

TACT Switch™ 12×12mm (Snap-in)Type

SKHC Series



Joint stem & flat stem with stable operation feeling.

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line
Package Type

Multi Control
Devices

TACT Switch™

Custom-
Products

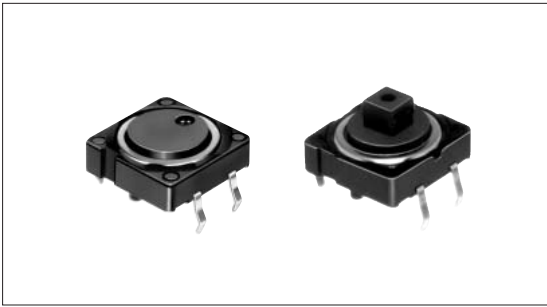
Sharp
Feeling

Soft
Feeling

Snap-in
Type

Surface
Mount Type

Radial
Type



Features

- Snap-in type, which can be directly mounted on PC board.
- Some of output terminals can be also used as jumper leads, thus making circuit design easy.
- Standard knobs are available.

Applications

- All types of audio devices, office equipment, communication equipment, measuring instruments, TV sets, video recorders, etc.


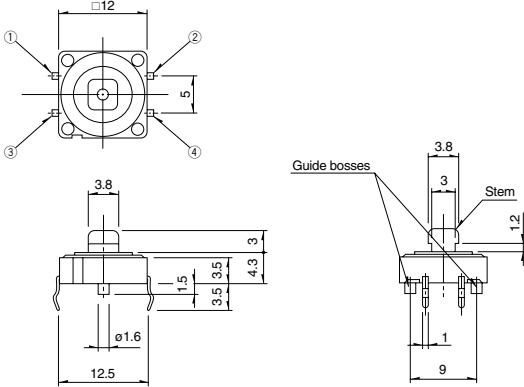
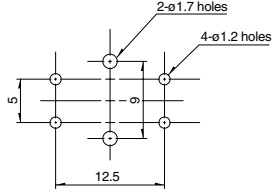

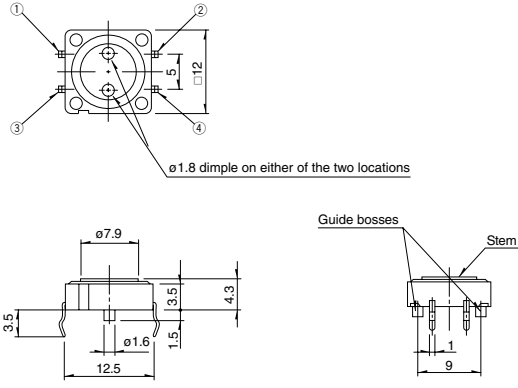
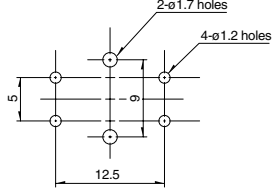
Products Line

Products No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Rating (min.)	Operating life (5mA 5V DC)	Initial contact resistance	Stem color	Variety	Minimum packing unit (pcs.)	Drawing No.
SKHCAEA010	0.74N	Vertical	0.3	50mA 12V DC	10μA 1V DC	500,000 cycles	100mΩ max.	Blue	Joint stem	1,000	1
SKHCAAA010	1.27N					1,000,000 cycles		Black			
SKHCACA010	2.55N					500,000 cycles		Dark gray			
SKHCAFA010	0.74N					500,000 cycles		Blue	Flat stem		
SKHCABA010	1.27N					1,000,000 cycles		Black			
SKHCADA010	2.55N					500,000 cycles		Dark gray			

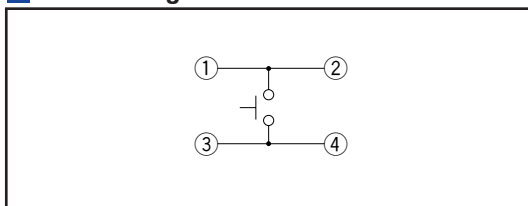
For other specifications, see P.369
For soldering conditions, see P.370
For standard knobs, see P.374

Dimensions

Unit:mm

No.	Photo	Style	PC board mounting hole dimensions (Viewed from switch mounting face)
1			
2			

Circuit Diagram



Note

Using a 1.6mm thick PC board is recommended.

