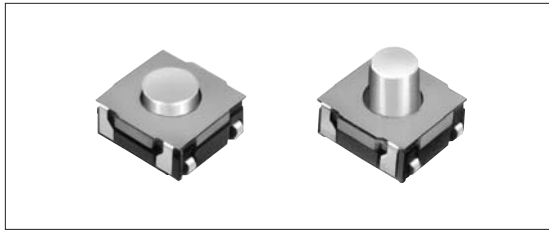


# TACT Switch™ 6.2mm Square with Middle-travel (Surface Mount Type)

SKRA Series



Rubber stem helps to achieve travel of 0.3 to 0.55mm & over travel.

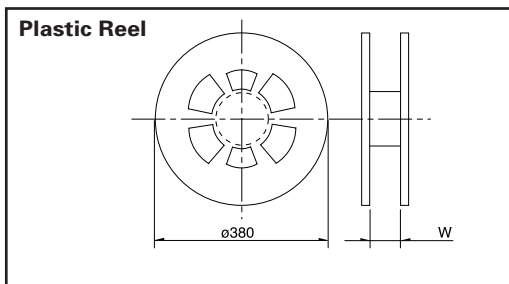


## Product Line

Product No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Rating (min.)	Operating life (5mA 5V DC)	Initial contact resistance	Stem color	Stem height	Minimum order unit (pcs.)
SKRAAKE010	2.45N	Vertical	0.3	50mA 12V DC	10μ A 1V DC	100,000cycles	100mΩ max.	White	h=3.4mm	3,000
SKRAALE010	3.92N		0.35						h=5.1mm	
SKRAAME010	1.96N		0.5							
SKRAAQE010	3.43N		0.55					Blue		

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

Reel Size Unit:mm



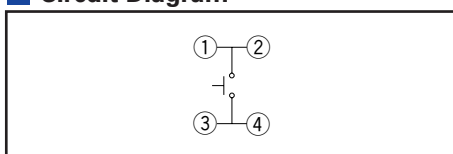
Series	Number of packages (pcs.)			Real width W (mm)	Tape width (mm)
	1 reel	1 case /Japan	1 case /export packing		
SKRAAK SKRAAL	3,000	30,000	30,000	13.5	12
SKRAAM SKRAAQ	1,400	11,200	11,200	17.5	16

## Dimensions

Unit:mm

Style	PC board land dimensions (Viewed from switch mounting face)						
<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>h</th> <th>A</th> </tr> </thead> <tbody> <tr> <td>3.4</td> <td>2.9</td> </tr> <tr> <td>5.1</td> <td>2.5</td> </tr> </tbody> </table>	h	A	3.4	2.9	5.1	2.5	
h	A						
3.4	2.9						
5.1	2.5						

## Circuit Diagram



## Note

- Please place purchase orders for taping products per minimum order unit (1 reel or a case).
- For  $\phi$  330mm 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	100M min. 100V DC			10M min. 100V DC		100M 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 Conditions .....306  
 TACT Switch™ Cautions .....307  
 Product Line of Knob for TACT Switch™ .....308

### 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

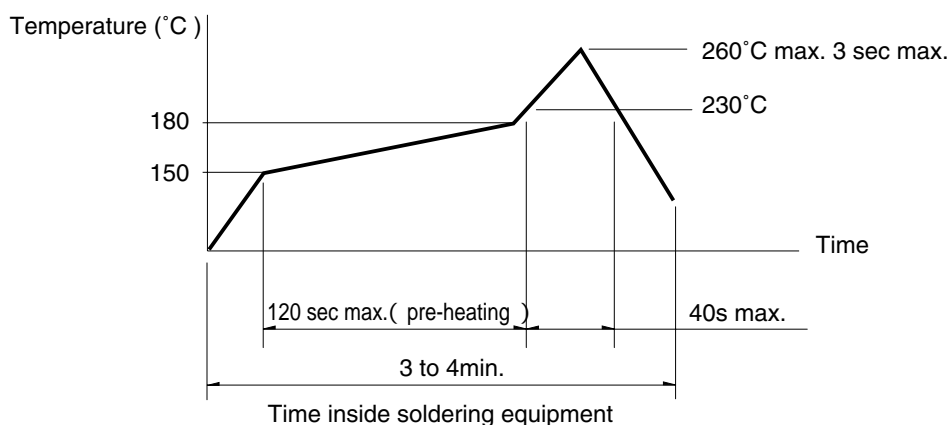
Radial  
Type

## 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 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. )

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