9mm Diameter Water-proof TACT Switch with Round Terminals (Radial)

SKRC Series

A round terminal type achieves efficient surface mounting and boasts excellent dustproof and water-proof capabilities.

Applications

proof characteristics

• Operating switches for washing machines and other

electronic technology-based machines that require water-



Features

Telephone -hook

Detector

Vibration

Dual-in-line

Package Type Multi Control Devices

Sensors

TACT

Sharp

Feeling Soft

Feeling

Snap-in Туре Surface

Radial Туре

- Swiches are supplied with radial taping.
- A round terminal is most suitable for radial auto-insertion/ mounting on the PC board. (Able to reduce switch rising when mounted, to reduce cutter wearing of the assembly machines.)
- Better solderability, free from terminal, cutting edge.

Products Line

| Products No. | Operating force | Operating direction | Travel (mm) | Rating (max.) | Operating life (5mA 5V DC) | Initial contact resistance | Stem color |
|--------------|--------------------|---------------------|----------------|------------------|-------------------------------|-------------------------------|------------|
| SKRCACD010 | 1.57N | Vertical | 0.25 | 50mA | 100.000cvcles | 500m Ω | Dark gray |
| SKRCADD010 | 2.55N | ventical | 0.25 | 12V DC | 100,000000000 | max. | Red |

Dimensions

Unit : mm PC board mounting hole dimensions Style (Viewed from switch mounting face) 12.7 Mount Type ø3.8 thh 12 10 Tholes ø0.5 3 5 5 <u>~</u> 12.7

Note

Using a 1.6mm thick PC board is recommended.



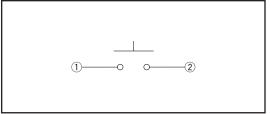
Water Resisting Performance

| Temperature of water | °00 | |
|----------------------|------|-------|
| Depth of water | 10cm | |
| Soaking time | 240h | Power |

Note

Performance described above is applicable only to swiches with terminal completely coated.

Circuit Diagram



Notes

- 1. After mounting a switch, apply coating until the terminal is completely covered by coating agents so that the intended waterproof performance may be maintained.
- 2. Please consult with us for further information about the coating agents.

Push

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Slide

Rotary

Encoders

Jog

Shuttle Telephone

-hook

Detector

Vibration Sensors Dual-in-line Package Type Multi Control

Devices

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 | | | |
| | | −30°C to +85°C SKRM / RW | -30℃ to +80℃ SKPG | Push | |
| | | −30°C to +90°C SKRA / RG / RP | -40℃ to +90℃ SKPF / PL / PM/ PN | Slide | |
| | Rating (max.) | 50mA 12V DC SKRP : 50mA 16V DC | 5mA 12V DC SKPL/PM/PN : 50mA 16V DC | Rotar | |
| Rating (min.) | | 10 µ A 1V DC | | Enco | |
| Electrical | Insulation resistance | 100ΜΩ SKEY/PD : 50MΩ | | | |
| performance Voltage proof | | 250V AC for 1 min. SKRB/RH/RM/RR/EY/PD : 100V AC for 1min. | | | |
| | Vibration 10 to 55 to 10Hz/min., the amplitude is 1.5mm for all the frequencies, in 3 direction of X, Y and Z for 2 hours respectively | | | Deteo | |
| Durability Lifetime | | Shall be in accordance with individual specifications. | | | |
| Cold -30±2°C for 96h | | | Dual-in-l Package | | |
| Environmental | | | | | |
| performance | Dry heat | 80±2℃ for 96h | | | |
| | Damp heat | 60±2℃, 90 to 95%RH for 96h | | | |

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 Δ λ (nm) IF=10mA | Luminous intensity IV(mcd) IF=10mA |
|-----------------------------|--------------------------------|--|--------------------------------|------------------------------|--|---------------------------------------|--|---|---|
| Red | 40 | | 15 | 4 | 2.7 max. 2.05TYP | 5 max. | 700 TYP | 100 TYP | 0.4min. 1.0 TYP |
| Pure green | | 40 80 | | | | 10 max. | 555 TYP | 20 TYP | 0.8min. 2.0 TYP |
| Amber | | | | | 2.7 max. | | 590 TYP | 30 TYP | 0.4min. 1.0 TYP |
| Orange (High brightness) | | | | 3 | 2.0 TYP | | 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 |

