Body Height 1.5mm, Compact-sized Double Action Tactile Switches TSW-3 Series

Features

- ♦ With 6.0x6.4mm dimension and 1.5mm height, surface-mounting type switches are ideal for high-density mounting.
- A double action type with 2 contacts in 1 circuit turning on the first push and the second step by pushing further.
- 2 types of switches with or without click feeling are available.
- Available with ground terminal for electrostatic discharge.
- A sharp click feeling of key touch is provided utilizing the tactile feedback characteristic.
- Switches are packaged in 16mm wide embossed taping.

Applications

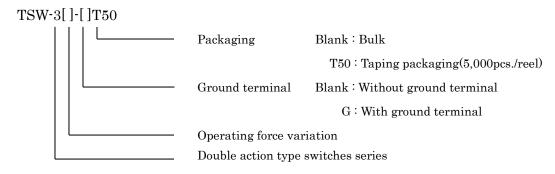
- Digital still camera and digital video camera
- Portable audio devices, Car navigation system
- Cellular phone, Personal digital assistance



Actual size

Zoom

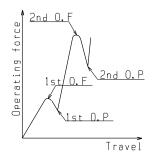
Product number

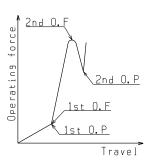


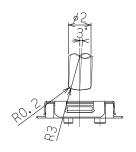
Products Line

No	Products No.	1 st click	Operating force	Operating position (Distance from P.C. Board mounting face)	Ground terminal
1	TSW-3A-T50	With	1 st 980mN 2 nd 2548mN	1st 1.0mm 2nd 0.8mm	Without
2	TSW-3A-GT50				With
3	TSW-3E-T50	Without	1 st 588mN 2 nd 2352mN	1st 0.9mm 2nd 0.7mm	Without
4	TSW-3E-GT50				With

