

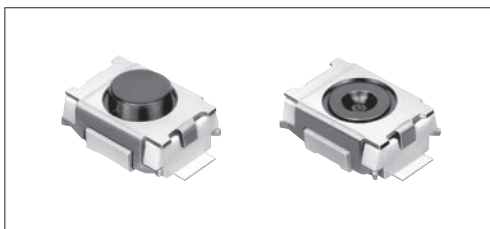
SKRK

3.9 × 2.9mm Compact (Surface Mount Type)

1.5mm or 2mm stem height contribute to smaller and thinner sets



Typical Specifications



Items	Specifications
Rating (max.)	50mA 12V DC
Rating (min.)	10μA 1V DC
Travel (mm)	0.13

Product Line

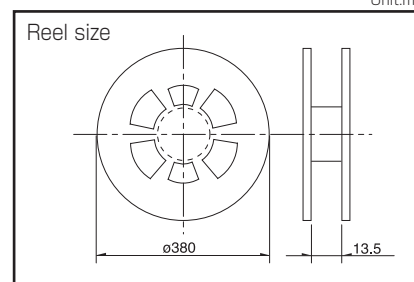
Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Initial contact resistance	Stem height	Minimum order unit (pcs.)		Drawing No.
						Japan	Export	
SKRKAEE010	1.57N	Top push	200,000 cycles	100mΩ max.	2mm	4,500	4,500	1
SKRKAHE010	0.98N			500mΩ max.				
SKRKAGE010	1.57N			100mΩ max.	1.5mm	5,000	5,000	2

Packing Specifications

Taping

Series	Number of packages (pcs.)			Tape width (mm)	Export package measurements (mm)
	1 reel	1 case / Japan	1 case / export packing		
SKRKA SKRKAH	4,500	45,000	45,000	12	401×401×214
SKRKAG	5,000	50,000	50,000		

Unit:mm



Note

For reels of 330mm diameter, please inquire.

Dimensions

Unit:mm

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

Refer to P.259 for soldering conditions.

ALPS

SKRK

3.9 × 2.9mm Compact (Surface Mount Type)

TACT switch™

Sharp Feeling

Soft Feeling

Snap-in Type

Surface Mount Type

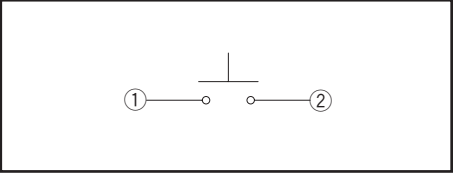
Radial Type























■ Dimensions

Unit:mm

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

■ Circuit Diagram



Type		Sharp Feeling Type							
		Surface Mount							
Series		SKSD	SKRN	SKSV	SKSW	SKSF	SKSM	SKSG	SKRK
Photo									
Features		Double action		Compact size Low-profile				High operation force Compact size	Compact size Low-profile
Water-proof		—	—	●	●	—	●	—	—
Dust-proof		—	—	●	●	—	●	—	—
IP standard		—	—	67 equivalency	67 equivalency	—	—	—	—
Operating direction	Top push	●	●	●	●	●	●	●	●
	Side push	—	—	—	—	—	—	—	—
Dimensions (mm)	W	4.1	□6	2.8	3	2.8	3.4	3	3.9
	D	3.9		1.9	2	2.4	2.9	2.7	2.9
	H	0.6		0.9	0.55	0.6	0.65	0.7	1.4
Operation force coverage	to 1N	See the relevant pages for respective product descriptions							
	1N to 2N								
	2N to 3N								
	3N to 4N								
	4N to 5N								
Travel (mm)		See the relevant pages for respective product descriptions		0.12	0.13	0.1		0.12	0.13
Ground terminal		●	●	—	—	—	—	○	—
Operating temperature range		−40℃ to +90℃		−30℃ to +85℃					−40℃ to +85℃
Automotive use		—	—	—	—	—	—	●	—
Life Cycle									
Electrical performance	Rating (max.) (Resistive load)	50mA 12V DC							
	Rating (min.) (Resistive load)	10μA 1V DC							
	Insulation resistance	100MΩ min. 100V DC 1min.					50MΩ min. 100V DC 1min.	100MΩ min. 100V DC 1min.	
	Voltage proof	100V AC 1min.	250V AC 1min.	100V AC 1min.					250V AC 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	−40℃ 96h							
	Dry heat	90℃ 96h							
	Damp heat	60℃, 90 to 95%RH 96h							
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W : Width. The most outer dimension excluding terminal portion.
D : Depth. The most outer dimension excluding terminal portion.
H : Height. The minimum dimension if there are variances.

