

Width of 1.9mm contributes to thinner product designs and greater mounting efficiency



TACT Switch™

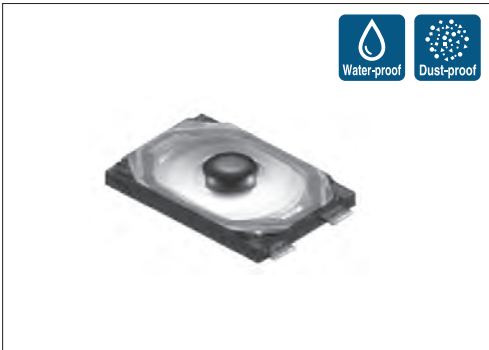
Sharp Feeling

Soft Feeling

Snap-In Type

Surface Mount Type

Radial Type



■ Typical Specifications

| Items                      | Specifications     |
|----------------------------|--------------------|
| Rating (max.)              | 50mA 12V DC        |
| Rating (min.)              | 10 $\mu$ A 1V DC   |
| Initial contact resistance | 500m $\Omega$ max. |
| Travel (mm)                | 0.12               |
| Protective structure ※     | IP67 equivalent    |

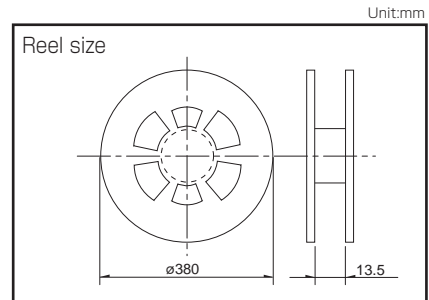
■ Product Line

| Product No.       | Operating force | Operating direction | Operating life (5mA 5V DC) | Minimum order unit (pcs.) |        |
|-------------------|-----------------|---------------------|----------------------------|---------------------------|--------|
|                   |                 |                     |                            | Japan                     | Export |
| <b>SKSVCAE010</b> | 1.6N            | Top push            | 300,000 cycles             | 20,000                    | 20,000 |
| <b>SKSVCE010</b>  | 2.2N            |                     | 100,000 cycles             |                           |        |

■ Packing Specifications

Taping

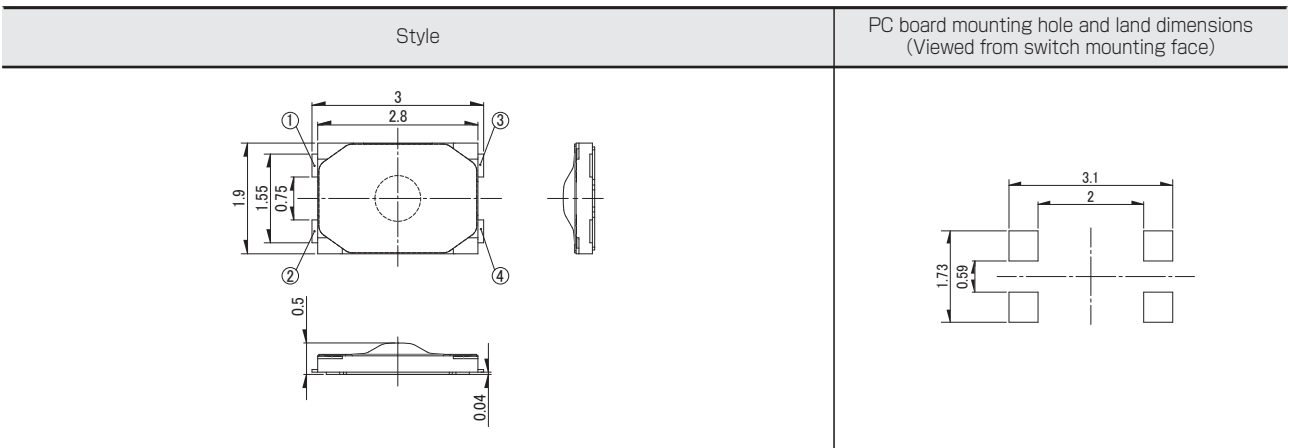
| Number of packages (pcs.) |                |                         | Tape width (mm) | Export package measurements (mm) |
|---------------------------|----------------|-------------------------|-----------------|----------------------------------|
| 1 reel                    | 1 case / Japan | 1 case / export packing |                 |                                  |
| 20,000                    | 200,000        | 200,000                 | 12              | 395×395×205                      |



