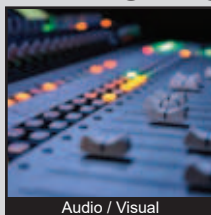


TL6170 SERIES TACT SWITCH

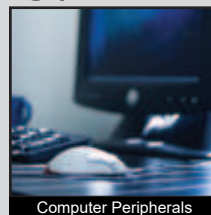
ANTI-VANDAL SWITCHES
DETECTOR SWITCHES
DIP SWITCHES
KEYLOCK SWITCHES
NAVIGATION SWITCHES
PUSHBUTTON SWITCHES
ROCKER SWITCHES
ROTARY SWITCHES
SLIDE SWITCHES
SNAP ACTION SWITCHES
TACTILE SWITCHES
TOGGLE SWITCHES
CAP OPTIONS



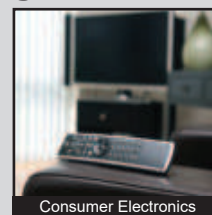
APPLICATIONS / MARKETS



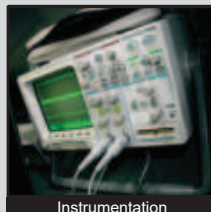
Audio / Visual



Computer Peripherals



Consumer Electronics



Instrumentation



Medical Equipment



Telecommunication

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
<input type="text" value="TL"/>	<input type="text" value="6170"/>	<input type="text" value="A - 7.20"/> B - 7.70	<input type="text" value="F180 - 180 gf - Red"/> F250 - 250 gf - Black	<input type="text" value="Q - Silver"/>	<input type="text" value="G - Gull Wing"/>

Specifications subject to change without notice 3.29.2022



E-SWITCH®

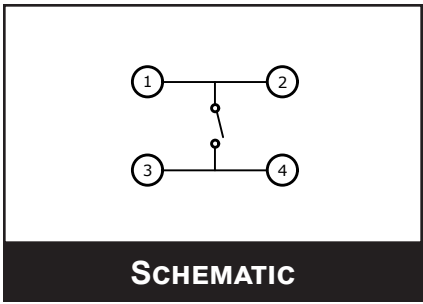
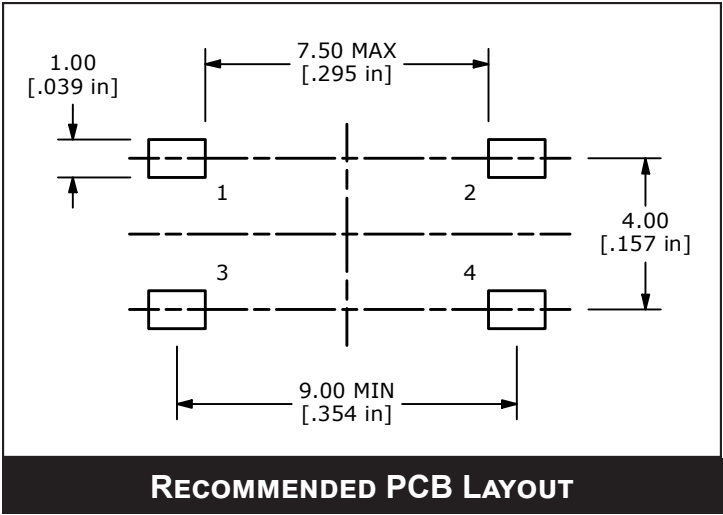
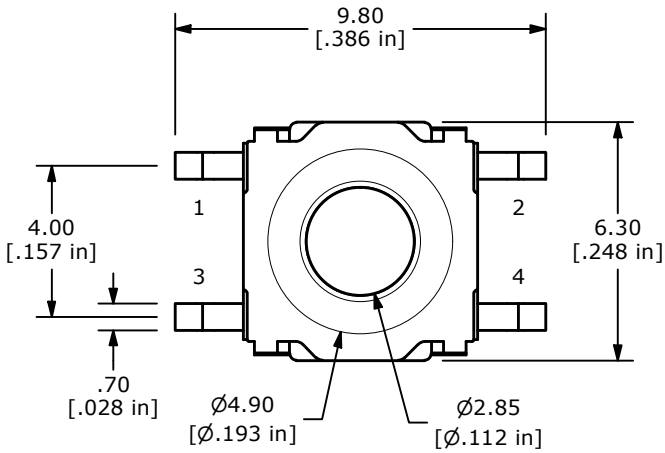
www.e-switch.com

