

TL1017 SERIES TACT SWITCH

APPLICATIONS / MARKETS



Audio / Visual



Computer Peripherals



Consumer Electronics



Instrumentation



Medical Equipment



Telecommunication

RoHS

SPECIFICATIONS

Electrical Rating: 50mA, 12VDC
Contact Resistance: 100mΩ Max. (Initial)
Insulation Resistance: 100MΩ Min. at 500VDC
Dielectric Strength: 250VAC for 1 Minute
Life Cycles: 200,000 cycles for 160gf
 100,000 cycles for 260gf
Operating Temperature: -20°C to 70°C
Storage Temperature: -30°C to 80°C
Travel: 0.15mm +/- 0.1mm
Operating Force: 160gf, 260gf
Function: SPST, Off-(On)
Packaging: Tape and Reel, 3,000 pcs/reel

FEATURES & BENEFITS

- Surface mount design
- Up to 200,000 cycle life expectancy
- Multiple actuation force options
- Multiple actuation force options
- Mounting boss option
- Ground terminal option
- Tape and Reel packaging

PART NUMBER CONFIGURATOR

Series	Actuator Height	Bosses	Ground Terminal	Actuation Force	Contact Plating	Termination
<input type="text" value="TL1017"/>	<input type="text" value="A - 1.5mm"/>	<input type="text" value="A - Without Bosses"/>	<input type="text" value="A - Without Ground Terminal"/>	<input type="text" value="F160 - 160 gf - Black"/>	<input type="text" value="Q - Silver"/>	<input type="text" value="G - Gull-wing"/>
		<input type="text" value="B - With Bosses"/>	<input type="text" value="B - With Ground Terminal"/>	<input type="text" value="F260 - 260 gf - Red"/>		

Specifications subject to change without notice 3.15.2023



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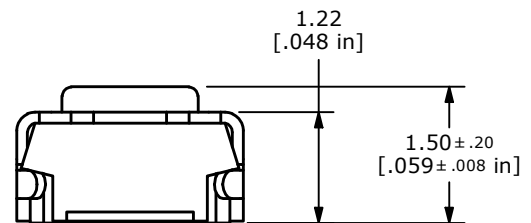
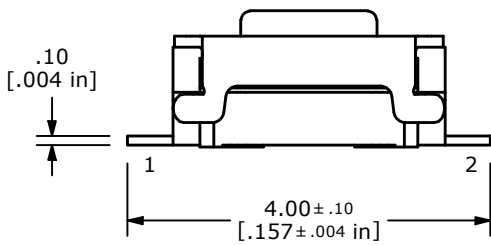
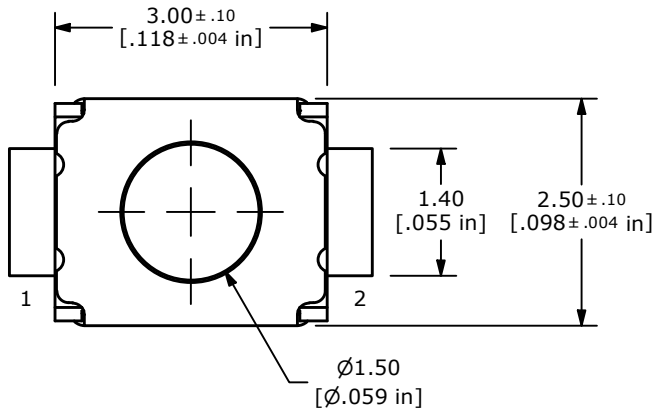
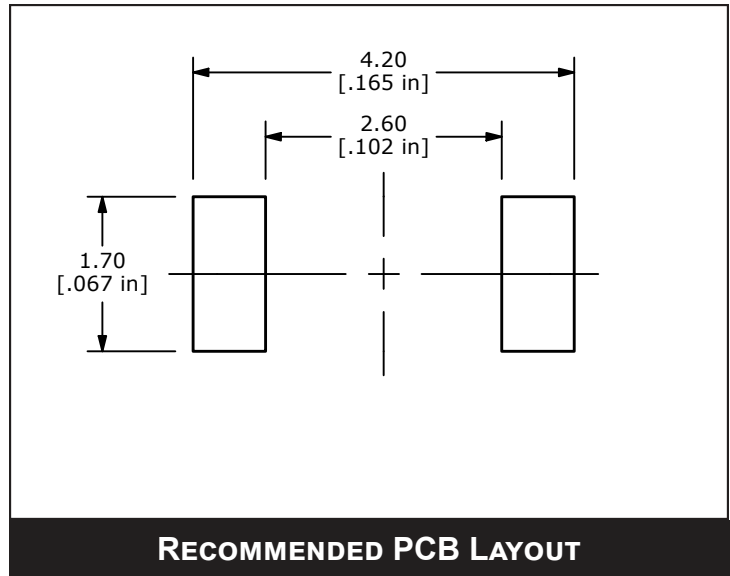
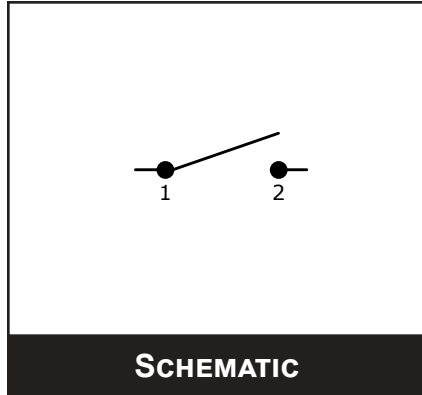
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ANTI-VANDAL SWITCHES
DETECTOR SWITCHES
DIP SWITCHES
KEYLOCK SWITCHES
NAVIGATION SWITCHES
PUSHBUTTON SWITCHES
ROCKER SWITCHES
ROTARY SWITCHES
SLIDE SWITCHES
SNAP ACTION SWITCHES
TACTILE SWITCHES
TOGGLE SWITCHES
CAP OPTIONS

