

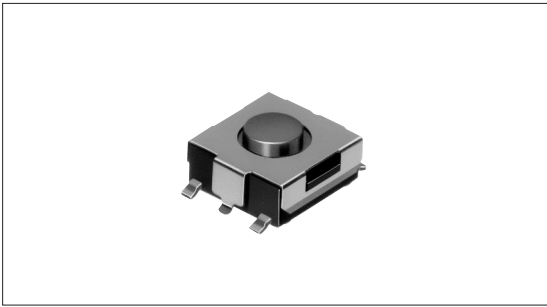
# TACT Switch™ 6.2 × 6.5mm (Surface Mount Type)

SKHM Series



Total height of 3.1mm. Surface mount package with ground terminal.

- Detector
- Push
- Slide
- Rotary
- Encoders
- Power



- Dual-in-line Package Type
- TACT Switch™
- Custom-Products

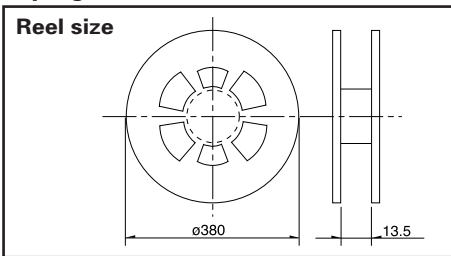
## Product Line

Product No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Rating (min.)	Operating life (5mA 12V DC)	Initial contact resistance	Stem color	Minimum order unit (pcs.)
SKHMQKE010	0.98N	Vertical	0.25	50mA 12V DC	10μA 1V DC	500,000cycles	100mΩ max.	Black	3,000
SKHMQLE010	1.57N					300,000cycles		Green	
SKHMQME010	2.35N					200,000cycles		Red	

## Packing Specifications

### Taping

Unit:mm



Number of packages (pcs.)			Tape width (mm)	Export package measurements (mm)
1 reel	1 case /Japan	1 case /export packing		
3,000	30,000	30,000	12	401 × 401 × 214

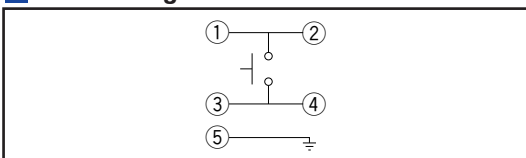
- Sharp Feeling
- Soft Feeling
- Snap-in Type
- Surface Mount Type
- Radial Type

## Dimensions

Unit:mm

Style	PC board land dimensions (Viewed from switch mounting face)

## Circuit Diagram














## Notes

1. Please place purchase orders per minimum order unit N (integer).
2. For φ330mm diameter reel requirements, please contact us.

Refer to P.334 for soldering conditions.

# List of Varieties

## Sharp Feeling Type

Series	SKRN	SKSE	SPEE	SKSF	SKSG	SKRK	SKRP	SKQM	SKQY	SKRA	SKHM	
Photo												
Type	Surface mount											
Features	Double action	Horizontal type Double action		Compact size Low-profile	High operation force Compact size	Compact size Low-profile	High operation force Compact size	Compact size		Middle travel	—	
Operating direction	Vertical	●	—		●	●	●	●	●	●	●	
	Horizontal	—	●	●	—							
Dimensions (mm)	W	□6	5.9	4	2.8	3	3.9	4.2	6	6.1	□6.2	6.2
	D		2.87	5	2.4	2.7	2.9	3.2	3.5	3.7		6.5
	H	0.9	3	1.22	0.65	1.4	1.5	2.5	4.3	2.5	3.4	3.1
Operation force coverage	1N	See the relevant pages for respective product descriptions			●	↕	↕	↕	↕	↕	↕	
	5N					↕	↕	↕	↕	↕	↕	
Travel (mm)	See the relevant pages for respective product descriptions			0.1	0.12	0.13	0.2	0.25		See the relevant pages for respective product descriptions	0.25	
Ground terminal	●	—			●	—			●	—	●	
Operating temperature range	-30°C to +85°C		-10°C to +60°C		-30°C to +85°C							
Automotive use	—				○	—	●	●	●	○	—	
Electrical performance	Insulation resistance	100MΩ min. 100V DC		10MΩ min. 100V DC	100MΩ min. 100V DC							
	Voltage proof	250V 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°C for 96h		-40±2°C for 96h		-30±2°C for 96h						
	Dry heat	80±2°C for 96h		85±2°C for 96h		80±2°C for 96h						
	Damp heat	60±2°C, 90 to 95%RH for 96h		40±2°C, 90 to 95%RH for 96h		60±2°C, 90 to 95%RH for 96h						
Page	306	307	102	308	309	310	311	312	313	314	315	

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 .....334
- TACT Switch™ Cautions .....335
- Product Line of Knobs for TACT Switch™ .....336

### Notes

- The automotive operating temperature range to be individually discussed upon request.
- marks in "Available for automotive use" indicate that some of the series products can work at the operating temperature range from -40°C to +85°C, ●marks in "Available for automotive use" indicate that all of the series products can work at the operating temperature range from -40°C to +85°C.

Detector  
 Push  
 Slide  
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 Dual-in-line Package Type  
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 Custom-Products

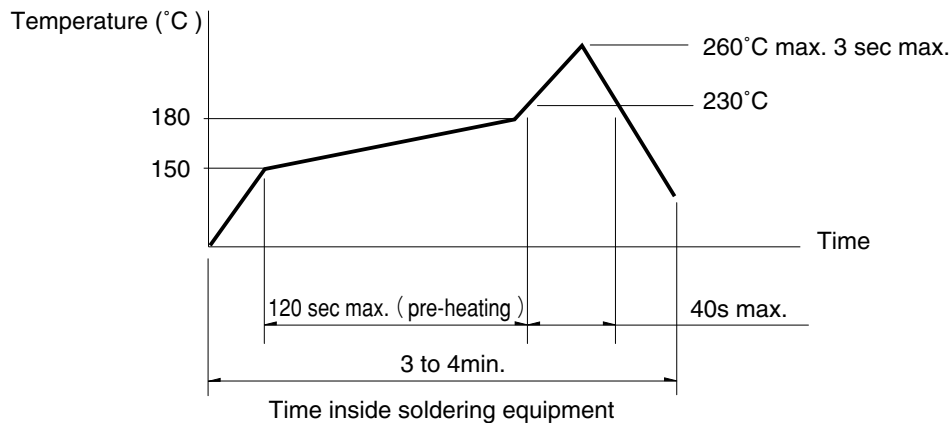
Sharp Feeling  
 Soft Feeling  
 Snap-in Type  
 Surface Mount Type  
 Radial Type

## 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  $\phi$  CA (K) or CC (T) at solder joints (copper foil surface). A heat resistive tape should be used to fix thermocouple.
3. 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  
(Except, 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°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times 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.)

### Manual Soldering (Except SKRT Series)

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

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line  
Package Type

TACT Switch™

Custom-  
ProductsSharp  
FeelingSoft  
FeelingSnap-in  
TypeSurface  
Mount TypeRadial  
Type