I Feeling chart and Recommended actuator style / Inclination of the actuator







With 1st click feeling type

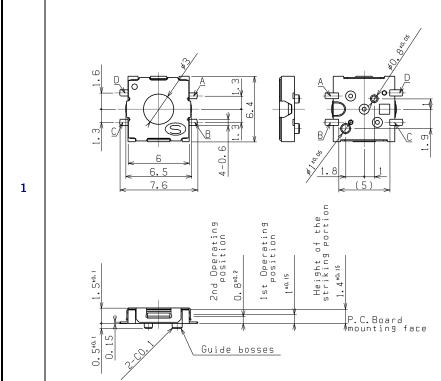
Without 1st click feeling type

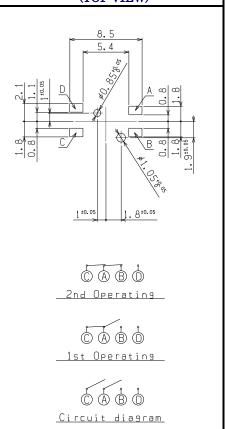
Operating area

TSW-3 Series

■ Typical Specifications

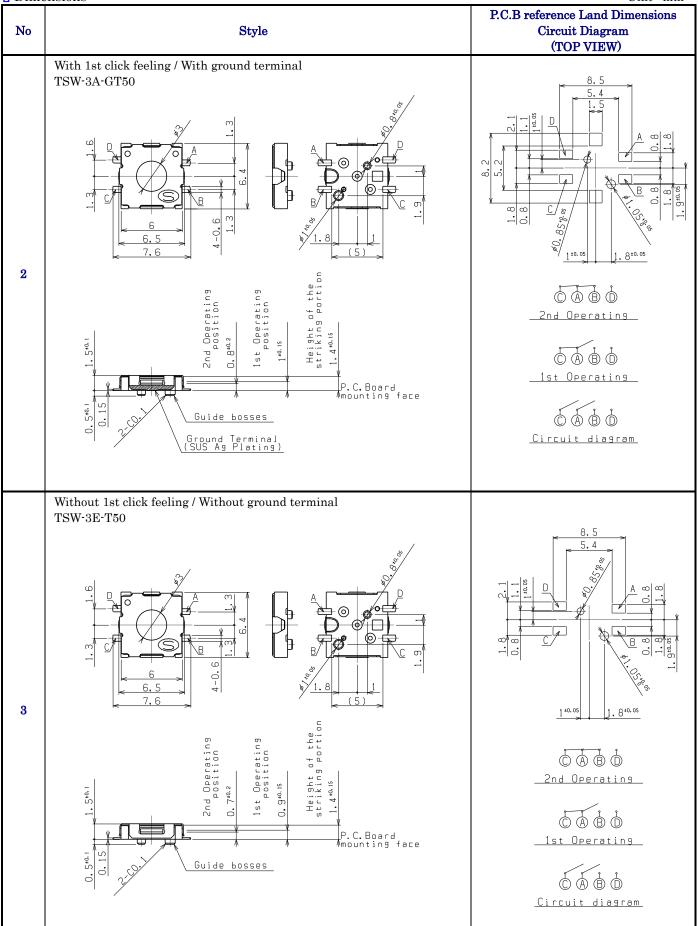
Item	Specifications		
Ratings (max.) (Resistive load)	50mA 12V DC		
Contact resistance	100 milliohm max. (Initial)		
Insulation resistance	100 megohm min. 100V DC		
Withstanding voltage	250V AC for 1min.		
Operating force	With 1st click feeling type; 1st 980mN,2nd 2548mN Without 1st click feeling type; 1st <588mN,2nd 2352mN		
Operating life	With 1st click feeling type; 30,000 cycles Without 1st click feeling type; 100,000 cycles		
Operating temperature range	-20 to +70 degree Celsius		
Storage temperature range	-30 to +80 degree Celsius (except carrier tape)		





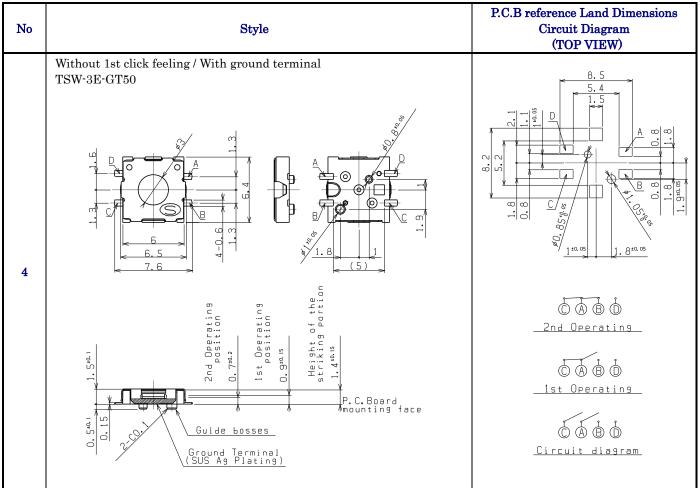
TSW-3 Series

Dimensions Unit: mm



TSW-3 Series 4/4

Dimensions Unit: mm



■ Notes

- 1. The appearance and specifications of the product may be modified to improve its performance without prior notice.
- 2. This catalog shows only outline specifications. When using the product, please obtain formal specifications.
- 3. Please see appendix [Cautions in Using Switches].
- 4. 5,000pcs/one reel is the minimum packing unit. It is requested that the quantity of order shall be an integer multiple of the minimum packing unit.
- 5. Please set the reflow soldering condition confirming under the actual conditions of mass-production.
- 6. Characteristics of switch may change due to the warping of the circuit writing board. Consideration shall be given to the pattern design and layout.
- 7. This push switch is not washable.
- 8. This push switch permits reflow soldering and the switch has the possibility to be mounted on the edge of the PC board. But auto-dip shall not be done after the mounting of the switch because of the big possibility of the penetration of the soldering flux into the contacts sliding portion.
- 9. Larger stress than specified and/ or shock shall not be applied during switch operation.
- 10. Do not press the portion of the film by the sharp edged object.
- 11. In manual soldering, consider that the abnormal pressure of the soldering iron shall not be applied to the tip of the terminal as well do not apply any pressure for more than 1 minute after soldering.
- 12. Care shall be taken so that the flux shall not penetrate into the terminal portion.
- 13. The operating characteristic may change if force is exerted to the top the cover.