TL1017 SERIES TACT SWITCH

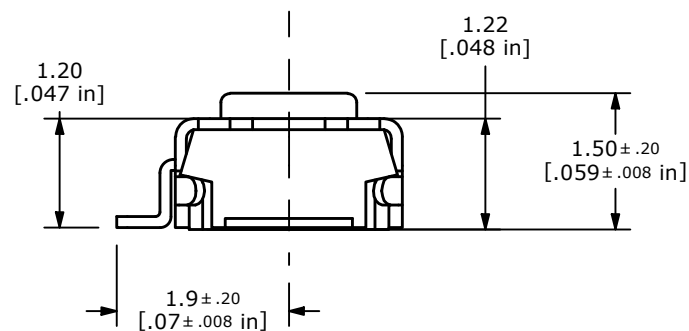
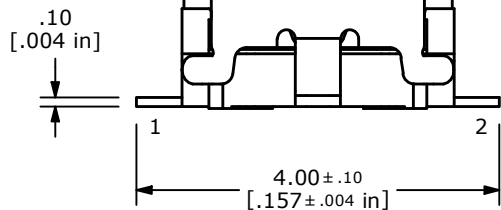
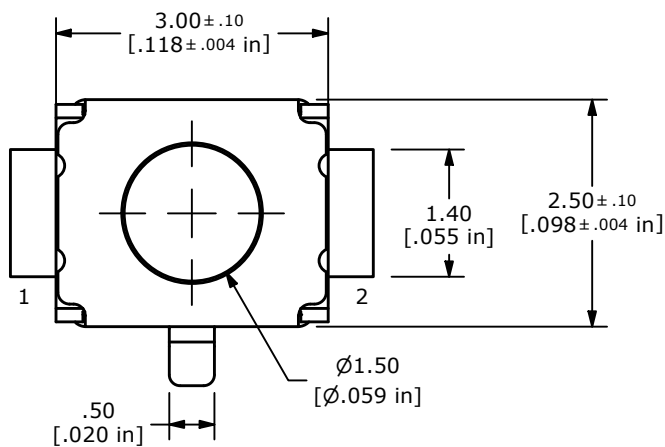
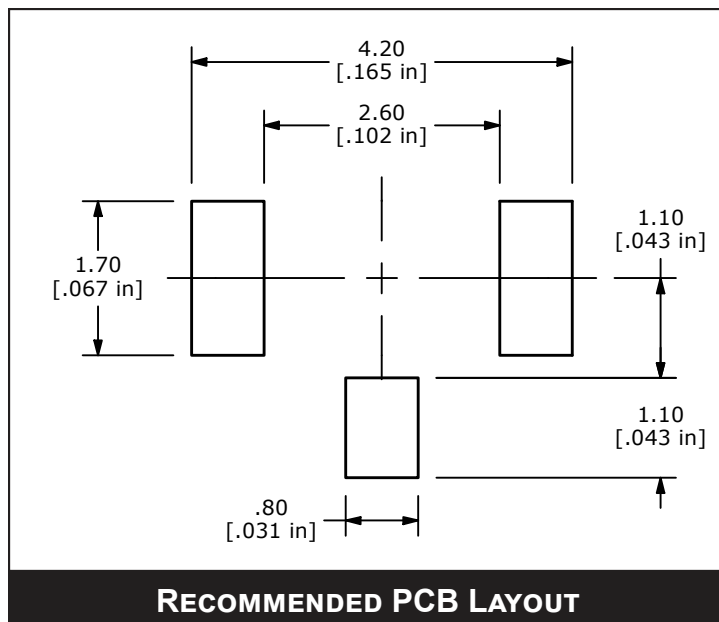
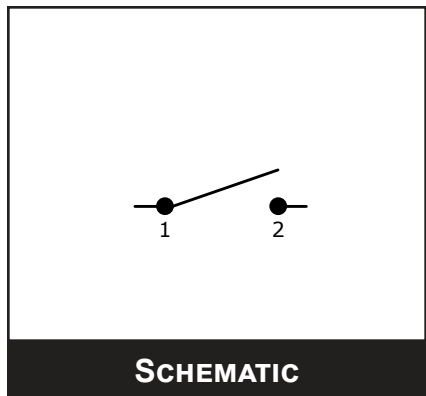
BODY DIMENSIONS WITHOUT BOSSES AND GROUND TERMINAL



