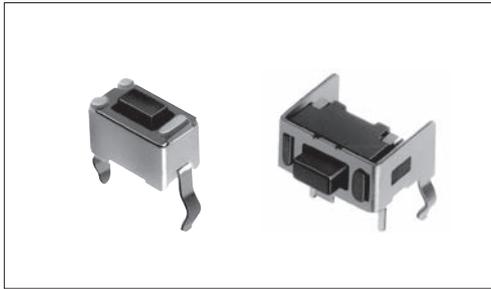


Switch contributing to high-density mounting,
available with top or side push operation



Typical Specifications



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

Product Line

Top push type

| Product No. | Operating force | Operating direction | Operating life (5mA 5V DC) | Stem color | Stem height | Minimum order unit (pcs.) | | Drawing No. |
|-------------------|-----------------|---------------------|----------------------------|------------|-------------|---------------------------|--------|-------------|
| | | | | | | Japan | Export | |
| SKHLAA010 | 0.98N | Top push | 50,000 cycles | Black | h=4.3mm | 1,000 | 1,000 | 1 |
| SKHLACA010 | 1.57N | | | Dark gray | | | | |
| SKHLAJA010 | 2.55N | | 30,000 cycles | Red | | | | |
| SKHLABA010 | 0.98N | | 50,000 cycles | Black | h=5mm | | | |
| SKHLADA010 | 1.57N | | | Dark gray | | | | |
| SKHLAKA010 | 2.55N | | 30,000 cycles | Red | | | | |

Side push type

| Product No. | Operating force | Operating direction | Operating life (5mA 5V DC) | Stem color | Terminal length | Minimum order unit (pcs.) | | Drawing No. |
|-------------------|-----------------|---------------------|----------------------------|------------|-------------------------------------|---------------------------|--------|-------------|
| | | | | | | Japan | Export | |
| SKHLLA010 | 0.98N | Side push | 50,000 cycles | Black | ϕ =3.5mm (PC board t : 1.6) | 1,000 | 1,000 | 2 |
| SKHLLBA010 | 1.57N | | | Dark gray | | | | |
| SKHLLFA010 | 2.55N | | 30,000 cycles | Red | | | | |
| SKHLLCA010 | 0.98N | | 50,000 cycles | Black | ϕ =2.5mm (PC board t : 1.0) | | | |
| SKHLLDA010 | 1.57N | | | Dark gray | | | | |

Packing Specifications

Bulk

| Number of packages (pcs.) | | Export package measurements (mm) |
|---------------------------|-------------------------|----------------------------------|
| 1 case / Japan | 1 case / export packing | |
| 10,000 | 30,000 | 309×476×347 |

SKHL 6×3.5mm Compact (Snap-in Type)

TACT Switch™

Sharp Feeling

Soft Feeling

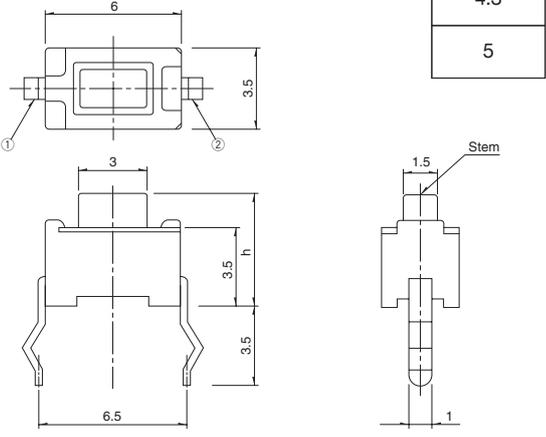
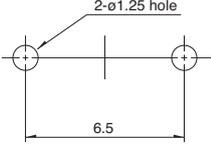
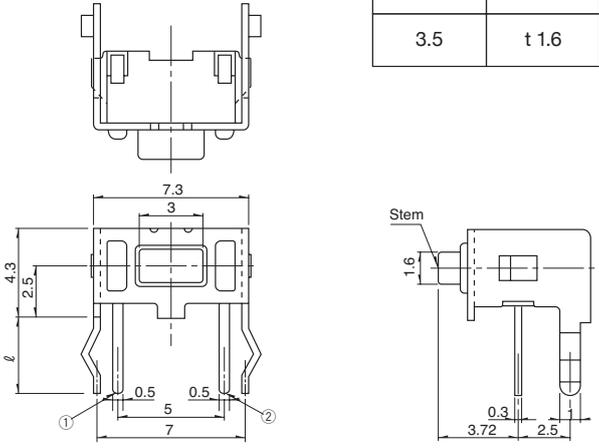
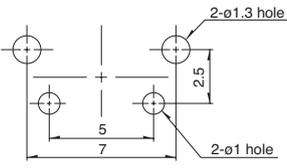
Snap-in Type

