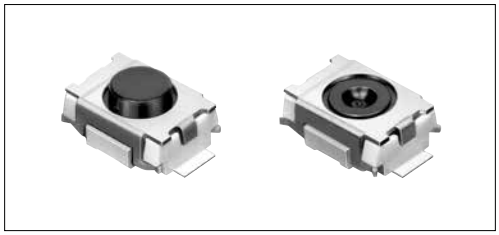
SKRK 3.9 × 2.9mm Compact (Surface Mount Type)

1.5mm or 2mm 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

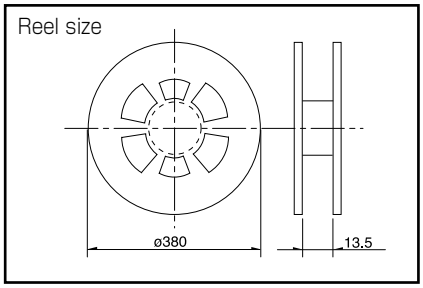
Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Initial contact resistance	Height	Minimum order unit (pcs.)		Drawing No.
						Japan	Export	
SKRKAEE020	1.57N	Top push	200,000 cycles	100mΩ max.	2mm	4,500	4,500	1
SKRKAHE020	0.98N			500mΩ max.				
SKRKAGE020	1.57N			100mΩ max.	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		
SKRKAE SKRKAH	4,500	45,000	45,000	12	395×395×205
SKRKAG	5,000	50,000	50,000		

Unit:mm

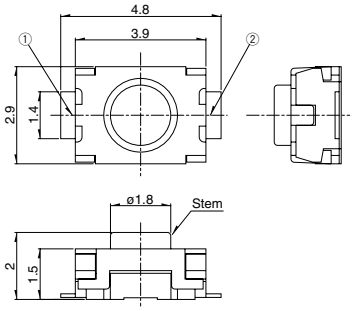
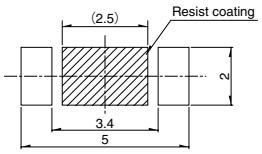


Note

For reels of 330mm diameter, please inquire.

Dimensions

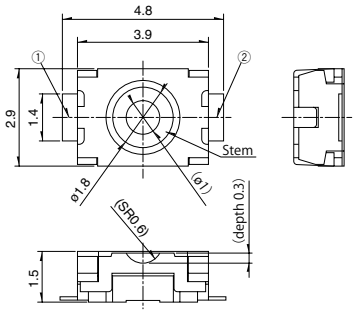
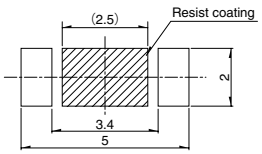
Unit:mm

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

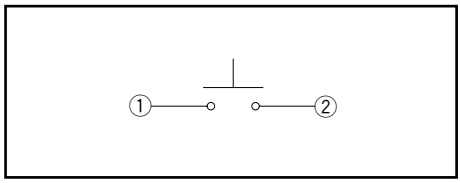
Refer to P.249 for soldering conditions.

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		**SKRK**	**SKTH**	**SKRP**	**SKQM**	**SKQY**	**SKTQ**	**SKTR**	**SKSU**
Photo							NEW 	NEW 	
Features		Compact size Low-profile	Compact size	High operation force Compact size	Compact size		Middle travel		
Water-proof		—	—	—	—	—	—	—	●
Dust-proof		—	●	—	—	—	—	—	●
IP standard		—	—	—	—	—	—	—	67 equivalent
Operating direction	Top push	●	●	●	●	●	●	●	●
	Side push	—	—	—	—	—	—	—	—
Dimensions (mm)	W	3.9	3.5	4.2	6	6.1	5.3	□6.1	5.3
	D	2.9	3.2		3.5	3.7	5.4		5.4
	H	1.5⁄2	1.8/2.5	2.5	4.3/5	2.5	4.25	4.1	3.85/4.34
Operation force coverage	1N max.	↕			↕	↕			
	1N to 2N	↕	↕	↕	↕	↕			
	2N to 3N		↕	↕	↕	↕			
	3N to 4N		↕	↕		↕	↕	↕	↕
	4N to 5N		↕	↕			↕		
Travel (mm)		0.13	0.12	0.2	0.25		0.71	0.72	0.7/0.9
Ground terminal		—	—	—	—	○	—	—	—
Operating temperature range		−40℃ to +85℃	−40℃ to +90℃						
Automotive use		—	●	●	●	●	●	●	●
Life Cycle		2	2	3	2	2	3	3	3
Electrical performance	Rating (max.) (Resistive load)	50mA 12V DC	25mA 16V DC	50mA 16V DC	50mA 12V DC		50mA 16V DC		
	Rating (min.) (Resistive load)	10μA 1V DC							
	Insulation resistance	100MΩ min. 100V DC 1min.							
	Voltage proof	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		−40℃ 1,000h	−40℃ 96h		−40℃ 1,000h		
	Dry heat	90℃ 96h		90℃ 1,000h	90℃ 96h		90℃ 1,000h		
	Damp heat	60℃, 90 to 95%RH 96h		60℃, 90 to 95%RH 1,000h	60°C, 90 to 95%RH 96h		60°C, 90 to 95%RH 1,000h		
Page		218	220	222	224	225	227	228	229

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.

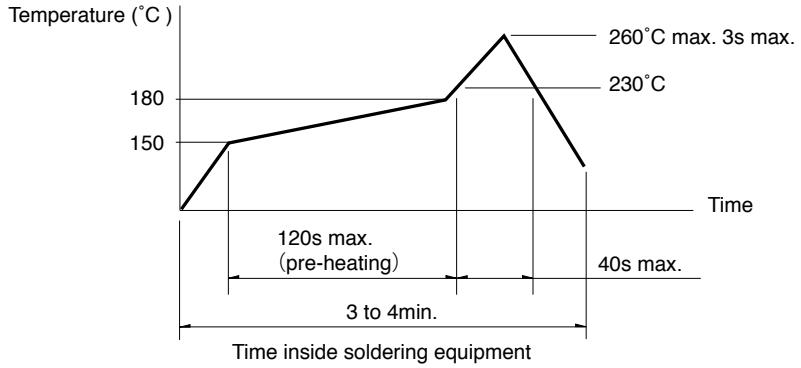
TACT Switch™ Soldering Conditions · · · · · · · · · · 249
TACT Switch™ Cautions · · · · · · · · · · 250

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

Condition for Reflow

Available for Surface Mount Type.

Temperature profile



Notes

1. Please confirm the specifications of our product for the detailed condition.
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℃ max.
Preheating time	60s max.
Soldering temperature	260℃ max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHH 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℃ max.
Preheating time	60s max.
Soldering temperature	260℃ max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHLTop Push Type, **SKQJ 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℃ max.
Preheating time	45s max.
Soldering temperature	255℃ max.
Duration of immersion	5s max.
Number of soldering	2times max.

Manual Soldering

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

SKHH, SKHW Series

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

SKTD, SKTG, SKQJ Series

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

Mouser Electronics

Authorized Distributor

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ALPS:

SKRKAEE020 SKRKAGE020 SKRKAHE020