

Combination of long travel 1.75mm and high operation force prevents malfunction



TACT Switch™

Sharp Feeling

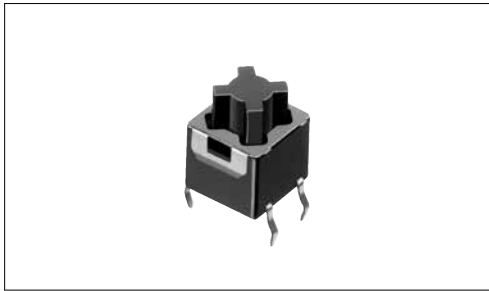
Soft Feeling

Snap-in Type

Surface Mount Type

Radial Type

### Typical Specifications



| Items                      | Specifications   |
|----------------------------|------------------|
| Rating (max.)              | 5mA 12V DC       |
| Rating (min.)              | 10 $\mu$ A 1V DC |
| Initial contact resistance | 1k $\Omega$ max. |
| Travel (mm)                | 1.75             |

### Product Line

| Product No.       | Operating force | Operating direction | Operating life (5mA 5V DC) | Minimum order unit (pcs.) |        |
|-------------------|-----------------|---------------------|----------------------------|---------------------------|--------|
|                   |                 |                     |                            | Japan                     | Export |
| <b>SKPFACA010</b> | 1.96N           | Top push            | 100,000 cycles             | 1,000                     | 1,000  |
| <b>SKPFAAA010</b> | 3.92N           |                     |                            |                           |        |

### Packing Specifications

Bulk

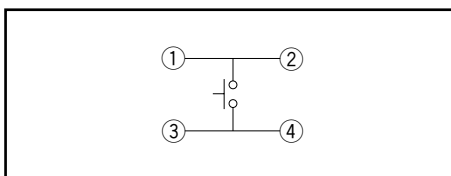
| Number of packages (pcs.) |                         | Export package measurements (mm) |
|---------------------------|-------------------------|----------------------------------|
| 1 case / Japan            | 1 case / export packing |                                  |
| 4,000                     | 12,000                  | 309×476×347                      |

### Dimensions

Unit:mm

| Style | PC board mounting hole dimensions (Viewed from switch mounting face) |
|-------|--|
|       |  |

















### Circuit Diagram



### Note

Please Using a 1.6mm thick PC board is recommended.

Refer to P.249 for soldering conditions.

| Type                        |                                | Sharp Feeling Type   |   |   | Soft Feeling Type   |  |   |   |   |
|-----------------------------|--------------------------------|--|---|---|---|--|---|---|---|
|                             |                                | Surface Mount  |   |   | Snap-in   | Surface Mount  |   |   |   |
| Series                      |                                | SKSC   | SKRT  | SKRH  | SKPF  | SKPS   | SKPM  | SKPG  | SKPR  |
| Photo                       |                                |   |    |    |    |    |    |    |    |
| Features                    |                                | Low-profile  | —   | 4-direction switch + push switch  | High operation force<br>Long travel   | Low contact resistance   |   | —   | High operation force<br>Low contact resistance  |
| Water-proof                 |                                | —  | —   | —   | —   | —  | —   | —   | —   |
| Dust-proof                  |                                | —  | —   | —   | —   | —  | —   | —   | —   |
| IP standard                 |                                | —  | —   | —   | —   | —  | —   | —   | —   |
| Operating direction         | Top push                       | —  | —   | ●   | ●   | ●  | ●   | ●   | ●   |
|                             | Side push                      | ●  | ●   | ●   | —   | —  | —   | —   | —   |
| Dimensions (mm)             | W                              | 3.5  | 4.5   | 7.35  | 8   | 5.9  |   | 6.6   | 7.5   |
|                             | D                              | 3.55   | 3.4   | 7.5   | 9   | 6  |   | 6.3   | 7.8   |
|                             | H                              | 1.25   | 3.3   | 5   | 10  | 5  |   | —   | 6.5   |
| Contact                     |                                | —  | —   | —   | Carbon  | Silver   |   | Carbon  | Silver  |
| Operation force coverage    | 1N max.                        | —  | —   | —   | —   | —  | —   | —   | —   |
|                             | 1N to 2N                       | ↕  | ↕   | —   | ↕   | —  | ↕   | ↕   | —   |
|                             | 2N to 3N                       | —  | —   | —   | —   | ↕  | —   | —   | —   |
|                             | 3N to 4N                       | —  | —   | —   | —   | —  | —   | —   | —   |
| Travel (mm)                 |                                | 0.2  |   | 1.75  | See the relevant pages for respective product descriptions                          | 1.05   | 1.3   |   | 1   |
| Ground terminal             |                                | ○  | ●   | ●   | —   | —  | —   | —   | —   |
| Operating temperature range |                                | −30°C to +85°C   | −40°C to +90°C  | −40°C to +85°C  | −40°C to +90°C  |  |   |   |   |
| Automotive use              |                                | —  | —   | —   | ●   | ●  | ●   | ●   | ●   |
| Life Cycle                  |                                |   |  |  |  |  |  |  |  |
| Electrical performance      | Rating (max.) (Resistive load) | 50mA<br>12V DC   |   |   | 50mA<br>16V DC  |  | 5mA<br>12V DC   | 50mA<br>16V DC  |   |
|                             | Rating (min.) (Resistive load) | 10μA 1V DC   |   |   |   |  |   |   |   |
|                             | Insulation resistance          | 100MΩ min. 100V DC 1min.   |   |   |   |  |   |   |   |
|                             | Voltage proof                  | 100V AC<br>1min.   | 250V AC<br>1min.  | 100V AC<br>1min.  | 250V 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  |   |   | −40°C 1,000h  |  | −40°C 96h   | −40°C 1,000h  |   |
|                             | Dry heat                       | 90°C 96h   |   |   | 90°C 1,000h   |  | 90°C 96h  | 90°C 1,000h   |   |
|                             | Damp heat                      | 60°C, 90 to 95%RH 96h  |   |   | 60°C, 90 to 95%RH 1,000h  |  | 60°C, 90 to 95%RH 96h   | 60°C, 90 to 95%RH 1,000h  |   |
| Page                        |                                | 239  | 241   | 444   | 244   | 245  | 246   | 247   | 248   |

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 | 249 |
| TACT Switch™ Cautions             | 250 |

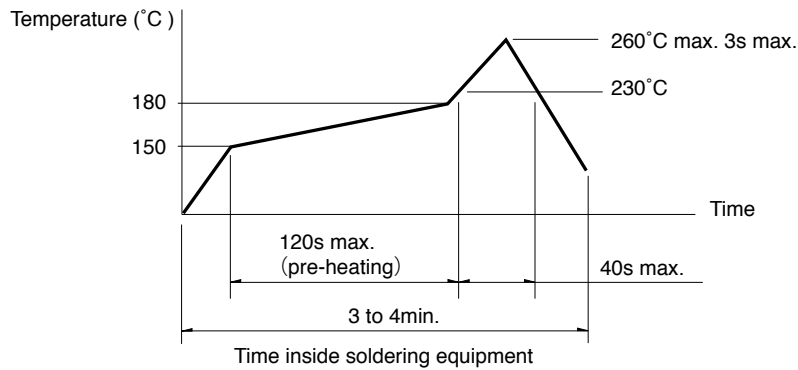
#### Notes

- The automotive operating temperature range to be individually discussed upon request.
- Indicates applicability to all 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 Series

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



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- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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