## [ Features

<> With 11x7mm dimension and 11mm height, these surface-mounting type switches are ideal for high-density mounting.
<> A sharp click feeling of key touch is provided utilizing the tactile feedback characteristic.
<> With solderable metal covered ground terminal effective for electrostatic discharge.
$<>$ Switches are packaged in 24 mm wide embossed taping.
[ Applications
$<>$ TV
<>Audio equipment,
[ Products Line

| No | Products No. | OF <br> (Center) | OF <br> (4 direction) | Travel <br> (Center) | Travel <br> (4 direction) | Qty/reel(pcs.) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | TSW-41-56-T045 | 3.5 N | 2.8 N | 0.2 mm | 5 degrees | 450 |

प Typical Specifications

| Item | Specifications |
| :--- | :--- |
| Ratings (max.) (Resistive load) | 20 mA 12 VDC |
| Contact resistance | 100 milliohm max. (Initial) |
| Insulation resistance | 100 megohm min. 100V DC |
| Withstanding voltage | 100 V AC for 1min. |
| Operating life | 50,000 cycles each |
| Operating temperature range | -20 to +70 degree Celsius |
| Storage temperature range | -30 to +80 degree Celsius (except carrier tape) |



## $\square$ 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. The operation force other than the above list is also available and please contact us for the details.
5. The minimum packing unit for taping specification is shown above. It is requested that the quantity of the order shall be an integer multiple of the minimum packing units.
6. Please set the reflow soldering condition confirming under the actual condition of mass-production.
7. Characteristics of switch may change due to the warping of the circuit writing board. Consideration should be given to the pattern design and layout.
8. This push switch is not washable.
9. 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 inside of the switch.
10. Larger stress than specified and/ or shock shall not be applied during switch operation.
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 of the cover.