Surface Mount Type

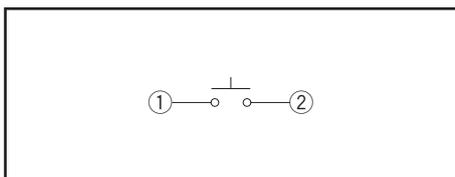
Radial Type

■ Dimensions

Unit:mm

| No. | Photo | Style | PC board mounting hole dimensions (Viewed from switch mounting face) | | | | | | |
|-----|---|--|---|----------|-----|---|-----|-------|---|
| 1 |  | <p>Top push</p>  <table border="1" data-bbox="976 380 1093 537"> <tr><td>h</td></tr> <tr><td>4.3</td></tr> <tr><td>5</td></tr> </table> | h | 4.3 | 5 |  | | | |
| h | | | | | | | | | |
| 4.3 | | | | | | | | | |
| 5 | | | | | | | | | |
| 2 |  | <p>Side push</p>  <table border="1" data-bbox="865 1019 1093 1176"> <thead> <tr> <th>ℓ</th> <th>PC board</th> </tr> </thead> <tbody> <tr> <td>2.5</td> <td>t 1.0</td> </tr> <tr> <td>3.5</td> <td>t 1.6</td> </tr> </tbody> </table> | ℓ | PC board | 2.5 | t 1.0 | 3.5 | t 1.6 |  |
| ℓ | PC board | | | | | | | | |
| 2.5 | t 1.0 | | | | | | | | |
| 3.5 | t 1.6 | | | | | | | | |

■ Circuit Diagram



TACT Switch™

List of Varieties

TACT Switch™

Sharp Feeling Type

Soft Feeling Type

Snap-in Type

Surface Mount Type

Radial Type

| Type | | Sharp Feeling Type | | | | | | |
|-----------------------------|--------------------------------|--|---|---|---|---|---|---|
| | | Snap-in | | | | | | |
| Series | | SKHL | SKHH | SKHW | SKQJ | SKQB | SKQE | SKHC |
| Photo | |  |  |  |  |  |  |  |
| Features | | — | — | — | — | — | Long-life | — |
| Water-proof | | — | — | — | — | ● | — | — |
| Dust-proof | | — | — | ● | ● | ● | ● | — |
| IP standard | | — | — | — | — | — | — | — |
| Operating direction | Top push | ● | ● | ● | ● | ● | ● | ● |
| | Side push | — | — | — | — | — | — | — |
| Dimensions (mm) | W | 6 | □6 | | □6.6 | □10 | □12 | |
| | D | 3.5 | | | | | | |
| | H | 4.3/5 | See the relevant pages for respective product descriptions | | 4.3/5 | 5 | 5/13/23.2 | |
| Operation force coverage | 1N max. | ↕ | ↕ | ↕ | ↕ | ↕ | ↕ | ↕ |
| | 1N to 2N | | | | | | | |
| | 2N to 3N | | | | | | | |
| | 3N to 4N | | | | | | | |
| | 4N to 5N | | | | | | | |
| Travel (mm) | | 0.25 | | 0.3 | 0.25 | 0.3 | | |
| Ground terminal | | — | ● | — | — | — | — | — |
| Operating temperature range | | -40°C to +90°C | | | -20°C to +70°C | -40°C to +90°C | | -40°C to +85°C |
| Automotive use | | ● | ● | — | — | ● | — | — |
| Life Cycle | |  |  |  |  |  |  |  |
| Electrical performance | Rating (max.) (Resistive load) | 50mA 12V DC | | | | | | |
| | Rating (min.) (Resistive load) | 10μA 1V DC | | | | | | |
| | Insulation resistance | 100MΩ min. 100V DC 1min. | | | | | | |
| | Voltage proof | 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 | | | -30°C 96h | -40°C 96h | | |
| | Dry heat | 90°C 96h | | | 80°C 96h | 90°C 96h | | |
| | Damp heat | 60°C, 90 to 95%RH 96h | | | | 60°C, 90 to 95%RH 1,000h | 60°C, 90 to 95%RH 96h | |
| Page | | 195 | 197 | 201 | 202 | 204 | 206 | 208 |

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 265
TACT Switch™ Cautions 266

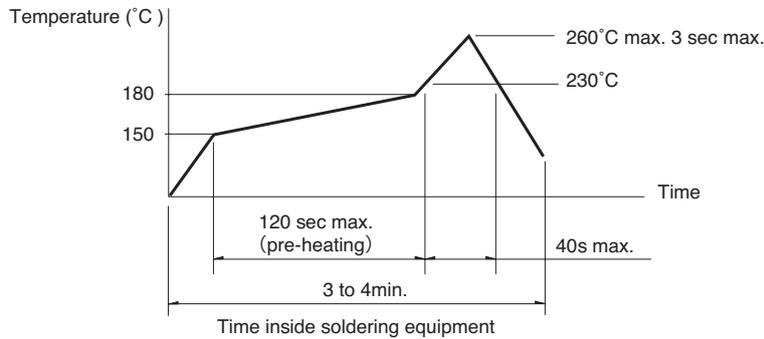
Notes

- 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.

1. Temperature measurement: Thermocouple ϕ 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.
2. 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 |
|------------------------|---|
| 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, SKPD 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. |

SKQJ, SKQK, SKEG 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. |

Manual Soldering

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

SKHH, SKHW, SKRG, SKPD Series

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

SKTD, SKTG, SKQJ, SKQK, SKEG Series

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

Mouser Electronics

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ALPS:

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[SKHLAJA010](#) [SKHLAKA010](#) [SKHLACA010](#) [SKHLABA010](#)