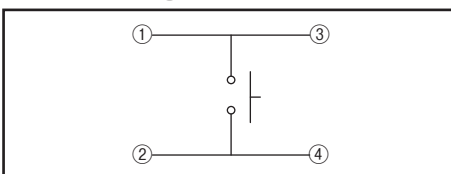
Note

For reels of 330mm diameter, please inquire.

■ Dimensions
































■ Circuit Diagram



※ Assumes the switch is left alone without being operated. Under the specified conditions, dust and water ingress with a significant impact on the switch's on-off function is prevented. IP67-level dust and water resistance is guaranteed for the switch alone and performance may not be guaranteed depending on the mounting conditions and usage.

Refer to P.235 for soldering conditions.

| Type                        |   | Sharp Feeling Type   |   |   |   |   |   |   |      |
|-----------------------------|---|--|---|---|---|---|---|---|------|
|                             |   | Surface Mount  |   |   |   |   |   |   |      |
| Series                      |   | SKSD   | SKRN  | SKTA  | SKSV  | SKSW  | SKTK  | SKSG  |      |
| Photo                       |   |   |    |    |    |    |    |    |      |
| Features                    |   | Double action  |   | Compact size<br>Low-profile   |   |   | Long life   | High operation force<br>Compact size  |      |
| Water-proof                 |   | —  | —   | ●   | ●   | ●   | ●   | —   |      |
| Dustproof                   |   | —  | —   | ●   | ●   | ●   | ●   | —   |      |
| IP standard                 |   | —  | —   | 67 equivalent   | 67 equivalent   | 67 equivalent<br>68 equivalent in some cases  | 67 equivalent   | —   |      |
| Operating direction         | Top push  | ●  | ●   | ●   | ●   | ●   | ●   | ●   |      |
|                             | Side push   | —  | —   | —   | —   | —   | —   | —   |      |
| Dimensions (mm)             | W   | 4.1  | □6  | 2.6   | 2.8   | 3   | 5.9   | 3   |      |
|                             | D   | 3.9  |   | 1.6   | 1.9   | 2   | 4   | 2.7   |      |
|                             | H   | 0.6  | 0.9   | 0.53  | 0.5   | 0.6   | 0.78  | 1.4   |      |
| Operation force coverage    | 1N max.   | See the relevant pages for respective product descriptions   |   |    |   |    |   |    |      |
|                             | 1N to 2N  |  |   |   |   |   |   |   |      |
|                             | 2N to 3N  |  |   |   |   |   |   |   |      |
|                             | 3N to 4N  |  |   |   |   |   |   |   |      |
| 4N to 5N                    |  |  |  |   |  |   |    |   |      |
| 1N to 2N                    |   |  |   |   |   |   |   |   |      |
| 2N to 3N                    |   |  |   |   |   |   |   |   |      |
| 3N to 4N                    |   |  |   |   |   |   |   |   |      |
| 4N to 5N                    |  |  |  |   |  |   |    |   |      |
| 1N to 2N                    |   |  |   |   |   |   |   |   |      |
| 2N to 3N                    |   |  |   |   |   |   |   |   |      |
| 3N to 4N                    |   |  |   |   |   |   |   |   |      |
| 4N to 5N                    |  |  |  |   |  |   |    |   |      |
| 1N to 2N                    |   |  |   |   |   |   |   |   |      |
| 2N to 3N                    |   |  |   |   |   |   |   |   |      |
| 3N to 4N                    |   |  |   |   |   |   |   |   |      |
| Travel (mm)                 |   | See the relevant pages for respective product descriptions   |   | 0.11  | 0.12  | See the relevant pages for respective product descriptions                            |   | 0.25  | 0.12 |
| Ground terminal             |   | ●  | ●   | —   | —   | —   | —   | ○   |      |
| Operating temperature range |   | -40°C to +90°C   |   | -30°C to +85°C  |   |   |   | -40°C to +85°C  |      |
| Automotive use              |   | —  | —   | —   | —   | —   | —   | ●   |      |
| Life Cycle                  |   |   |  |  |  |  |  |  |      |
| Electrical performance      | Rating (max.)<br>(Resistive load)   | 50mA 12V DC  |   |   |   |   |   |   |      |
|                             | Rating (min.)<br>(Resistive load)   | 10μA 1V DC   |   |   |   |   |   |   |      |
|                             | Insulation resistance   | 100MΩ min. 100V DC 1min.   |   |   |   |   |   |   |      |
|                             | Voltage proof   | 100V AC 1min.  | 250V AC 1min.   | 100V AC 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 2 hours respectively |   |   |   |   |   |   |      |
|                             | Lifetime  | Shall be in accordance with individual specifications.   |   |   |   |   |   |   |      |
| Environmental performance   | Cold  | -40°C 96h  |   |   |   |   |   |   |      |
|                             | Dry heat  | 90°C 96h   |   |   |   |   |   |   |      |
|                             | Damp heat   | 60°C, 90 to 95%RH 96h  |   |   |   |   |   |   |      |
| Page                        |   | 195  | 196   | 197   | 198   | 199   | 201   | 202   |      |

