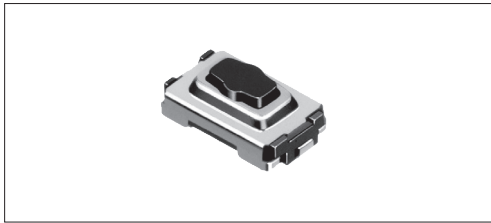




Compact switch with contact sealing structure, also available with ground terminal.



Typical Specifications

| Items                      | Specifications |
|----------------------------|----------------|
| Rating (max.)              | 50mA 12V DC    |
| Rating (min.)              | 10μA 1V DC     |
| Initial contact resistance | 500mΩ max.     |
| Travel (mm)                | 0.25           |

Product Line

Toppush Type

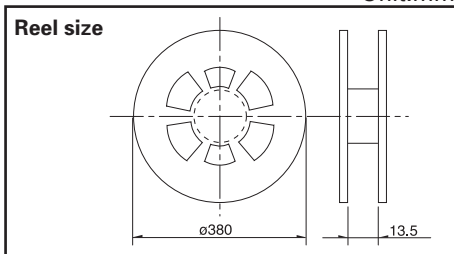
| Product No. | Operating force | Operating direction | Operating life (5mA 5V DC) | Minimum order unit (pcs.) |        |
|-------------|-----------------|---------------------|----------------------------|---------------------------|--------|
|             |                 |                     |                            | Japan                     | Export |
| SKQYACE010  | 0.98N           | Toppush             | 50,000cycles               | 3,000                     | 3,000  |
| SKQYAAE010  | 1.57N           |                     |                            |                           |        |
| SKQYABE010  | 2.55N           |                     |                            |                           |        |
| SKQYAFE010  | 3.14N           |                     |                            |                           |        |

With Ground Terminal Type

| Product No. | Operating force | Operating direction | Operating life (5mA 5V DC) | Minimum order unit (pcs.) |        |
|-------------|-----------------|---------------------|----------------------------|---------------------------|--------|
|             |                 |                     |                            | Japan                     | Export |
| SKQYPCE010  | 0.98N           | Toppush             | 50,000cycles               | 3,000                     | 3,000  |
| SKQYPAE010  | 1.57N           |                     |                            |                           |        |
| SKQYPBE010  | 2.55N           |                     |                            |                           |        |
| SKQYPDE010  | 3.14N           |                     |                            |                           |        |

Packing Specifications

Taping



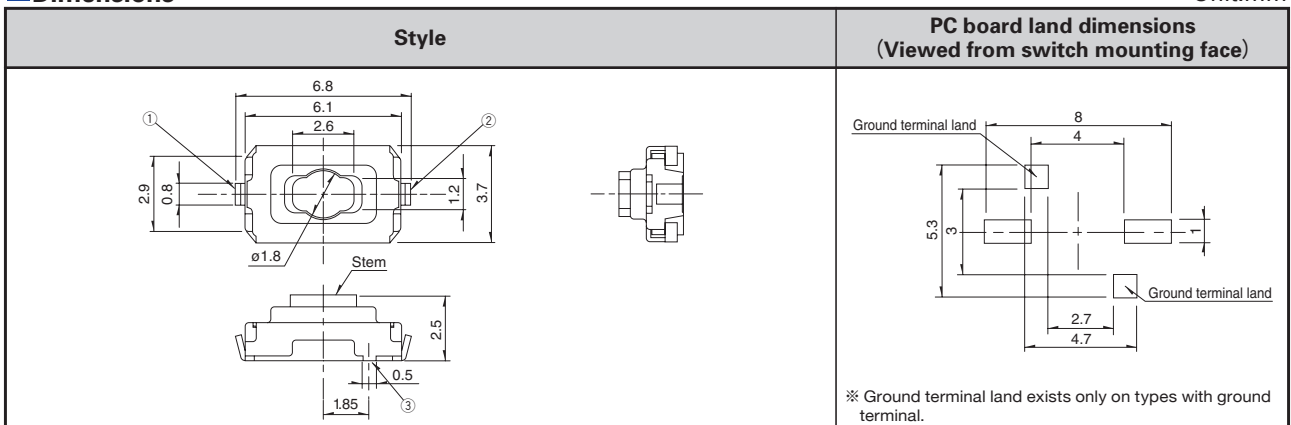
| Number of packages (pcs.) |                |                         | Tape width (mm) | Export package measurements (mm) |
|---------------------------|----------------|-------------------------|-----------------|----------------------------------|
| 1 reel                    | 1 case / Japan | 1 case / export packing |                 |                                  |
| 3,000                     | 30,000         | 30,000                  | 12              | 401 × 401 × 214                  |

Note

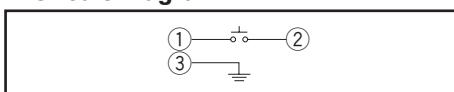
For reels of 330mm diameter, please inquire.

