

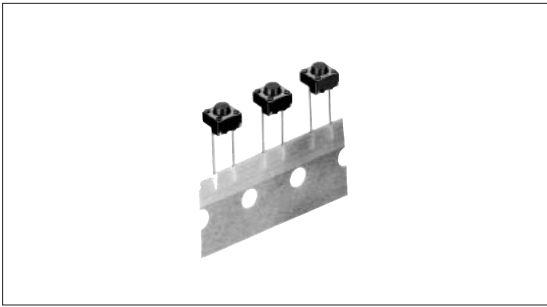
TACT Switch™ 6×6mm (Radial) Type

SKHV Series



Advantage in excellent mounting efficiency.

- Detector
- Push
- Slide
- Rotary
- Encoders
- Power



Features

- Supplied with radial taping.
- Allows automatic insertion onto PC board with the radial auto insertion machine.

Applications

- For operating various electronic devices such as audio devices, office equipment, communication devices, TVs, video recorders, automotive sets, etc.

- Dual-in-line Package Type
- Multi Control Devices
- TACT Switch™
- Custom-Products

Products Line

Products No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Rating (min.)	Operating life (5mA 5V DC)	Initial contact resistance	Stem color	Stem height
SKHVBAD010	0.98N	Vertical	0.25	50mA 12V DC	10μA 1V DC	1,000,000 cycles	100mΩ max.	Black	h=4.3mm
SKHVBD010	1.57N					500,000 cycles		Dark gray	
SKHVBCD010	2.55N					200,000 cycles		Red	
SKHVBDD010	0.98N					1,000,000 cycles		Black	h=5mm
SKHVBED010	1.57N					500,000 cycles		Dark gray	
SKHVBFD010	2.55N					200,000 cycles		Red	
SKHVCED010	5.10N					1,000,000 cycles		Yellow	h=7mm
SKHVBKD010	0.98N					500,000 cycles		Black	
SKHVBLD010	1.57N					200,000 cycles		Dark gray	
SKHVBMD010	2.55N					1,000,000 cycles		Red	h=9.5mm
SKHVBGD010	0.98N					500,000 cycles		Black	
SKHVBHD010	1.57N					200,000 cycles		Dark gray	
SKHVBJD010	2.55N					200,000 cycles		Red	

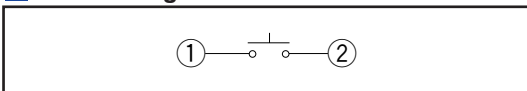
- Sharp Feeling
- Soft Feeling
- Snap-in Type
- Surface Mount Type
- Radial Type

Dimensions

Unit:mm

Style	PC board mounting hole dimensions (Viewed from switch mounting face)										
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4.3	3.5										
5	3.5										
7	3.3										
9.5	3										

Circuit Diagram



Note

Using a 1.6mm thick PC board is recommended.

For other specifications, see **P.369**
 For soldering conditions, see **P.370**
 For specifications for the taping package, see **P.372**

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

Encoders

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										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		

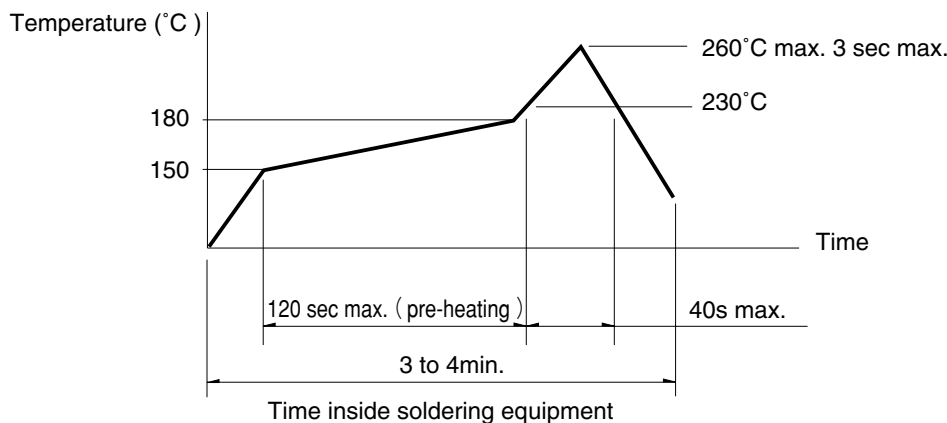
Sharp
FeelingSoft
FeelingSnap-in
TypeSurface
Mount TypeRadial
Type

Soldering Conditions

Condition for Reflow

Available for Surface Mount Type. (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
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Dual-in-line Package Type
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Sharp Feeling
Soft Feeling
Snap-in Type
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Specification of Radial Taping Package

Taping Packaging for Auto-insertion

The SKHV, SKQC, SKQK, SKQN, SKQW, SKRC, SKRG, SKRS, SKPD and SKPL series are delivered with taping packaging.

Box Size

Unit:mm

Series	A	B	C
SKHV SKQC SKQK SKRS SKPD SKQN	47	331	291
SKRGAL to AS	48	334	235
SKRGAA to AF	43		
SKPL			340
SKRC	55	337	370

Quantity Accommodated Per Box

Series	Qty/reel (pcs.) (Minimum packing unit)
SKHV SKQK	1,000
SKRS	700
SKQC	1,500
SKPD	800
SKRG	2,000
SKQN SKRC	900
SKPL	2,700

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Mount Type

Radial
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