TACT Switch[™] 4.1 × 3.9mm Low-profile Double Action (Surface Mount Type)

SKSD Series



0.6mm low-profile, double action type.





Product Line

| - | Product No. | Operating force | Operating direction | Travel (mm) | Rating (max.) | Rating (min.) | Operating life (5mA 5V DC) | Initial contact resistance | Minimum order unit (pcs.) | |
|---|-------------|----------------------|------------------------|----------------|--------------------|------------------|-------------------------------|-------------------------------|--------------------------------|--|
| | SKSDPBE010 | 1st 0.8N 2nd 1.6N | Vertical | 1st 0.15 | 50mA | 10 <i>µ</i> A | 100,000cycles | 200m | 10.000 | |
| | SKSDPCE010 | 1st 0.8N 2nd 1.9N | vertical | All 0.25 | 12V DC | 1V DC | 50,000cycles | max. | 10,000 | |

Custom-**Products**

Sharp Feeling Soft

Feeling Snap-in Туре

Surface

Radial Туре

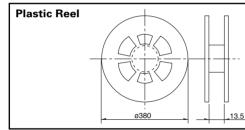
Mount Type

Encoders

Power Dual-in-line Package Type TACT Switch"

Specification of Embossed Taping Package (Taping Packaging for Auto-insertion) **Reel Size**

Unit:mm



| Num | T | | | | |
|--------|------------------|---------------------------|--------------------|--|--|
| 1 reel | 1 case /Japan | 1 case /export packing | Tape width (mm) | | |
| 10,000 | 100,000 | 100,000 | 12 | | |

Dimensions Unit:mm PC board mounting hole and land dimensions Style (Viewed from switch mounting face) 4.1 Ground terminal ò ø0.8 activation area Pattern prohibited

Circuit Arrangement

| Switch circuit configuration | (1st action) | (2nd action) | | | | |
|------------------------------|------------------------------|------------------------------|--|--|--|--|
| 1-00-2 | 12 | 12 | | | | |
| 3 <u>5</u> 6 <i>mm</i> | 3 <u>5</u> 6 <i>mm</i> | 3 <u>5</u> 6 <i>mm</i> | | | | |

Note

- 1. Please place purchase orders for taping products per minimum order unit (1 reel or a case).
- 2. For 330mm diameter reel requirements, please contact us.



List of Varieties

Sharp Feeling Type

| | | sing i | ype | | i | | | | | | | | | |
|--------------------------------------|-----------------|--|--|-------------------|----------------------------------|---------------------------------|---|------|--------------|------|------------------|------------------------------------|------|--|
| | Series | | SKSD | SKRN | SKSE | SPEE | SKRK | SKRP | SKQM | SKQY | SKRA | SKHM | SKHU | |
| Photo | | | \diamond | 101 | Ser. | | | | | C. | | C. | | |
| | Туре | | | Surface mount | | | | | | | | | | |
| Features | | s | Double action | | Horizontal type Double action | | Compact size High operation force Low-profile Compact size | | Compact size | | Middle stroke | Dust-proot type is available | | |
| Oper dire | Vert | tical | | | | | | | | | | | | |
| Operating direction | Horiz | ontal | | • | | | | | | | • | | | |
| | | w | 4.1 | 6 | 5.9 | 4 | 3.9 | 4.2 | 6 | 6.1 | | 6 | 6.2 | |
| | nsions 1m) | D | 3.9 | | 2.87 | 5 | 2.9 | 3.2 | 3.5 | 3.7 | 6.2 | 6 | .5 | |
| | | Н | 0.6 | 0.9 | 3 | 1.22 | 1.5 | 2.5 | 4.3 | 2.5 | 3.4 | 3.1 | 2.5 | |
| 1N Operation force coverage | | See the relevant pages for respective product descriptions | | | spective | \$ | Ì | Ĵ | ↓ ↓ | Ì | 1 | ↓ ↓ | | |
| Grou | nd terr | 5N ninal | | | | | | | | | | | | |
| Operating temperature range | | | -30 | 0 to +8 | 5 | -10 to +60 | -30 to +85 | | | | | | | |
| Electrical | Insul resist | ation tance | 100M | min. 10 | 00V DC | 10M min. 100V DC | | | | | | | | |
| trical: | | oltage 250V AC for 1m proof SKSD/SE : 100V AC for | | | | 100V AC for 1min. | for 250V AC for 1min. | | | | | | | |
| | Vibra | ation | 10 to 55 to 10Hz/min., the amplitude is 1.5mm for all the frequencies, in the 3 direction of X, Y and Z for 2hours respectively | | | | | | | | | | | |
| Durability | Lifet | time | Shall be in accordance with individual specifications. | | | | | | | | | | | |
| Envi | Co | old | -30 | ±2 for | 96h | -40 ± 2 for 96h | -30 ± 2 for 96h | | | | | | | |
| Environmental performance | Dry | heat | 80 | ±2 for 9 | 96h | 85 ± 2 for 96h | 80 ± 2 for 96h | | | | | | | |
| ental | Damp | heat | 60 ± 2 | , 90 to 95 96h | %RH for | 40 ± 2 , 90 to 95%RH for 96h | | | | | | | | |
| | Page | | 278 | 279 | 280 | 84 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | |
| | | | | | • | • | | | | · | | | | |