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 Specifications

Items		Series	Sharp feeling type	Soft feeling type
		Operating temperature range		-20°C to +70°C SKHJ/HL/QJ/RR/RV/QC/QK
			-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		

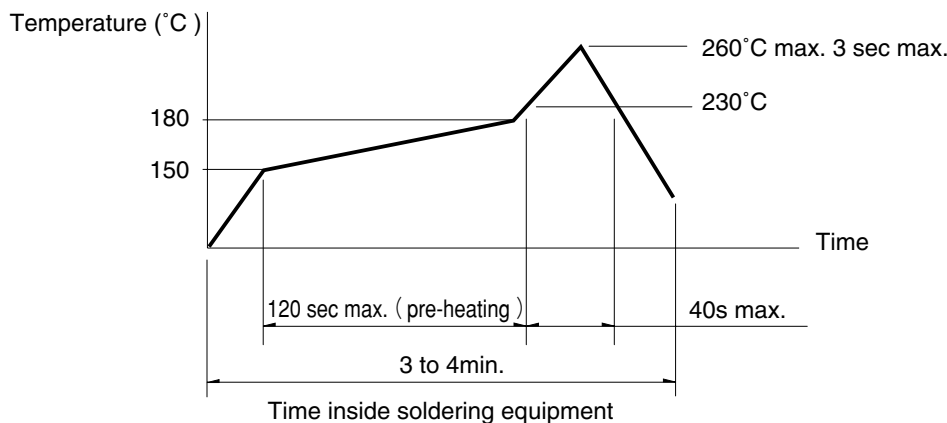
Sharp
FeelingSoft
FeelingSnap-in
TypeSurface
Mount TypeRadial
Type

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


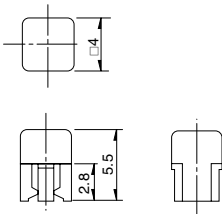

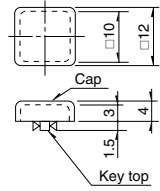
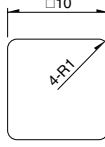

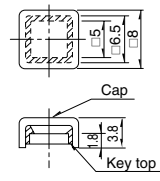
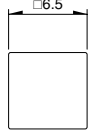
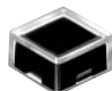
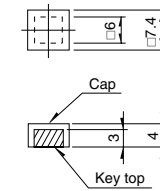
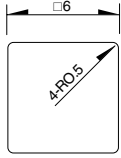
1. Consult with us for TACT Switch™ washing conditions.
2. Prevent flux penetration from the top side of the TACT Switch™.
3. Switch terminals and a PC board should not be coated with flux prior to soldering.
4. The second soldering should be done after the switch returns to normal temperature.
5. Use the flux with a specific gravity of at least 0.81.
(EC-19S-8 by TAMURA Corporation, or their equivalents.)

Detector
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 of Knob

Unit:mm

Applicable model	Dimensions		Variety			Label dimensions (Unit:mm)	
			Color	Model			
Detector			Keytop				
Push			Red Blue Ivory Black Yellow	SK2AA00410 SK2AA00420 SK2AA00430 SK2AA00440 SK2AA00450			
Slide							
Rotary							
Encoders							
Power			Cap			 Thickness 0.1	
Dual-in-line Package Type			Clear	SK2AA00510			
Multi Control Devices			Keytop		Keytop + Cap		
TACT Switch™			Red Blue Ivory Black	SK2AA00010 SK2AA00020 SK2AA00030 SK2AA00040			SK2AA00060 SK2AA00070 SK2AA00080 SK2AA00090
Custom-Products							
Applicable to joint stem type							
Sharp Feeling			Cap			 Thickness 0.1	
Soft Feeling			Clear	SK2AA00520			
Snap-in Type			Keytop		Keytop + Cap		
Surface Mount Type			Red Blue Ivory Black Yellow	SK2AA00210 SK2AA00220 SK2AA00230 SK2AA00240 SK2AA00250			SK2AA00260 SK2AA00270 SK2AA00280 SK2AA00290 SK2AA00300
Radial Type							
Applicable to joint stem type							
			Cap			 Thickness 0.1	
			Clear	SK2AA00540			
			Keytop		Keytop + Cap		
			Red Blue Ivory Black Yellow	SK2AA00310 SK2AA00320 SK2AA00330 SK2AA00340 SK2AA00350			SK2AA00360 SK2AA00370 SK2AA00380 SK2AA00390 SK2AA00400

Notes

1. The knob will be delivered with the switch, unmounted.
2. The label is not included.
3. For SK2AA00010 to SK2AA00090 type, check its mounting direction.

