

SKRN Series



0.9mm low-profile switch with double action.



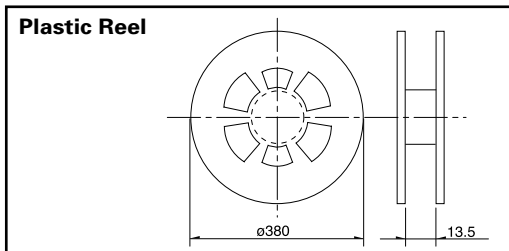
Product Line

Product No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Rating (min.)	Operating life (5mA 5V DC)	Initial contact resistance	Variety	Minimum order unit (pcs.)						
SKRNP AE010	1st 0.78N 2nd 2.45N	Vertical	1st 0.25 All 0.4	50mA 12V DC	10μ A 1V DC	30,000cycles	100mΩ max.	Without guide bosses	5,000						
SKRNP BE010								With guide bosses							
SKRNP CE010	1st 0.78N 2nd 1.57N														
SKRNP DE010	100,000cycles					Without guide bosses									
SKRNP EE010						1st 0.59N 2nd 1.57N									
SKRNP ME010													With guide bosses		

Specification of Embossed Taping Package (Taping Packaging for Auto-insertion)

Reel Size

Unit:mm



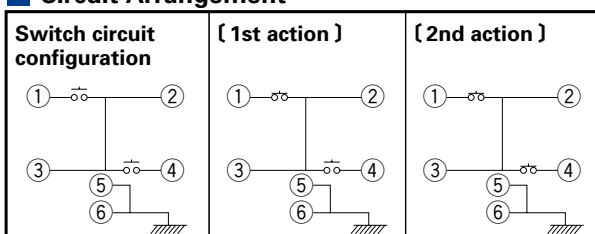
Number of packages(pcs.)			Tape width (mm)
1 reel	1 case /Japan	1 case /export packing	
5,000	50,000	50,000	12

Dimensions

Unit:mm

Style	PC board mounting hole and land dimensions (Viewed from switch mounting face)
Technical drawing of the switch assembly showing top, side, and detail views. The top view shows a square base with dimensions 6.4, 6, 4.5, 4.3, 4, and 4.3. It includes numbered callouts 1 through 6. A note indicates "ø1 Recommended activation area by set knob". The side view shows a height of 0.9 and a base width of 0.6. A detail view shows a hole with a diameter of ø0.85 and a land width of 0.4.	Technical drawing of the PC board mounting hole and land dimensions. It shows a square footprint with dimensions 7, 4.8, 1, 1.25, 6.8, 5.4, 1.45, 0.6, 3.5, 5.5, and 0.95. It includes labels for "Ground terminal land", "ø0.75 hole", and "ø0.95 hole".

Circuit Arrangement



Note

1. Please place purchase orders for taping products per minimum order unit (1 reel or a case).
2. For $\phi 330\text{mm}$ diameter reel requirements, please contact us.

Refer to **P.306** for soldering conditions.

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line
Package Type

TACT Switch™

Custom-Products

Sharp Feeling

Soft Feeling

Snap-in
Type

Surface Mount Type

Radial
Type

List of Varieties

Sharp Feeling Type

Series			SKSD	SKRN	SKSE	SPEE	SKRK	SKRP	SKQM	SKQY	SKRA	SKHM	SKHU
Photo													
Type			Surface mount										
Features			Double action		Horizontal type Double action		Compact size Low-profile	High operation force Compact size	Compact size		Middle stroke	—	Dust-proof type is available
Operating direction	Vertical		•	•	—		•	•	•	•	•	•	•
	Horizontal		—		•	•	—						
Dimensions (mm)		W	4.1	□ 6	5.9	4	3.9	4.2	6	6.1	□ 6.2	6.2	
		D	3.9		2.87	5	2.9	3.2	3.5	3.7		6.5	
		H	0.6	0.9	3	1.22	1.5	2.5	4.3	2.5	3.4	3.1	2.5
Operation force coverage		1N	See the relevant pages for respective product descriptions				↕	↕	↕	↕	↕	↕	↕
		5N											
Ground terminal			•	•	•	—			•	—	•	•	
Operating temperature range			-30 to +85			-10 to +60		-30 to +85					
Electrical performance	Insulation resistance		100MΩ min. 100V DC			10MΩ min. 100V DC		100MΩ min. 100V DC					
	Voltage proof		250V AC for 1min. SKSD/SE : 100V AC for 1min.			100V AC for 1min.		250V 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 2hours respectively										
	Lifetime		Shall be in accordance with individual specifications.										
Environmental performance	Cold		-30 ± 2 for 96h			-40 ± 2 for 96h		-30 ± 2 for 96h					
	Dry heat		80 ± 2 for 96h			85 ± 2 for 96h		80 ± 2 for 96h					
	Damp heat		60 ± 2 , 90 to 95%RH for 96h			40 ± 2 , 90 to 95%RH for 96h		60 ± 2 , 90 to 95%RH for 96h					
Page			278	279	280	84	281	282	283	284	285	286	287

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 Conditions306
- TACT Switch™ Cautions307
- Product Line of Knob for TACT Switch™308

Note

The automotive operating temperature range to be individually discussed upon request.

Detector

Push

Slide

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Encoders

Power

Dual-in-line
Package Type

TACT Switch™

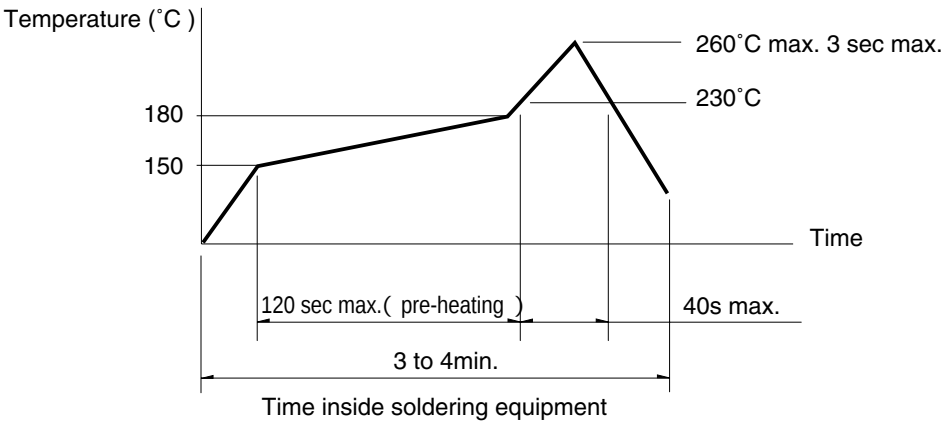
Custom-
ProductsSharp
FeelingSoft
FeelingSnap-in
TypeSurface
Mount TypeRadial
Type

Soldering Conditions

Condition for Reflow

Available for Surface Mount Type.

- 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 solder joints(copper foil surface). A heat resistive tape should be used to fix thermocouple.
- 3. Temperature profile



Note

- 1. The above temperature shall be measured 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 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
(Except SKHJ, SKHL, 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 max.
Preheating time	60s max.
Soldering temperature	260 max.
Duration of immersion	5s max.
Number of soldering	2times max.

Manual Soldering (Except SKRT Series)

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

Notes

- 1. Consult with us for availability of TACT Switch™ washing.
- 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 is stable with normal temperature.
- 5. Use the flux with a specific gravity of min 0.81.
(EC-19S-8 by TAMURA Corporation, or equivalents.)