- ANTI-VANDAL SWITCHES
- DETECTOR SWITCHES
- DIP SWITCHES
- KEYLOCK SWITCHES
- NAVIGATION SWITCHES
- PUSHBUTTON SWITCHES
- ROCKER SWITCHES
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- TACTILE SWITCHES**
- TOGGLE SWITCHES
- CAP OPTIONS

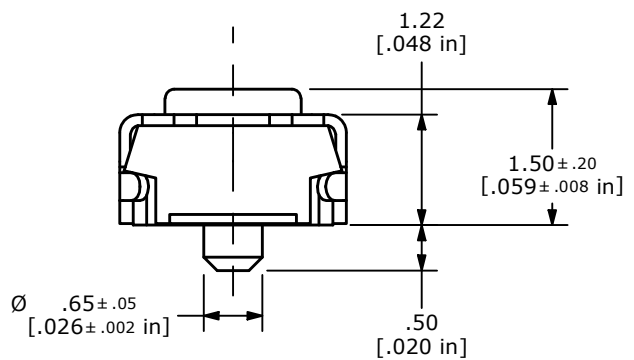
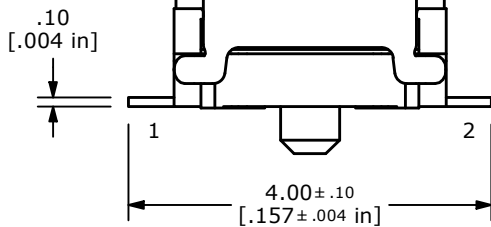
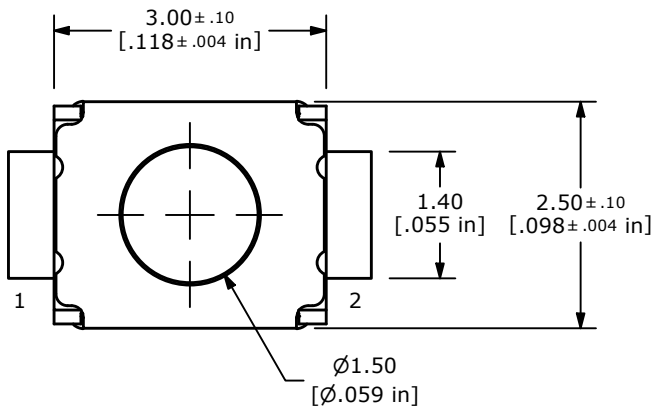
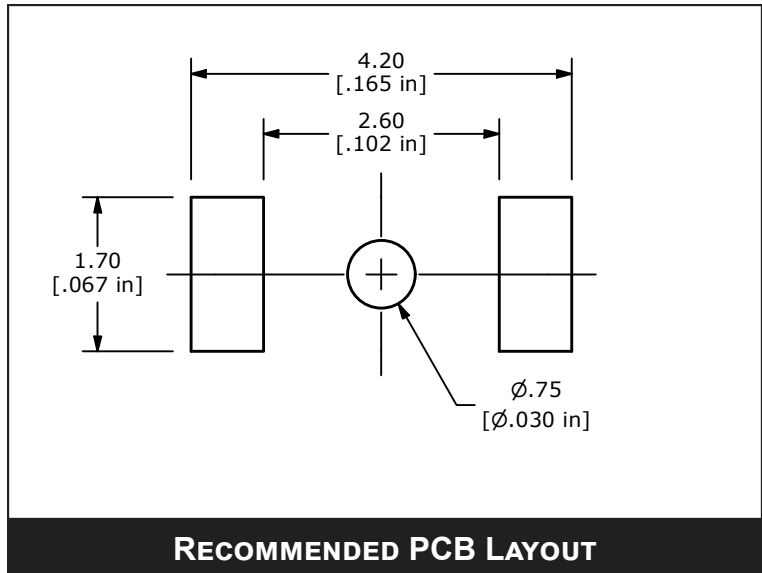
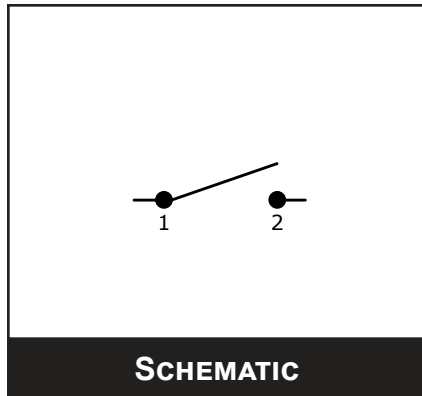
TL1017 SERIES TACT SWITCH