Dimensions

Unit:mm



Circuit Diagram



Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line Package Type

TACT Switch™

Sharp Feeling

Soft Feeling

Snap-in Type

Surface Mount Type

Radial Type

## List of Varieties

| Type                           |                       | Sharp Feeling Type  |                   |                             |      |      |                             |      |   |              |             |                  |             |     |
|--------------------------------|-----------------------|---|-------------------|-----------------------------|------|------|-----------------------------|------|---|--------------|-------------|------------------|-------------|-----|
|                                |                       | Surface Mount   |                   |                             |      |      |                             |      |   |              |             |                  |             |     |
| Series                         |                       | SKRN  | SKSE              | SKSV                        | SKSW | SKSF | SKSM                        | SKSG | SKRK                                    | SKRP         | SKQM        | SKQY             | SKSU        |     |
| Photo                          |                       |   |                   |                             |      |      |                             |      |   |              |             |                  |             |     |
| Features                       |                       | Double action   |                   | Compact size<br>Low-profile |      |      | Compact size<br>Low-profile |      | High operation<br>force<br>Compact size | Compact size |             | Middle<br>travel |             |     |
| Water-proof                    |                       | —   | —                 | ●                           | ●    | —    | ●                           | —    | —                                       | —            | —           | —                | ●           |     |
| Dust-proof                     |                       | —   | —                 | ●                           | ●    | ○    | ●                           | —    | —                                       | —            | —           | ○                | ●           |     |
| Operating direction            | Toppush               | ●   | —                 | ●                           | ●    | ●    | ●                           | ●    | ●                                       | ●            | ●           | ●                | ●           |     |
|                                | Sidepush              | —   | ●                 | —                           | —    | —    | —                           | —    | —                                       | —            | —           | —                | —           |     |
| Dimensions (mm)                | W                     | □ 6   | 5.9               | 2.8                         | 3.0  | 2.8  | 3.4                         | 3    | 3.9                                     | 4.2          | 6           | 6.1              | 5.3         |     |
|                                | D                     |   | 2.87              | 1.9                         | 2    | 2.4  | 2.9                         | 2.7  | 2.9                                     | 3.2          | 3.5         | 3.7              | 5.4         |     |
|                                | H                     | 0.9   | 3                 | 0.5                         | 0.58 | 0.65 | 0.7                         | 1.4  | 1.5                                     | 2.5          | 4.3         | 2.5              | 3.85        |     |
| Operation force coverage       | ~1N                   |   |                   | ↕                           | ↕    | ↕    | ↕                           | ↕    | ↕                                       | ↕            | ↕           | ↕                |             |     |
|                                | 1N~2N                 |   | ※                 | ↕                           | ↕    | ↕    | ↕                           | ↕    | ↕                                       | ↕            | ↕           | ↕                |             |     |
|                                | 2N~3N                 |   |                   |                             |      |      |                             |      |   |              |             |                  |             |     |
|                                | 3N~4N                 |   |                   |                             |      |      |                             |      |   |              |             |                  |             |     |
| 4N~5N                          |                       |   |                   |                             |      |      |                             |      |   |              |             | ↕                |             |     |
| Travel (mm)                    |                       | ※   |                   | 0.12                        | 0.13 |      | 0.1                         |      | 0.12                                    | 0.13         |             | 0.2              | 0.25        | 0.7 |
| Ground terminal                |                       | ●   | ●                 | —                           | —    | —    | —                           | ●    | —                                       | —            | —           | ●                | —           |     |
| Operating temperature range    |                       | -30°C to +85°C  |                   |                             |      |      |                             |      |   |              |             |                  |             |     |
| Automotive use                 |                       | —   | —                 | —                           | —    | —    | —                           | ○    | —                                       | ●            | ●           | ●                | ●           |     |
| Life Cycle                     |                       |   |                   |                             |      |      |                             |      |   |              |             |                  |             |     |
| Rating (max.) (Resistive load) |                       | 50mA 12V DC   |                   |                             |      |      |                             |      |   | 50mA 16V DC  | 50mA 12V DC |                  | 50mA 16V DC |     |
| Rating (min.) (Resistive load) |                       | 10μA 1V DC  |                   |                             |      |      |                             |      |   |              |             |                  |             |     |
| Electrical performance         | Insulation resistance | 100MΩ min. 100V DC for 1min.  |                   |                             |      |      |                             |      |   |              |             |                  |             |     |
|                                | Voltage proof         | 250V AC for 1min.   | 100V AC for 1min. |                             |      |      |                             |      | 250V AC for 1min.                       |              |             |                  |             |     |
| Durability                     | Vibration             | 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 |                   |                             |      |      |                             |      |   |              |             |                  |             |     |
|                                | Lifetime              | Shall be in accordance with individual specifications.  |                   |                             |      |      |                             |      |   |              |             |                  |             |     |
| Environmental performance      | Cold                  | -30±2°C for 96h   |                   |                             |      |      |                             |      |   |              |             |                  |             |     |
|                                | Dry heat              | 80±2°C for 96h  |                   |                             |      |      |                             |      |   |              |             |                  |             |     |
|                                | Damp heat             | 60±2°C, 90 to 95%RH for 96h   |                   |                             |      |      |                             |      |   |              |             |                  |             |     |
| Page                           |                       | 255   | 256               | 257                         | 258  | 259  | 260                         | 261  | 262                                     | 263          | 264         | 265              | 266         |     |

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.

