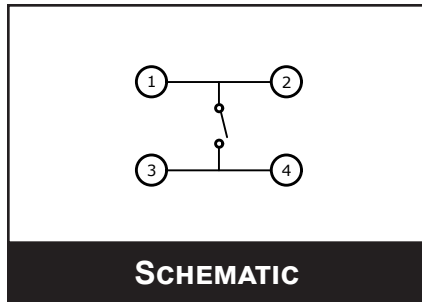
www.e-switch.com

800.867.2717

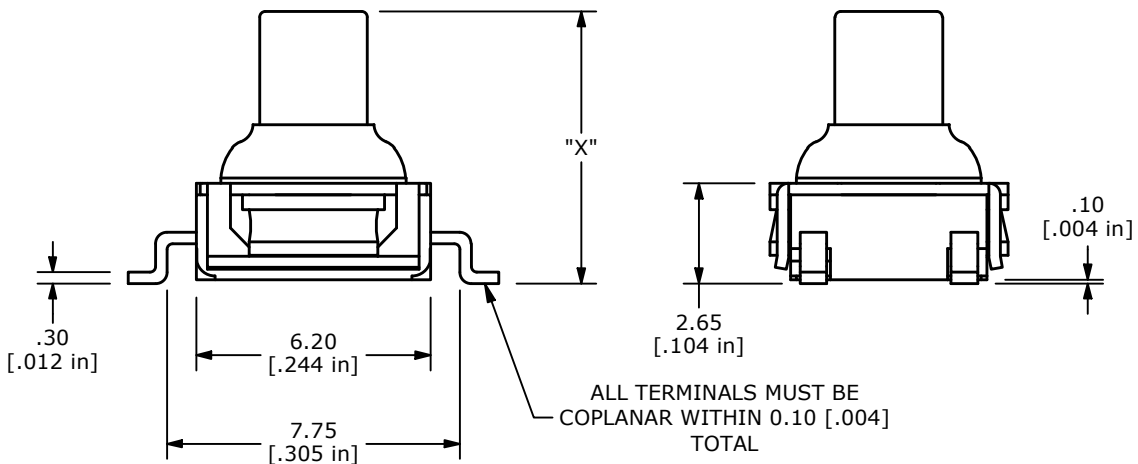
1

# TL6170 SERIES TACT SWITCH

## BODY DIMENSIONS

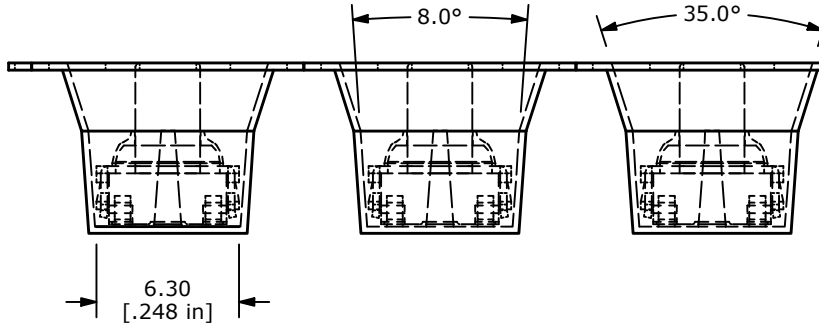
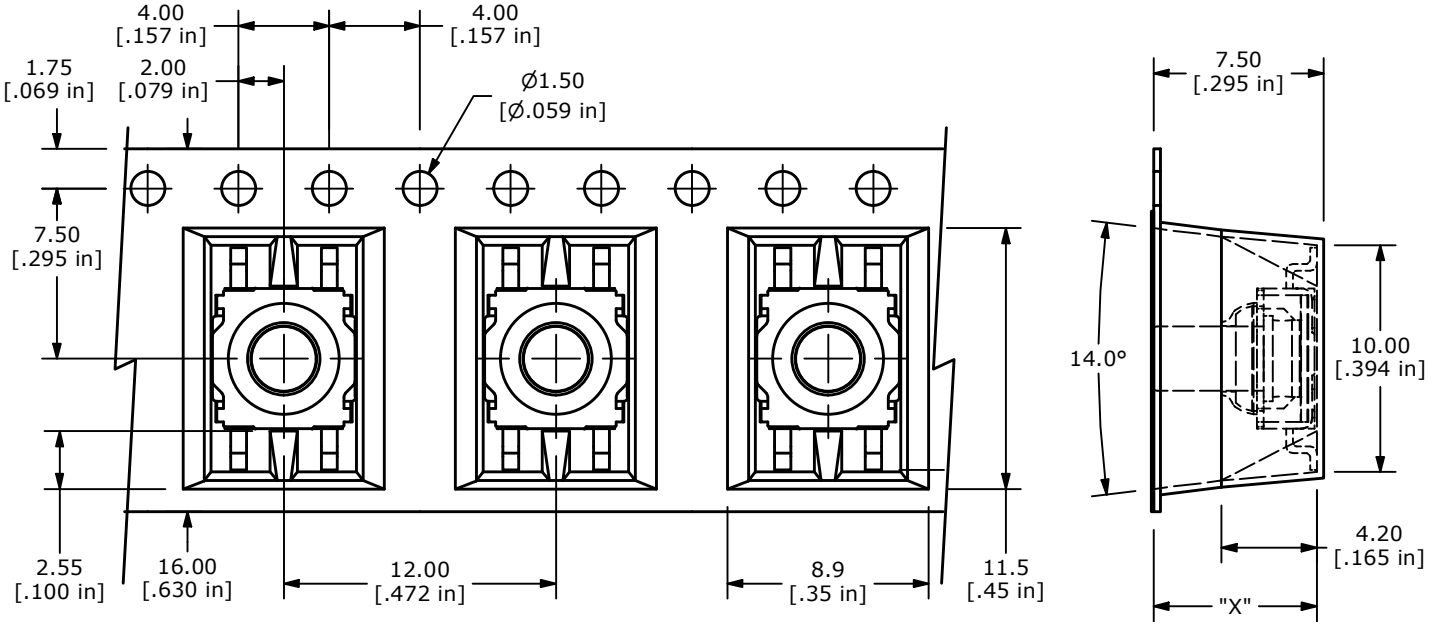


