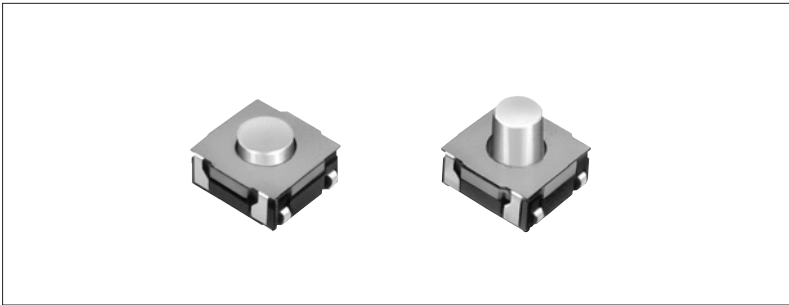


6.2×6.2mm TACT Switch with Middle Travel (SMD)

SKRA Series

Use of rubber stem contributes to 0.3 to 0.55mm middle travel.

- Power
- Push
- Slide
- Rotary
- Encoders



Car Use

- Jog Shuttle
- Telephone-hook
- Detector
- Vibration Sensors
- Dual-in-line Package Type
- Multi Control Devices

TACT

Sharp Feeling

Soft Feeling

Snap-in Type

Surface Mount Type

Radial Type

Features

- Stem is made of rubber, achieves excellent operability with pre-travel and over-travel.
- Reflow solderable.
- Packaged with a 12mm/16mm wide embossed taping.

Applications

- Electric home appliances
- Car navigation systems, car audio systems
- Operating switches in all types of electronic equipment such as audio apparatus, communication apparatus, measuring instruments, in-vehicle instruments, etc.

Products Line

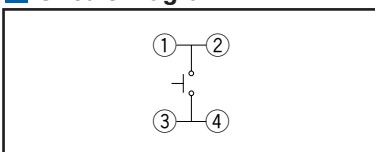
Products No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Operating life (5mA 5V DC)	Initial contact resistance	Stem color	Stem height
SKRAAAE010	2.45N	Vertical	0.3	50mA 12V DC	100,000cycles	100mΩ max.	White	h=3.4mm
SKRAABE010	3.92N		0.35					h=5.1mm
SKRAACE010	1.96N		0.5					
SKRAAFE010	3.43N		0.55					

Dimensions

Unit : mm

Style	PC board land dimensions (Viewed from switch mounting face)						
<table border="1" style="margin-left: 20px;"> <thead> <tr> <th>h</th> <th>A</th> </tr> </thead> <tbody> <tr> <td>3.4</td> <td>2.9</td> </tr> <tr> <td>5.1</td> <td>2.5</td> </tr> </tbody> </table>	h	A	3.4	2.9	5.1	2.5	
h	A						
3.4	2.9						
5.1	2.5						

Circuit Diagram



For detailed specifications, see P.413
 For soldering conditions, see P.414
 For specifications for the taping package, see P.416

Products Specifications

Items		Series	Sharp feeling type	Soft feeling type
		-20°C to +70°C		
Operating temperature range			-30°C to +85°C SKRM / RW	-30°C to +80°C SKPG
			-30°C to +90°C SKRA / RG / RP	-40°C to +90°C SKPF / PL / PM / PN
Rating (max.)			50mA 12V DC SKRP : 50mA 16V DC	5mA 12V DC SKPL/PM/PN : 50mA 16V DC
Rating (min.)		10 μA 1V DC		
Electrical performance	Insulation resistance	100MΩ SKEY/PD : 50MΩ		
	Voltage proof	250V AC for 1 min. SKRB/RH/RM/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		

Power

Push

Slide

Rotary

Encoders

Jog Shuttle

Telephone -hook

Detector

Vibration Sensors

Dual-in-line Package Type

Multi Control Devices

TACT

Sharp Feeling

Soft Feeling

Snap-in Type

Surface Mount Type

Radial Type

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)

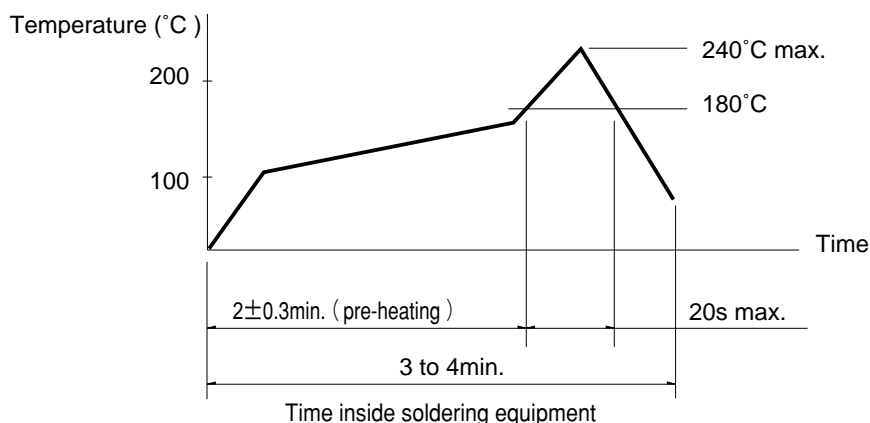
Color of light	Power dissipation	Forward pulse peak current	Forward current	Reverse voltage	Forward voltage	Reverse current	Peak emission wave length	Spectral line half width	Luminous intensity
	P (mW)	IFP (mA)	IFDC (mA)	VR (V)	VF (V) IF=10mA	IR (μA) VR=4V	λ peak (nm) IF=10mA	Δλ (nm) IF=10mA	IV (mcd) 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					2.7 max. 2.0 TYP	10 max.	555 TYP	20 TYP	0.8min. 2.0 TYP
Amber							590 TYP	30 TYP	0.4min. 1.0 TYP
Orange (High brightness)				630 TYP	40 TYP	1.5min. 4.0 TYP			
Green (High brightness)				4	2.7 max. 2.05TYP	565 TYP	30 TYP	2.0min. 5.0 TYP	

Soldering Conditions

Condition for Reflow

Available for Surface Mount Type. (Except SKHM 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



Notes

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. (Except a part of Variety SKRM, SKRR Series)
2. Soldering conditions differ depending on reflow soldering machines. You are requested to verify the soldering conditions thoroughly beforehand.
3. Ask us for the specifications of lead-free products.

Conditions for Auto-dip

Available for Snap-in Type and Radial Type

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	45s max.
Soldering temperature	255°C max.
Continuous dipping time	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 at least 0.83. (MH-820V or CF220V by TAMURA Corporation, or their equivalents.)

Manual Soldering

Available for Manual Soldering Type

Items	Condition
Soldering temperature	350°C max.
Continuous soldering time	3s max.

- Power
- Push
- Slide
- Rotary
- Encoders
- Jog Shuttle
- Telephone-hook
- Detector
- Vibration Sensors
- Dual-in-line Package Type
- Multi Control Devices

TACT

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

