TACT Switch™ 6.2mm Square with Middle-travel (Surface Mount Type)

SKRA Series



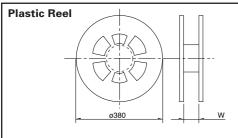
Rubber stem helps to achieve travel of 0.3 to 0.55mm & over travel.



Product Line

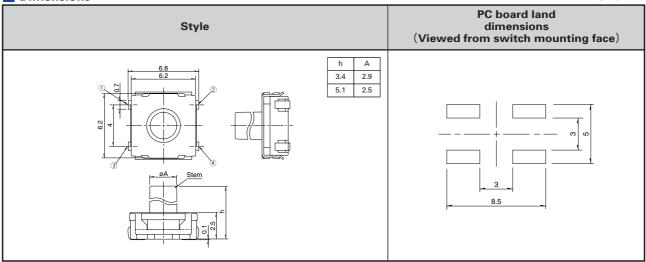
| Product No. | Operating force | Operating direction | Travel (mm) | Rating (max.) | Rating (min.) | Operating life (5mA 5V DC) | Initial contact resistance | Stem color | Stem height | Minimum order unit (pcs.) |
|-------------|--------------------|---------------------|----------------|------------------|---------------|-------------------------------|----------------------------|---------------|----------------|------------------------------|
| SKRAAKE010 | 2.45N | | 0.3 | | | | | | h=3.4mm | 3.000 |
| SKRAALE010 | 3.92N | Vertical | 0.35 | 50mA | | 100,000cycles | 100m Ω max. | White | 11=3.411111 | 3,000 |
| SKRAAME010 | 1.96N | vertical | 0.5 | 12V DC | | | | | – h=5.1mm | 1,400 |
| SKRAAQE010 | 3.43N |] | 0.55 | | | | | Blue | | 1,400 |

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

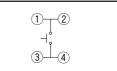


| | Nu | Tape | | | | |
|------------------|--------|------------------|---------------------------|---------------------|---------------|--|
| Series | 1 reel | 1 case /Japan | 1 case /export packing | Real width W(mm) | width (mm) | |
| SKRAAK SKRAAL | 3,000 | 30,000 | 30,000 | 13.5 | 12 | |
| SKRAAM SKRAAQ | 1,400 | 11,200 | 11,200 | 17.5 | 16 | |

Dimensions



Circuit Diagram



Note

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

Soft Feeling Snap-in Туре

Sharp Feeling

Surface

Mount Type Radial

Туре

285

Rotary

Encoders

Detector

Push

Slide

Power

Dual-in-line Package Type

TACT Switch™

Custom-**Products**



List of Varieties

Sharp Feeling Type

| | | sing i | yhe | | i | | | | | | | | | |
|---|--------|--|--|--|-------------------|----------------------------------|-------------------|--------------------------------------|--------------|------|------------------|-----------------------------------|------|--|
| | Series | | SKSD | SKRN | SKSE | SPEE | SKRK | SKRP | SKQM | SKQY | SKRA | SKHM | SKHU | |
| Photo | | | \diamond | 101 | Ser. | | | | | C. | | C. | | |
| | Туре | | | | | | Su | irface moi | unt | | | | | |
| F | eature | s | Double action Double | | Horizor Double | Horizontal type Double action | | High operation force Compact size | Compact size | | Middle stroke | Dust-proo 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 | 6.2 | 6 | 5.2 | |
| Dimensions (mm) | | D | 3.9 | - 6 | 2.87 | 5 | 2.9 | 3.2 | 3.5 | 3.7 | 0.2 | 6 | 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 | | | \$ | Ì | Ĵ | ↓ ↓ | Ì | 1 | ↓ ↓ | | | |
| 5N Ground terminal | | | | | | | | | | | | | | |
| Operating temperature range | | -30 | 0 to + 85 -10 to + 60 | | | -30 to +85 | | | | | | | | |
| ק ק ק ק ק ק ק ק ק ק ק ק ק ק ק ק ק ק ק | | | 100M | min. 10 | 00V DC | 10M min. 100V DC | 100M min. 100V DC | | | | | | | |
| Performance Relection resistance Voltage proof | | | | V AC for 1 : 100V AC | | 100V AC for 1min. | 250V AC for 1min. | | | | | | | |
| | | | | 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 | | | | | | | |
| performance Damp heat | | | 80 ± 2 for 96h | | | 85 ± 2 for 96h | 80 ± 2 for 96h | | | | | | | |
| ental | Damp | heat | 60 ± 2 , 90 to 95%RH for 96h | | | 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

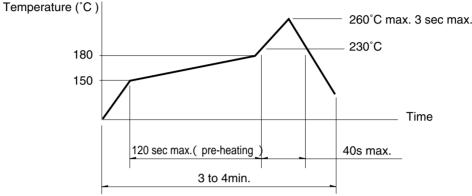
Encoders

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.)