800.867.2717

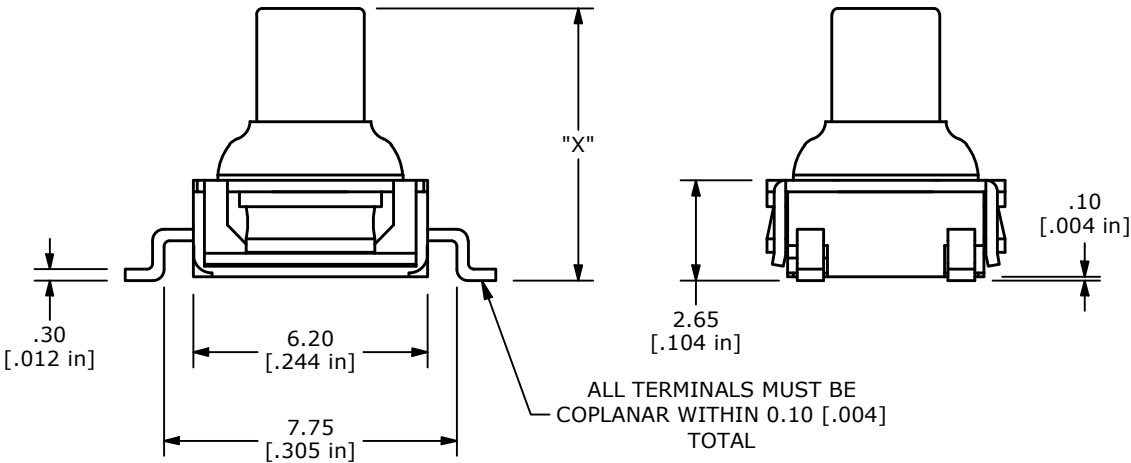
1

TL6170 SERIES TACT SWITCH

BODY DIMENSIONS

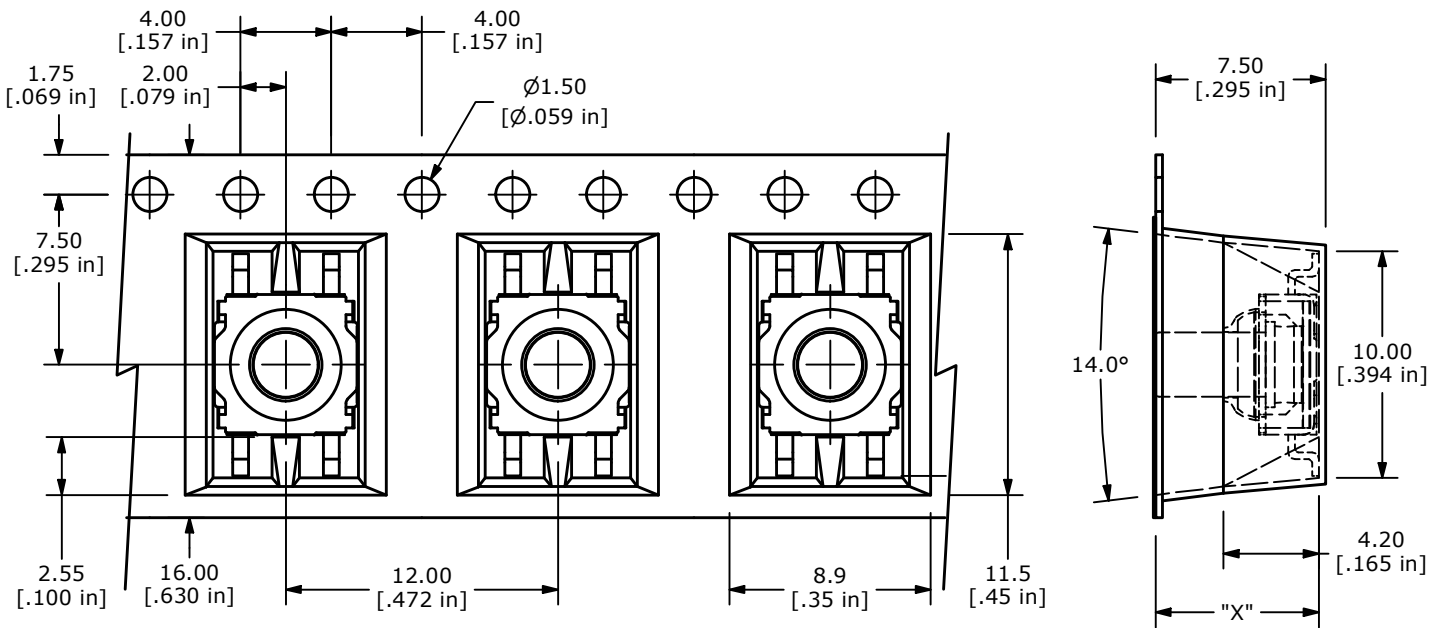
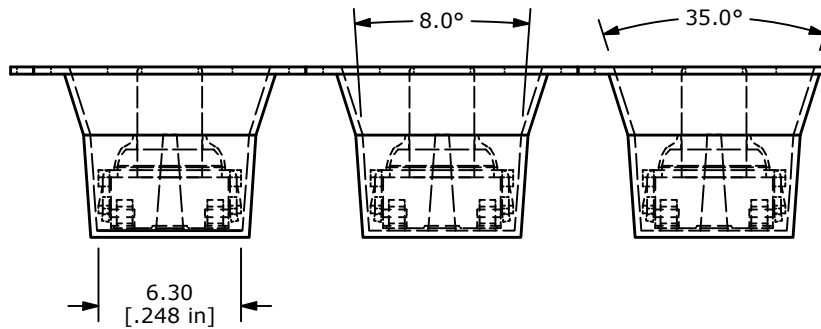