BODY DIMENSIONS WITH BOSSES AND WITHOUT GROUND TERMINAL



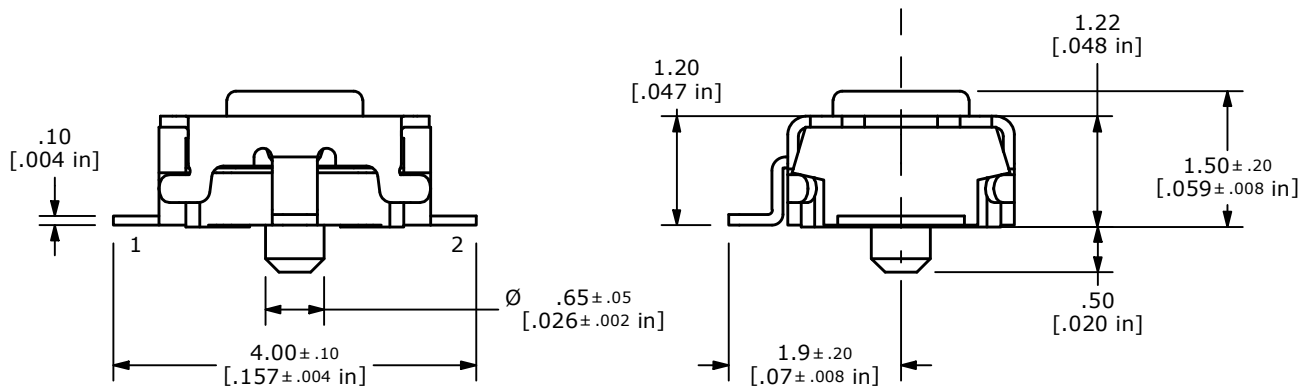
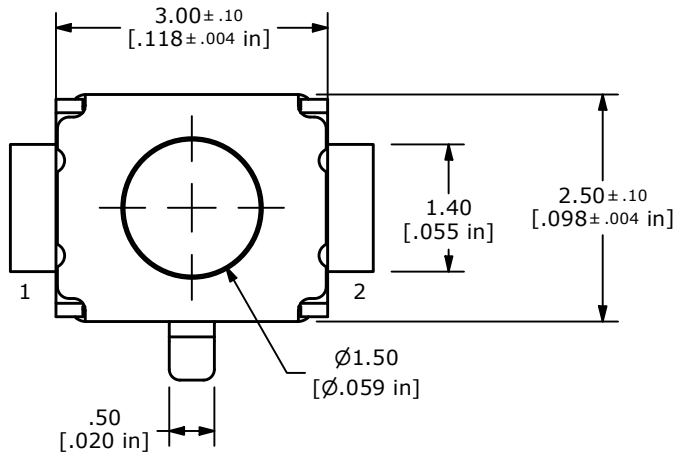
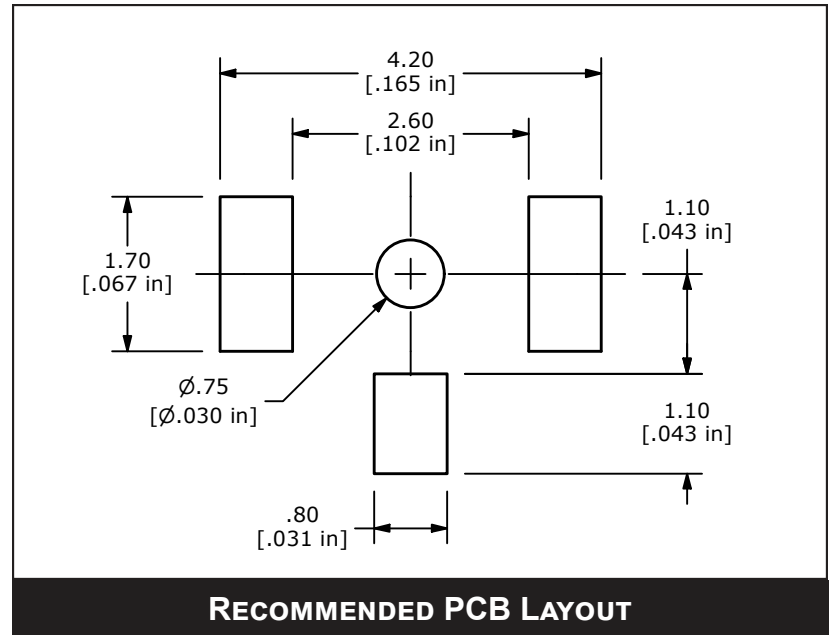
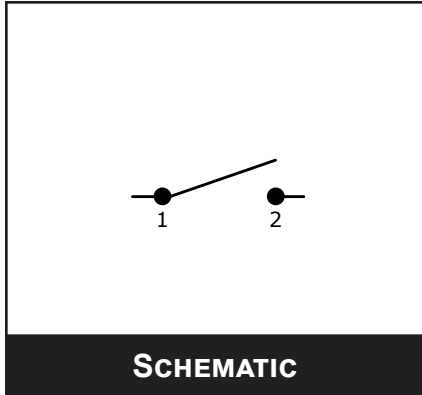
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BODY DIMENSIONS WITH GROUND TERMINAL AND WITHOUT BOSSES