TACT Switch™ Soldering Conditions	259
TACT Switch™ Cautions	260

Notes

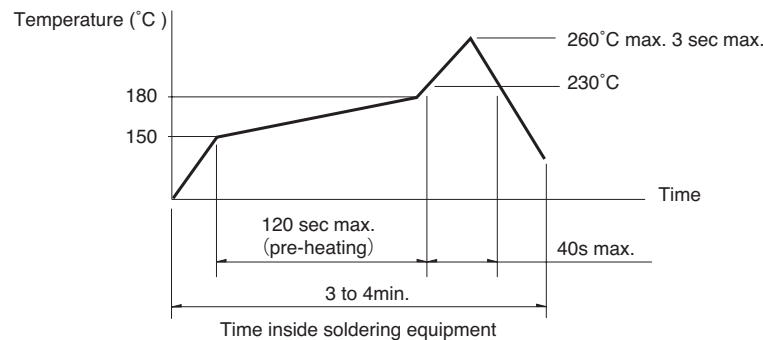
- The automotive operating temperature range to be individually discussed upon request.
- Indicates applicability to all products in the series, while ○ indicates applicability to some products in the series.

TACT Switch™ Soldering Conditions

Condition for Reflow

Available for Surface Mount Type.

1. Temperature measurement: Thermocouple ϕ 0.1 to 0.2 CA (K) or CC (T) at solder joints (copper foil surface).
A heat resistive tape should be used to fix thermocouple.
2. Temperature profile



Notes

1. The above temperature shall be measured of the top of switch. There are cases where the PC board's temperature greatly differs from that of the switch, depending on the material, size, thickness of PC boards and others.
The above-stated conditions shall also apply to switch surface temperatures.
2. Soldering conditions differ depending on reflow soldering machines.
Prior verification of soldering condition is highly recommended.

Conditions for Auto-dip

Available for Snap-in Type and Radial Type.

Items	Condition
Flux built-up	Mounting surface should not be exposed to flux
Preheating temperature	Ambient temperature of the soldered surface of PC board. 100°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHH, SKPD Series

Items	Condition
Flux built-up	Mounting surface should not be exposed to flux
Preheating temperature	Ambient temperature of the soldered surface of PC board. 110°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKQJ, SKQK, SKEG Series

Items	Condition
Flux built-up	Mounting surface should not be exposed to flux
Preheating temperature	Ambient temperature of the soldered surface of PC board. 100°C max.
Preheating time	45s max.
Soldering temperature	255°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

Notes

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

Manual Soldering

Items	Condition
Soldering temperature	350°C max.
Duration of soldering	3s max.
Capacity of soldering iron	60W max.

SKHH, SKHW, SKRG, SKPD Series

Items	Condition
Soldering temperature	360°C max.
Duration of soldering	3s max.
Capacity of soldering iron	60W max.

SKTD, SKTG, SKQJ, SKQK, SKEG Series

Items	Condition
Soldering temperature	350°C max.
Duration of soldering	3s max.
Capacity of soldering iron	20W max.

TACT Switch™

Sharp Feeling

Soft Feeling

Snap-in Type

Surface Mount Type

Radial Type