W : Width. The most outer dimension excluding terminal portion.
D : Depth. The most outer dimension excluding terminal portion.
H : Height. The minimum dimension if there are variances.

Note

The automotive operating temperature range to be individually discussed upon request.

Soldering Conditions

Condition for Reflow

Available for Surface Mount Type.

- 1. Heating method: Double heating method with infrared heater.
- 2. Temperature measurement: Thermocouple 0.1 to 0.2 CA(K) or CC(T) at solder joints (copper foil surface). A heat resistive tape should be used to fix thermocouple.

Push 3. Temperature profile

Slide

Detector

Rotary

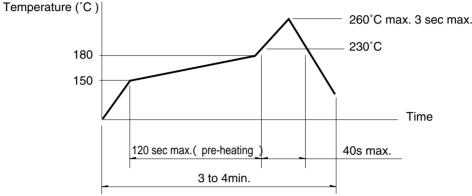
Encoders

Power

Dual-in-line Package Type

TACT Switch[™]

Custom-Products



Time inside soldering equipment

Note

- 1. The above temperature shall be measured on the mounting surface of a PC board. There are cases where the PC board's temperature greatly differs from that of the switch, depending on the material, size, thickness of PC boards and others. The above-stated conditions shall also apply to switch surface temperatures.
- 2. Soldering conditions differ depending on reflow soldering machines. Prior verification of soldering condition is highly recommended.

| Sharp Feeling |
|-----------------------|
| Soft Feeling |
| Snap-in Type |
| Surface Mount Type |
| Radial Type |

nıgr

Conditions for Auto-dip Available for Snap-in Type and Radial Type

(Except SKHJ, SKHL, SKQJ, SKQK, SKEG series)

| ltems | Condition | | | | |
|------------------------|---|--|--|--|--|
| Flux built-up | Mounting surface should not be exposed to fluk | | | | |
| Preheating temperature | Ambient temperature of the soldered surface of PC board. 100 max. | | | | |
| Preheating time | 60s max. | | | | |
| Soldering temperature | 260 max. | | | | |
| Duration of immersion | 5s max. | | | | |
| Number of soldering | 2times max. | | | | |

Manual Soldering (Except SKRT Series)

| Items | Condition | | | | |
|----------------------------|-----------|--|--|--|--|
| | | | | | |
| Soldering temperature | 350 max. | | | | |
| Duration of soldering | 3s max. | | | | |
| Duration of soldering | 3s max. | | | | |
| Capacity of soldering iron | 60W max. | | | | |
| | | | | | |

Notes

- 1. Consult with us for availability of TACT Switch[™] washing.
- 2. Prevent flux penetration from the top side of the TACT Switch[™].
- 3. Switch terminals and a PC board should not be coated with flux prior to soldering.
- 4. The second soldering should be done after the switch is stable with normal temperature.
- 5. Use the flux with a specific gravity of min 0.81.
- (EC-19S-8 by TAMURA Corporation, or equivalents.)