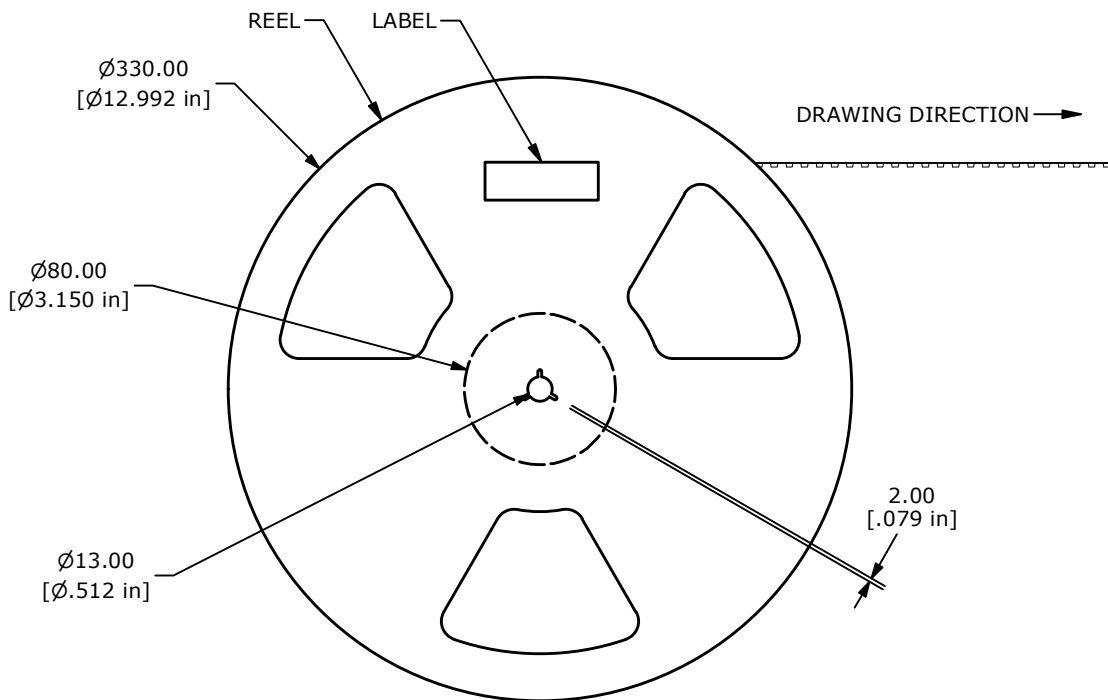
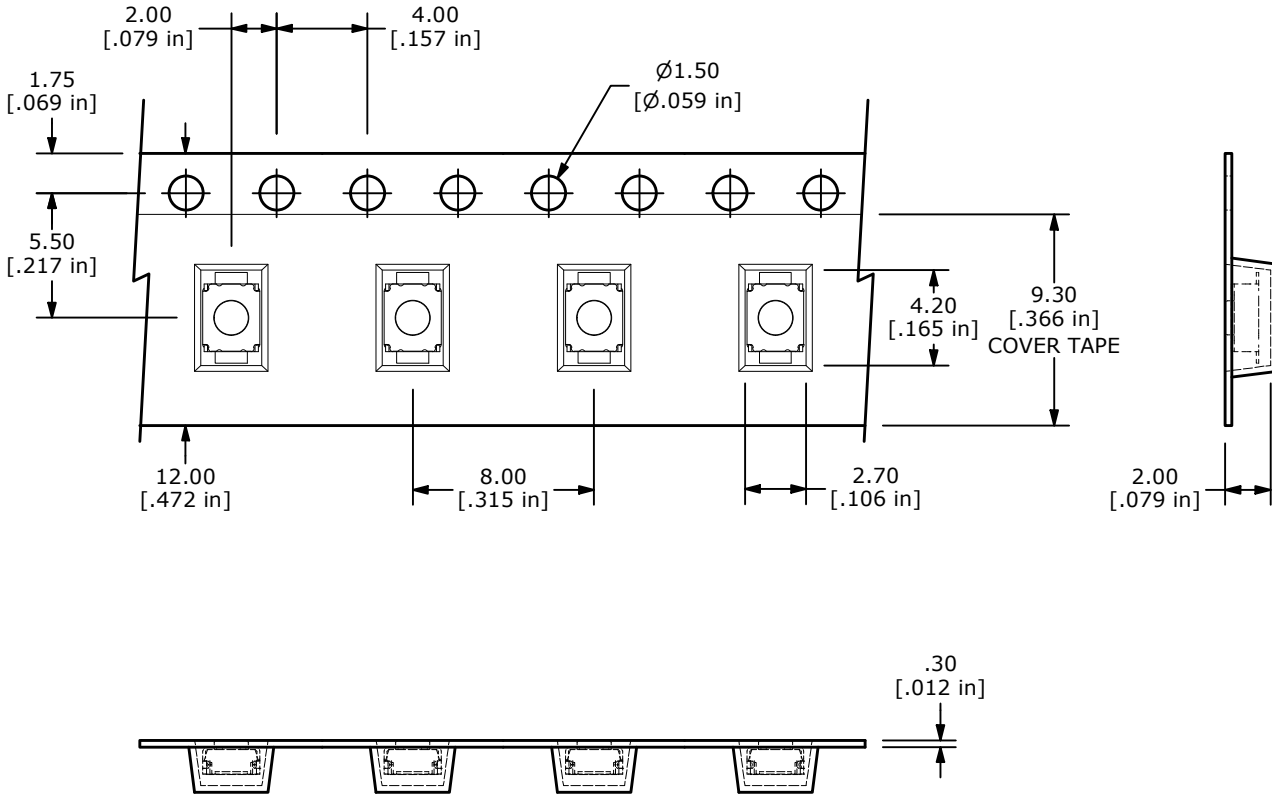
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BODY DIMENSIONS WITH BOSSES AND GROUND TERMINAL



TL1017 SERIES TACT SWITCH

BODY DIMENSIONS TAPE AND REEL



TL1017 SERIES TACT SWITCH

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.