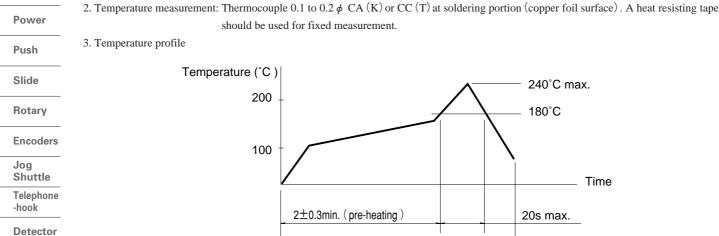
Sharp Feeling Soft Feeling Snap-in Type Surface Mount Type Radial Type

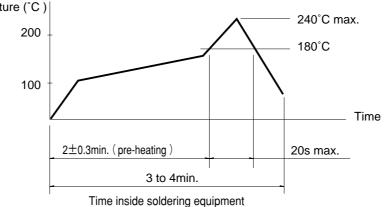
Soldering Conditions

Condition for Reflow

Available for Surface Mount Type. (Except SKHM Series)

1. Heating method: Double heating method with infrared heater.





Notes

Vibration

Sensors Dual-in-line Package Type

Multi Control

Devices

TACT

Sha

Feeli Soft

Feeli Snap

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Surfac Mount Radi

Туре

- 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.

| rp ing | Available for Snap-in Type and Radial Type | | | | | |
|--------------|--|--|--|--|--|--|
| ing | Items | Condition | | | | |
| p-in | Flux built-up | Mounting surface should not be coated with flax | | | | |
| ce t Type | Preheating temperature | Ambient temperature of the soldered surface of PC board. 100°C max. | | | | |
| al e | Preheating time | 45s max. | | | | |
| | Soldering temperature | 255°C max. | | | | |
| | Continuous dipping time | 5s max. | | | | |
| | Number of soldering | 2times max. | | | | |

Conditions for Auto-dip

Manual Soldering Available for Manual Soldering Type

| ltems | Condition |
|---------------------------|-----------|
| Soldering temperature | 350℃max. |
| Continuous soldering time | 3s 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.

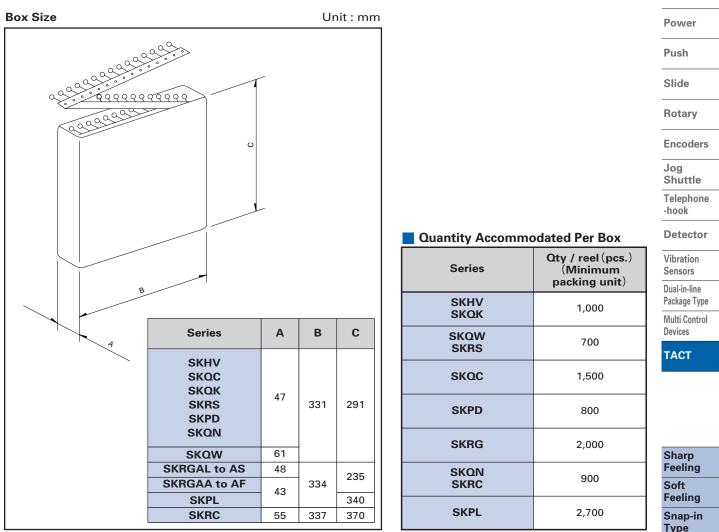
- The second soldering should be done after the switch returns to normal temperature. 4.
- 5. Use the flux with a specific gravity of at least 0.83.
- (MH-820V or CF220V by TAMURA Corporation, or their equivalents.)

ALPS

Specification of Radial Taping Package

Taping Packaging for Auto-insertion

The SKHV, SKOC, SKOK, SKON, SKOW, SKRC, SKRG, SKRS, SKPD and SKPL series are delivered with taping packaging.



Soft Feeling Snap-in Type Surface Mount Type Radial Type