## TL2233 SERIES PusHBUTTON SWITCH



Applications / Markets


## Specifications

Electrical Rating: 100mA @ 30VDC
Contact Arrangement: DPDT
Electrical Life: 10,000 Cycles
Contact Resistance: $100 \mathrm{~m} \Omega$ Max. inital
Insulation Resistance: 100M Min. @ 100VDC
Dielectric Strength: 250VAC for 1 Minute
Travel: 1.90 mm
Actuation Force: 250 gf $\pm 80$ gf
Operating Temperature: $-10^{\circ} \mathrm{C}$ to $60^{\circ} \mathrm{C}$

## Features \& Benefits

- Surface mount design
- Long electrical life
- Momentary function
- Wave solderable


## Part Number Configurator



## Body Dimensions



Body Dimensions
Tape and Reel


## Recommended <br> 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 Min $\left(\mathrm{Ts}_{\text {min }}\right)$ - Temperature $\left.\mathrm{Max}^{(\mathrm{Ts}} \mathrm{Ts}_{\text {max }}\right)$ -Time $\left(\mathrm{ts}_{\text {min }}\right.$ to ts $\left.\mathrm{t}_{\max }\right)$ | $\begin{gathered} 100{ }^{\circ} \mathrm{C} \\ 150^{\circ} \mathrm{C} \\ 60-120 \text { seconds } \end{gathered}$ | $\begin{gathered} 150^{\circ} \mathrm{C} \\ 200^{\circ} \mathrm{C} \\ 60-180 \text { seconds } \end{gathered}$ |
| 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.


