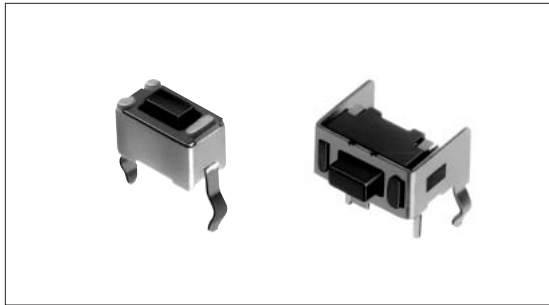


TACT Switch™ 6×3.5mm Compact (Snap-in)Type

SKHL Series



Available in vertical and horizontal types, both supporting high density surface mounting.



Features

- Snap-in type, which can be directly mounted on PC board.

Applications

- Operating switches in all types of electronic equipment such as audio devices, office equipment, communication devices, measuring instruments, TVs, video recorders, automotive sets etc.

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line
Package Type

Multi Control
Devices

TACT Switch™

Custom-
Products

Sharp
Feeling

Soft
Feeling

Snap-in
Type

Surface
Mount Type

Radial
Type

Products Line

Vertical Type

Products No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Rating (min.)	Operating life (5mA 5V DC)	Initial contact resistance	Stem color	Stem height	Minimum packing unit (pcs.)	Drawing No.
SKHLAA010	0.98N	Vertical	0.25	50mA 12V DC	10μA 1V DC	50,000 cycles	500mΩ max.	Black	h=4.3mm	1,000	1
SKHLACA010	1.57N							Dark gray			
SKHLAJA010	2.55N							Red			
SKHLABA010	0.98N							Black	h=5mm		
SKHLADA010	1.57N							Dark gray			
SKHLAKA010	2.55N							Red			


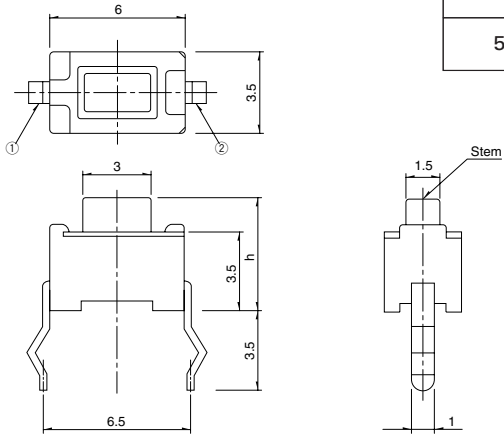
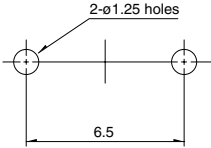

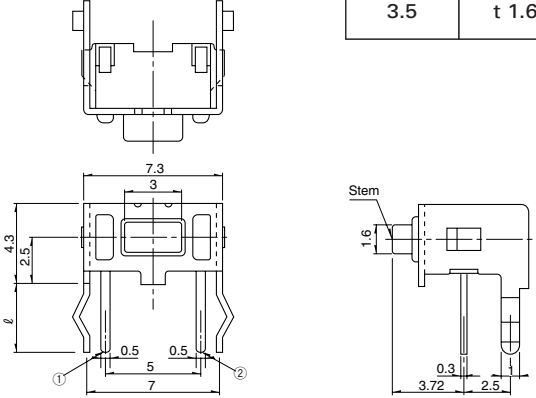
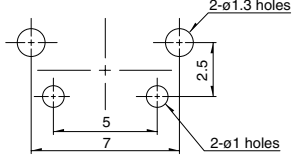
Horizontal Type

Products No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Rating (min.)	Operating life (5mA 5V DC)	Initial contact resistance	Stem color	Terminal length	Minimum packing unit (pcs.)	Drawing No.
SKHLLA010	0.98N	Horizontal	0.25	50mA 12V DC	10μA 1V DC	50,000 cycles	500mΩ max.	Black	ℓ =3.5mm (PC board t: 1.6)	1,000	2
SKHLLBA010	1.57N							Dark gray			
SKHLLFA010	2.55N							Red			
SKHLLCA010	0.98N							Black	ℓ =2.5mm (PC board t: 1.0)		
SKHLLDA010	1.57N							Dark gray			

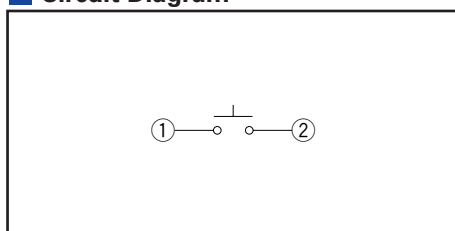
For other specifications, see P.369
For soldering conditions, see P.370

Dimensions

Unit:mm

No.	Photo	Style	PC board mounting hole dimensions (Viewed from switch mounting face)						
1		<p>Vertical type</p>  <table border="1" data-bbox="986 360 1102 521"> <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>Horizontal type</p>  <table border="1" data-bbox="874 1003 1102 1160"> <tr><th>ℓ</th><th>PC board</th></tr> <tr><td>2.5</td><td>t 1.0</td></tr> <tr><td>3.5</td><td>t 1.6</td></tr> </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



Products Specifications

Items		Series	Sharp feeling type	Soft feeling type
		Operating temperature range		
			-30°C to +85°C	-40°C to +90°C
Electrical performance	Insulation resistance	100MΩ min. 100V DC SKEY/PD : 50MΩ min. 100V DC		
	Voltage proof	250V AC for 1 min. SKRE/SKSC/SKRB/RV/RH/RM/RW/RR/EY/PD : 100V 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 2 hours 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		

Detector

Push

Slide

Rotary

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Power

Dual-in-line
Package TypeMulti Control
Devices

TACT Switch™

Custom-
Products

Note

We can raise the working temperature range for in-vehicle applications upon request. Contact us if you have any requirements of this kind.

Specifications of LED (SKHJ)

Color of light	Power dissipation P (mW)	Forward pulse peak current IFP (mA)	Forward current IFDC (mA)	Reverse voltage VR (V)	Forward voltage VF (V) IF=10mA	Reverse current IR (μA) VR=4V	Peak emission wave length λ peak (nm) IF=10mA	Spectral line half width Δλ (nm) IF=10mA	Luminous intensity IV (mcd) IF=10mA
Red	40	80	15	4	2.7 max. 2.05TYP	5 max.	700 TYP	100 TYP	0.4min. 1.0 TYP
Pure green									0.8min. 2.0 TYP
Amber									0.4min. 1.0 TYP
Orange (High brightness)				3	2.7 max. 2.0 TYP	10 max.	590 TYP	30 TYP	1.5min. 4.0 TYP
Green (High brightness)									4

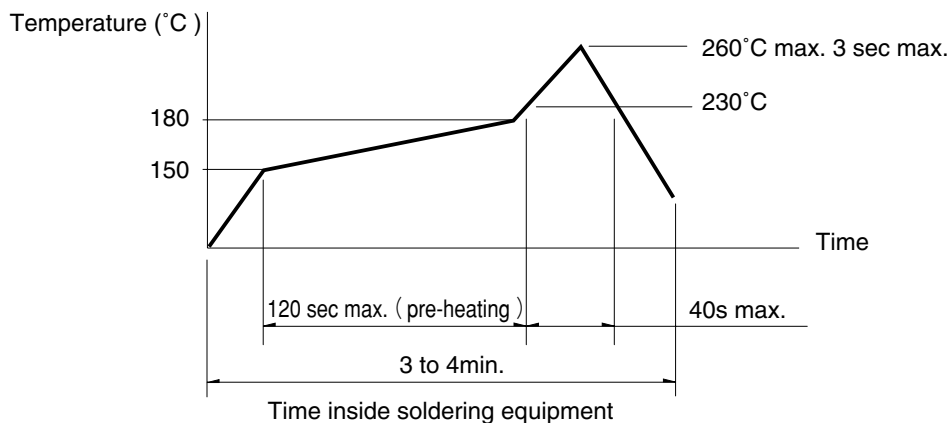
Sharp
FeelingSoft
FeelingSnap-in
TypeSurface
Mount TypeRadial
Type

Soldering Conditions

Condition for Reflow

Available for Surface Mount Type. (Except SKRM, SKRR Series)

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 soldering portion (copper foil surface). A heat resisting tape should be used for fixed measurement.
3. Temperature profile



Note

1. The condition mentioned above is the temperature 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 PC board's material, size, thickness, etc. The above-stated conditions shall also apply to switch surface temperatures.
2. Soldering conditions differ depending on reflow soldering machines. You are requested to verify the soldering conditions thoroughly beforehand.

Conditions for Auto-dip

Available for Snap-in Type and Radial Type
(Except SKHJ, SKHL, SKQC, SKQJ, SKQK, SKEG series)

Items	Condition
Flux built-up	Mounting surface should not be coated with flux
Preheating temperature	Ambient temperature of the soldered surface of PC board. 100°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Continuous dipping time	5s max.
Number of soldering	2times max.

Manual Soldering (Except SKRT series)

Items	Condition
Soldering temperature	350°C max.
Continuous soldering time	3s max.
capacity of soldering iron	60W max.

Notes

1. Consult with us for TACT Switch™ washing conditions.
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 returns to normal temperature.
5. Use the flux with a specific gravity of at least 0.81.
(EC-19S-8 by TAMURA Corporation, or their equivalents.)

Detector
Push
Slide
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Sharp Feeling
Soft Feeling
Snap-in Type
Surface Mount Type
Radial Type