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.

|                                   |     |
|-----------------------------------|-----|
| TACT Switch™ Soldering Conditions | 235 |
| TACT Switch™ Cautions             | 236 |

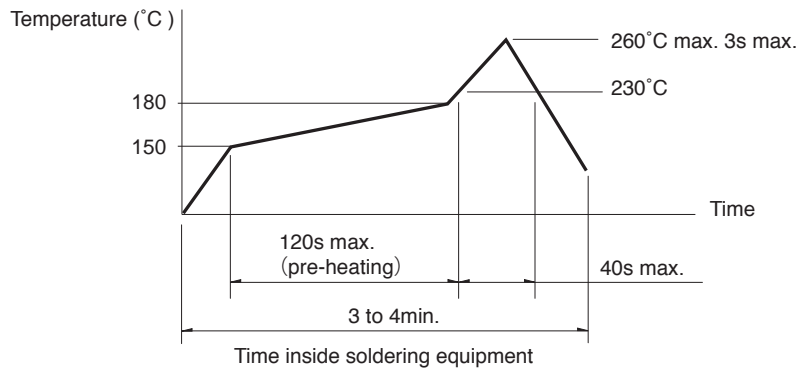
### Notes

- The automotive operating temperature range to be individually discussed upon request.
- Indicates applicability to all products in the series, while ○ indicates applicability to some products in the series.

## Condition for Reflow

Available for Surface Mount Type.

Temperature profile



### Notes

1. Please confirm the specifications of our product for the detailed condition.
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   |
|------------------------|---|
| Flux built-up          | Mounting surface should not be exposed to flux                      |
| Preheating temperature | Ambient temperature of the soldered surface of PC board. 100°C max. |
| Preheating time        | 60s max.  |
| Soldering temperature  | 260°C max.  |
| Duration of immersion  | 5s max.   |
| Number of soldering    | 2times max.   |

### SKHH Series

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

### SKHL Top Push Type, SKQJ Series

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

### Notes

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

## Manual Soldering

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

### SKHH, SKHW Series

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

### SKTD, SKTG, SKQJ, SKSN Series

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