## 6mm Square Low-profile Double Action (Surface Mount Type)

**SKRN** Series



### 0.9mm low-profile switch with double action.



**Detector** 

Push

Slide

**Rotary** 

**Encoders** 

Power

Dual-in-line Package Type

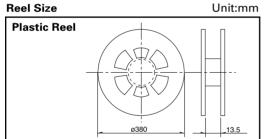
TACT Switch™

Custom-**Products** 

#### 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.)
SKRNPAE010	1st 0.78N 2nd 2.45N 1st 0.78N 2nd 1.57N		1st 0.25 All 0.4	50mA 12V DC	10 <i>μ</i> Α 1V DC	30,000cycles	100m max.	Without guide bosses	5,000
SKRNPBE010								With guide bosses	
SKRNPCE010		Vertical							
SKRNPDE010								Without guide bosses	
SKRNPEE010	1st 0.59N					100,000cycles			
SKRNPME010	2nd 1.57N							With guide bosses	

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

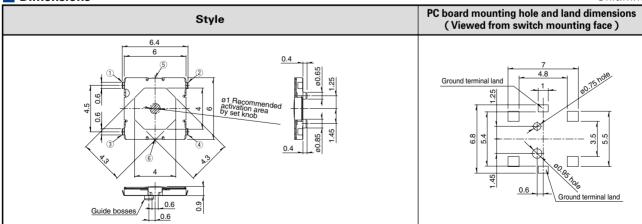


Numl					
1 reel	1 case /Japan	1 case /export packing	Tape width (mm)		
5,000	50,000	50,000	12		

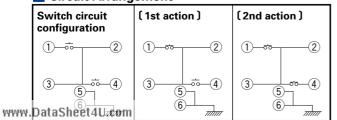
Feeling Soft **Feeling** Snap-in Type Surface Mount Type Radial

Type

Dimensions



Circuit Arrangement



#### Note

- 1. Please place purchase orders for taping products per minimum order unit (1 reel or a case).
- 330mm diameter reel requirements, please contact us.

Refer to P.306 for soldering conditions.

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## **List of Varieties**

#### Sharp Feeling Type

Sharp reening Type														
Series		SKSD	SKRN	SKSE	SPEE	SKRK	SKRP	SKQM	SKQY	SKRA	sкнм	SKHU		
Photo				100	San P									
Туре		Surface mount												
Features		Double	action		ital type action	Compact size High operation force Low-profile Compact size Middle stroke			Dust-proof type is available					
Opei dire	Vertical													
Operating direction	Horizontal										l	ı		
	nsions	w	4.1		5.9	4	3.9	4.2	6	6.1	6.2	6	6.2	
		D	3.9	6	2.87	5	2.9	3.2	3.5	3.7		6	6.5	
		Н	0.6	0.9	3	1.22	1.5	2.5	4.3	2.5	3.4	3.1	2.5	
Operation force coverage		See the relevant pages for respective product descriptions			pective	<b>‡</b>	1	1	1	1	1	1		
Ground terminal						l								
Operating temperature range		-30	-10 to +85 -30 to +85											
Electrical performance	Insul resist	ation tance	100M	min. 10	0V DC	10M min. 100V DC	100M min. 100V DC							
rical nance				V AC for 1i : 100V AC		100V AC for 1min.								
Durability	Vibra	ation	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											
bility	Lifet	time			Sh	all be in a	accordance with individual specifications.							
Environmenta performance	Co	old	-30	±2 for	96h	-40 ± 2 for 96h	−30 ± 2 for 96h							
	Dry	heat	80	±2 for 9	96h	85 ± 2 for 96h	80 ± 2 for 96h							
ntal	Damp	heat	60 ± 2	, 90 to 95° 96h	%RH for	40 ± 2 , 90 to 95%RH for 96h		60 ± 2 , 90 to 95%RH for 96h			n			
Page			278	279	280	84	281	282	283	284	285	286	287	
								A /: 1-1 T1						

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 .......306 TACT Switch™ Cautions .......307 

#### Note

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

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

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**Encoders** 

Power

Dual-in-line Package Type

TACT Switch<sup>11</sup>

Custom-

**Products** 

Sharp Feeling

Soft

**Feeling** 

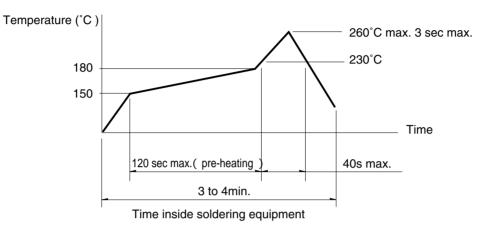
Snap-in Type Surface Mount Type Radial Type

## **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 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 fluk				
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  $\tilde{S}$ witch $^{TM}$ .
- 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.)