ACTUATOR	"X"
A	7.20
B	7.70

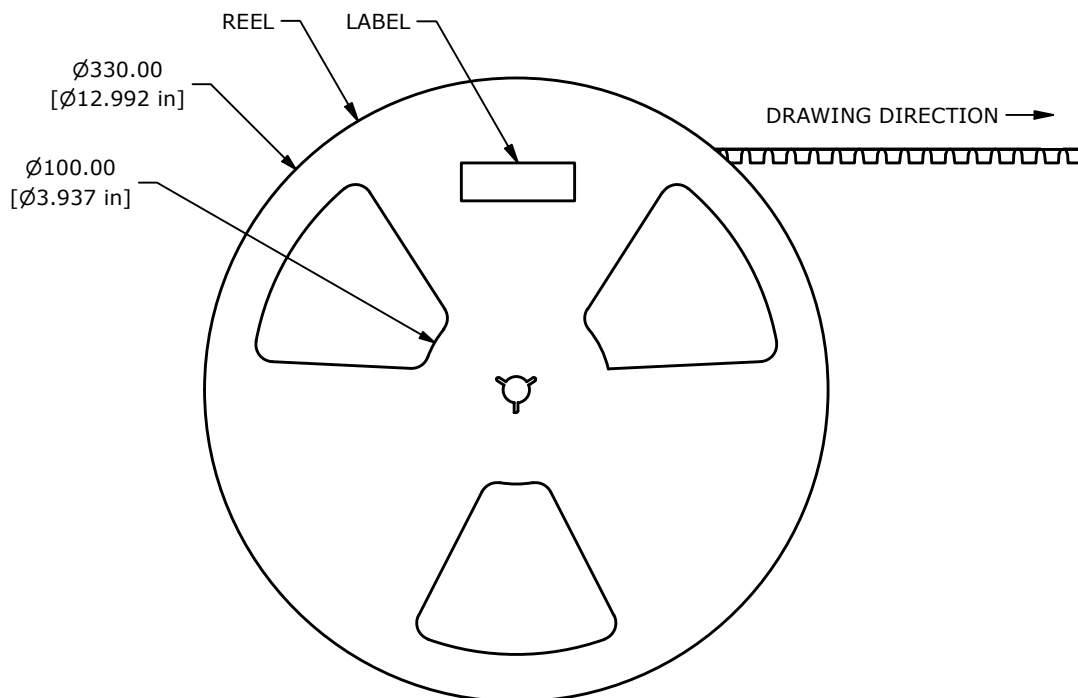


TL6170 SERIES TACT SWITCH

BODY DIMENSIONS TAPE AND REEL



ACTUATOR	"X"
A	7.20
B	7.70



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3

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 ($T_{s_{max}}$ to T_p)	3 °C/second max.	3 °C/second max.
Preheat		
-Temperature Min ($T_{s_{min}}$)	100 °C	150 °C
-Temperature Max ($T_{s_{max}}$)	150 °C	200 °C
-Time ($t_{s_{min}}$ to $t_{s_{max}}$)	60-120 seconds	60-180 seconds
Time Maintained above:		
-Temperature (T_L)	183 °C	217 °C
-Time (t_L)	60-150 seconds	60-150 seconds
Time within 5 °C of actual Peak Temperature (t_p)	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.