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- TACT Switch™ Cautions . . . . . 289

### Notes

1. The automotive operating temperature range to be individually discussed upon request.
2. ● indicates applicability to all products in the series, while ○ indicates applicability to some products in the series.
3. ※ See the relevant pages for respective product descriptions

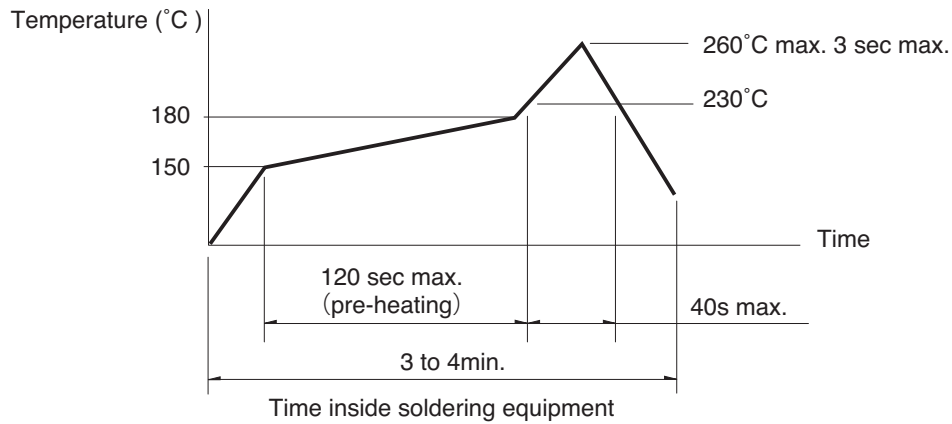
# TACT Switch™ Soldering Conditions

## 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 φ CA (K) or CC (T) at solder joints (copper foil surface).  
A heat resistive tape should be used to fix thermocouple.

3. Temperature profile



## Notes

1. The above temperature shall be measured of the top of switch. 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.

## Conditions for Auto-dip

Available for Snap-in Type and Radial Type

| Items                         | Condition   |
|-------------------------------|---|
| <b>Flux built-up</b>          | Mounting surface should not be exposed to flux                      |
| <b>Preheating temperature</b> | Ambient temperature of the soldered surface of PC board. 100°C max. |
| <b>Preheating time</b>        | 60s max.  |
| <b>Soldering temperature</b>  | 260°C max.  |
| <b>Duration of immersion</b>  | 5s max.   |
| <b>Number of soldering</b>    | 2times max.   |

SKHH、SKPD Series

| Items                         | Condition   |
|-------------------------------|---|
| <b>Flux built-up</b>          | Mounting surface should not be exposed to flux                      |
| <b>Preheating temperature</b> | Ambient temperature of the soldered surface of PC board. 110°C max. |
| <b>Preheating time</b>        | 60s max.  |
| <b>Soldering temperature</b>  | 260°C max.  |
| <b>Duration of immersion</b>  | 5s max.   |
| <b>Number of soldering</b>    | 2times max.   |

SKQJ、SKQK、SKEG Series

| Items                         | Condition   |
|-------------------------------|---|
| <b>Flux built-up</b>          | Mounting surface should not be exposed to flux                      |
| <b>Preheating temperature</b> | Ambient temperature of the soldered surface of PC board. 100°C max. |
| <b>Preheating time</b>        | 45s max.  |
| <b>Soldering temperature</b>  | 255°C max.  |
| <b>Duration of immersion</b>  | 5s max.   |
| <b>Number of soldering</b>    | 2times 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.)

## Manual Soldering (Except SKRT Series)

| Items                             | Condition  |
|-----------------------------------|------------|
| <b>Soldering temperature</b>      | 350°C max. |
| <b>Duration of soldering</b>      | 3s max.    |
| <b>Capacity of soldering iron</b> | 60W max.   |

SKHH、SKHW、SKRG、SKPD Series

| Items                             | Condition  |
|-----------------------------------|------------|
| <b>Soldering temperature</b>      | 360°C max. |
| <b>Duration of soldering</b>      | 3s max.    |
| <b>Capacity of soldering iron</b> | 60W max.   |

SKQJ、SKQK、SKEG Series

| Items                             | Condition  |
|-----------------------------------|------------|
| <b>Soldering temperature</b>      | 350°C max. |
| <b>Duration of soldering</b>      | 3s max.    |
| <b>Capacity of soldering iron</b> | 20W max.   |

Detector  
Push  
Slide  
Rotary  
Encoders  
Power  
Dual-in-line  
Package Type

TACT Switch™

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