## TL6155 Series Tact Switch



Applications / Markets


## RoHS

## Specifications

Contact Rating: 50 mA , 32VDC
Electrical Life: 300,000 Cycles
Contact Resistance: $100 \mathrm{~m} \Omega$ Max. (Initial)
Insulation Resistance: 10M $\Omega$ Min. at 100VDC
Dielectric Strength: 250VAC for 1 Minute Operating Temperature: $-40^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}$
Operating Force: $350 \mathrm{gf} \pm 100 \mathrm{gf}$ ( 300,000 cycles) Travel: 0.5 mm
Dust/Moisture Protection: IP67
Function: SPST, Off-(On)

## Features \& Benefits

- Up to 300,000 cycle life expectancy
- Tape and Reel packaging
- IP67 ratings
- Right angle surface mount design


## Part Number Configurator



## Body Dimensions



Recommended PCB Layout


ACTUATOR


## Body Dimensions <br> Tape and Reel



## 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 ( $\mathrm{Ts}_{\text {max }}$ to Tp ) | $3^{\circ} \mathrm{C} /$ second max. | $3^{\circ} \mathrm{C} /$ second max. |
| Preheat -Temperature $\mathrm{Min}\left(\mathrm{T} s_{\text {min }}\right)$ -Temperature $\mathrm{Max}^{\left(T s_{\text {max }}\right)}$ -Time $\left(\mathrm{ts}_{\text {min }}\right.$ to $\left.\mathrm{ts} \mathrm{s}_{\max }\right)$ | $\begin{gathered} 100{ }^{\circ} \mathrm{C} \\ 150^{\circ} \mathrm{C} \\ 60-120 \text { seconds } \end{gathered}$ | $\begin{gathered} 150^{\circ} \mathrm{C} \\ 200^{\circ} \mathrm{C} \\ 60-180 \text { seconds } \end{gathered}$ |
| Time Maintained above: <br> -Temperature ( $\mathrm{T}_{\mathrm{L}}$ ) <br> -Time ( $\mathrm{t}_{\mathrm{L}}$ ) | $\begin{gathered} 183{ }^{\circ} \mathrm{C} \\ 60-150 \text { seconds } \end{gathered}$ | $\begin{gathered} 217{ }^{\circ} \mathrm{C} \\ 60-150 \text { seconds } \end{gathered}$ |
| Time within $5^{\circ} \mathrm{C}$ of actual Peak Temperature (tp) | 10-30 seconds | 20-40 seconds |
| Ramp-Down Rate | $6^{\circ} \mathrm{C} /$ second max. | $6^{\circ} \mathrm{C} /$ second max. |
| Time $25^{\circ} \mathrm{C}$ to Peak Temperature | 6 minutes max. | 8 minutes max. |

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


