## Series 223A

## $4.7 \times 3.5 \mathrm{~mm}$ Compact Tactile Switch

- Surface mount gull-wing and J bend terminal configurations
- Compatible with IR reflow and manual soldering
- Variety of operating force \& actuator height options


Sense


## Electrical Specifications

| Parameter | Conditions \& Remarks | Min | Max | Unit |
| :--- | :---: | :---: | :---: | :---: |
| Contact Resistance |  | 500 | milliohms |  |
| Insulation Resistance | Between insulated <br> terminals | 100 |  | Megohms |
| Dielectric Strength | 1 minute between <br> adjacent switches |  | 250 | VAC |
| Nonswitching Rating |  | 50 | mA |  |
|  |  | or <br> 12 | or |  |

## Mechanical and Environmental

| Soldering | Maximum reflow temperature, $260^{\circ} \mathrm{C}$ for 5 seconds <br> Maximum manual temperature, $350^{\circ} \mathrm{C}$ for 3 seconds |
| :--- | :--- |
| RoHS | $160 \pm 50 \mathrm{gf}$ <br> $260 \pm 50 \mathrm{gf}$ |
| Operating Force | $160 \mathrm{gf:} 300,000$ cycles <br> $260 \mathrm{gf:} \mathrm{100,000} \mathrm{cycles}$ |
| Actuation Life | 3 Kgf maximum |
| Actuator Strength | $0.3_{-0.2}^{+0.1} \mathrm{~mm}$ |
| Travel | Standard tape and reel packaging |
| Packaging | $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |
| Operating Temperature <br> Range |  |
| Storage Temperature <br> Range | $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |

## Soldering Profile



Time (seconds)

## Mechanical Specifications

Figure 1 - 223AM..., Surface Mount Gull Wing


CIRCUIT DIAGRAM



PCB LAYOUT

DIMENSION : mm
STANDARD TOLERANCE :
X (1 PLACE) : $\pm 0.1$

Figure 2 - 223A..., Surface Mount J Bend Terminal


CIRCUIT DIAGRAM


DIMENSION : mm
STANDARD TOLERANCE :
. X (1 PLACE) : $\pm 0.1$

## Packing: Tape and Reel

## Surface Mount Gull Wing/J Bend Terminal

The packing specifications :
Structure and materials :


| (3) | COVER TAPE | POLYESTER |
| :---: | :--- | :--- |
| $(2)$ | CARRIER TAPE | POLYSTYRENE |
| $(1)$ | REEL | POLYSTYRENE |
| NO. | PARTS NAME | MATERIALS |

1. Packing quantity : 2,500 pcs/reel
2. More than 10 empty pockets should remain at each end of the carrier tape for each reel.
3. Shortage less than 10 pcs a reel is acceptable but no more than 3 consecutive empty pockets are allowed.
4. Stripping strength of cover tape is between 10 gf to 70 gf and stripping angle should be within $165^{\circ} \sim 180^{\circ}$.
5. The product in the pocket of carrier tape should be placed in a specified correct position.
6. Tape and reel per EIA-481-C
7. Dimensions:

