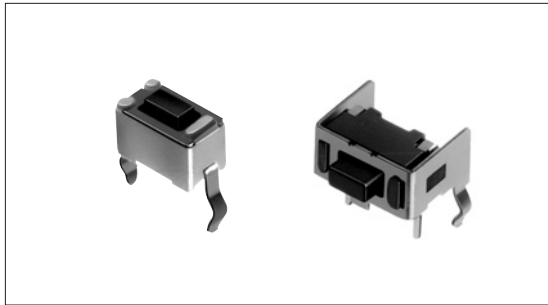


TACT Switch™ 6×3.5mm Compact (Snap-in type)

SKHL Series



A vertical and horizontal type switch contributing to high density mounting.



Features

- Snap-in type allows the switch to be mounted directly onto the PC board.

Applications

- For various operation in audio equipment, office devices, communication devices, measuring devices, TVs, VCRs and in-car components

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

Product Line

Vertical Type

Product 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			


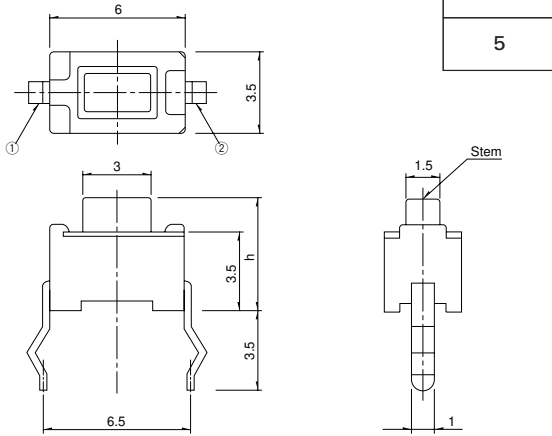
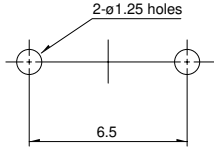

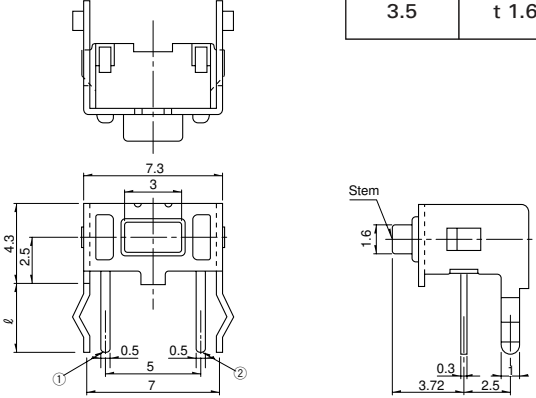
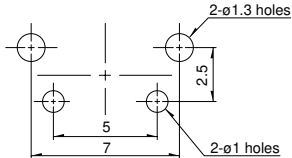
Horizontal Type

Product No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Rating (max.)	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			

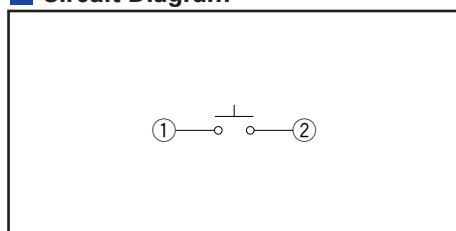
Refer to P.373 for product specifications.
Refer to P.374 for soldering conditions.

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 1098 517"> <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 1098 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



Product 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 1minute SKRE/SC/RB/RM/RW/RR/EY/PD : 100V AC for 1minute		
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		

Detector

Push

Slide

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Dual-in-line
Package TypeMulti Control
Devices

TACT Switch™

Custom-
Products

Note

The automotive operating temperature range to be individually discussed upon request.

Specifications of LED (SKHJ)

Color of illumination	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										10 max.	555 TYP	20 TYP	0.8min. 2.0 TYP
Amber													
Orange (High brightness)				4	630 TYP	40 TYP	1.5min. 4.0 TYP						
Green (High brightness)								2.7 max. 2.05TYP	565 TYP	30 TYP	2.0min. 5.0 TYP		

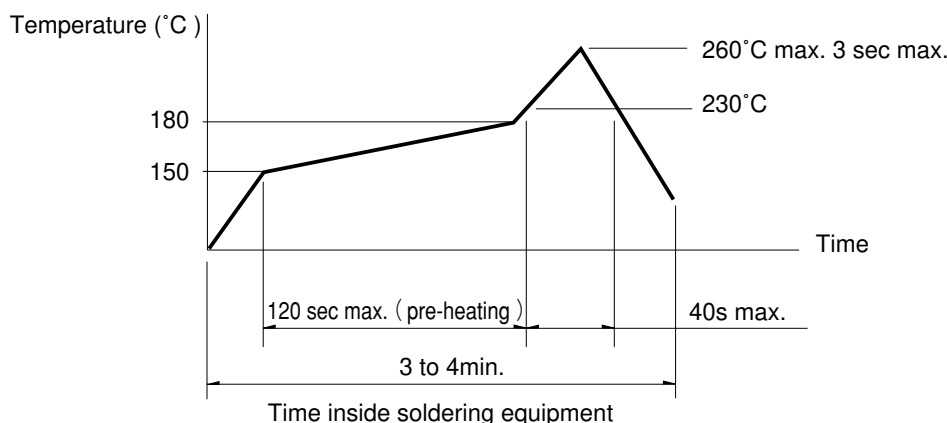
Sharp
FeelingSoft
FeelingSnap-in
TypeSurface
Mount TypeRadial
Type

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



Note

1. The above temperature shall be measured 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 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
(Except SKHJ, SKHL, 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	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times 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 min 0.81.
(EC-19S-8 by TAMURA Corporation, or equivalents.)

Manual Soldering (Except SKRT series)

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

Detector
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Slide
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Multi Control Devices
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Sharp Feeling
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Snap-in Type
Surface Mount Type
Radial Type