

TACT Switch™ 7.8×7.8mm (Radial)Type

SKPD Series



Car Use
RoHS applicable

Varieties of 1mm, 1.2mm or 1.75mm travel support wide ranges of applications.

Detector

Push

Slide

Rotary

Encoders

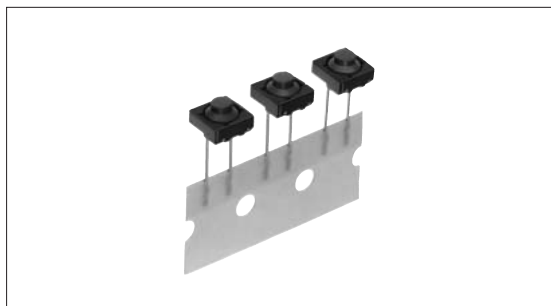
Power

Dual-in-line
Package Type

Multi Control
Devices

TACT Switch™

Custom-
Products



Features

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

Applications

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

Products Line

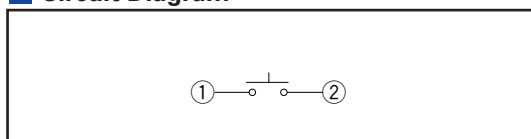
Products No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Rating (min.)	Operating life (5mA 5V DC)	Initial contact resistance	Rubber color	height
SKPDALD010	0.78N	Vertical	1	5mA 12V DC	10μA 1V DC	500,000 cycles	1kΩ max.	Light gray	h=5mm
SKPDAMD010	1.18N		1.2					Light blue	
SKPDACD010	2.45N		1.75			Blue		h=5.5mm	
SKPDAFD010	2.94N		Gray			h=6.1mm			

Dimensions

Unit:mm

Style	PC board mounting hole dimensions (Viewed from switch mounting face)

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		-20°C to +70°C SKHJ/HL/QJ/RR/RV/QC/QK
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		

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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										3	2.7 max. 2.0 TYP	10 max.	555 TYP	20 TYP	0.8min. 2.0 TYP
Amber															
Orange (High brightness)				4	2.7 max. 2.05TYP	10 max.	630 TYP	40 TYP	1.5min. 4.0 TYP						
Green (High brightness)										4	2.7 max. 2.05TYP	10 max.	565 TYP	30 TYP	2.0min. 5.0 TYP

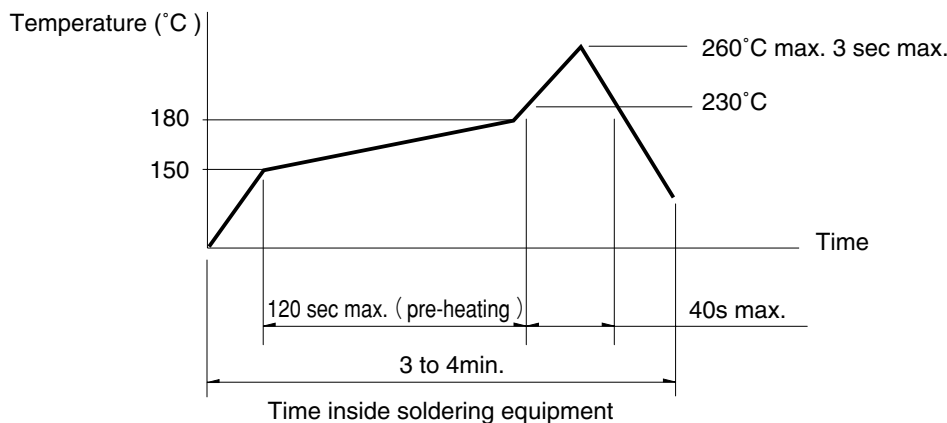
Sharp
FeelingSoft
FeelingSnap-in
TypeSurface
Mount TypeRadial
Type

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.)

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

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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