ACTUATOR	"X"
A	7.20
B	7.70

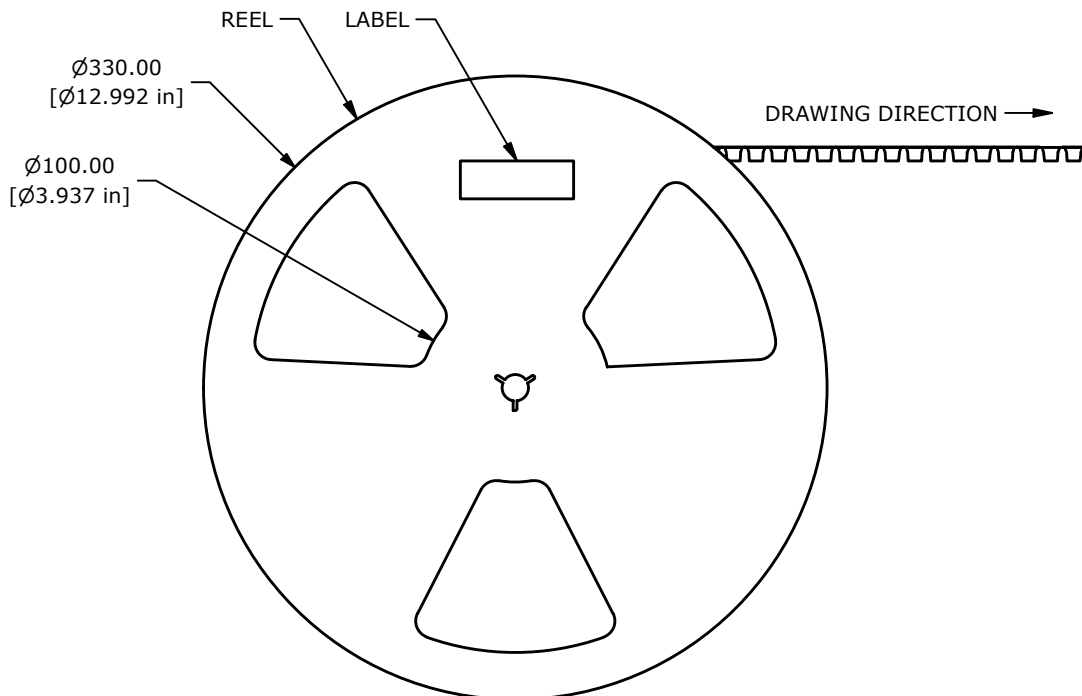


# TL6170 SERIES TACT SWITCH

## BODY DIMENSIONS TAPE AND REEL



ACTUATOR	"X"
A	7.20
B	7.70



## RECOMMENDED SOLDER PROCESS

Most contamination problems can be prevented by exercising care during the cleaning and soldering process. Care should be taken not to immerse or spray unsealed switches during flux removal. Contact E-Switch for specific soldering recommendations and specifications not shown. Generalized soldering procedures are outlined below.

### “TYPICAL” SMT REFLOW (Pb and Pb-Free)

Profile Feature	Sn-Pb Eutectic Assembly	Pb-Free Assembly
Average Ramp-Up Rate (T <sub>smax</sub> to T <sub>p</sub> )	3 °C/second max.	3 °C/second max.
<b>Preheat</b>		
-Temperature Min (T <sub>smin</sub> )	100 °C	150 °C
-Temperature Max (T <sub>smax</sub> )	150 °C	200 °C
-Time (t <sub>smin</sub> to t <sub>smax</sub> )	60-120 seconds	60-180 seconds
Time Maintained above:		
-Temperature (T <sub>L</sub> )	183 °C	217 °C
-Time (t <sub>L</sub> )	60-150 seconds	60-150 seconds
Time within 5 °C of actual Peak Temperature (t <sub>p</sub> )	10-30 seconds	20-40 seconds
Ramp-Down Rate	6 °C/second max.	6 °C/second max.
Time 25 °C to Peak Temperature	6 minutes max.	8 minutes max.

*Note 1: All temperatures refer to topside of the package, measured on the package surface.*

