

# 6.2 × 6.5mm (Surface Mount Type)



# Total hight of 3.1mm. Surface mount package with ground terminal.



## Typical Specifications

- Typical opecinications			
Items	Specifications		
Rating (max.)	50mA 12V DC		
Rating (min.)	10μA 1V DC		
Initial contact resistance	100mΩ max.		
Travel (mm)	0.25		

**Detector** 

Push

Slide

**Rotary** 

**Encoders** 

Power

Dual-in-line

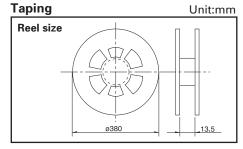
Package Type

TACT Switch™

### Product Line

Product No.	Operating force	Operating direction	Operating life	Stem color	Minimum ord	rder unit (pcs.)	
Product No.	Operating force	Operating direction	(5mA 12V DC)	Stelli color	Japan	Export	
SKHMQKE010	0.98N		500,000cycles	Black			
SKHMQLE010	1.57N	Toppush	300,000cycles	Green	3,000	3,000	
SKHMQME010	2.35N		200,000cycles	Red			

# Packing Specifications



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

### Feeling Soft

Sharp

Feeling Snap-in Type

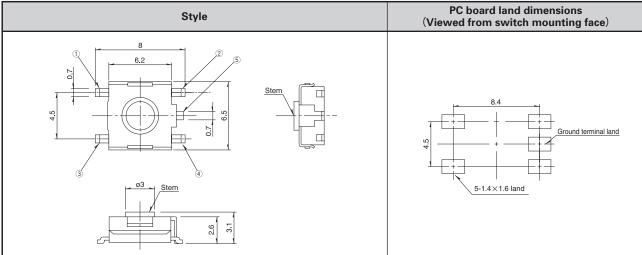
Surface Mount Type

Radial Type

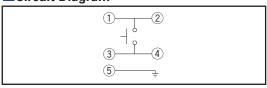
# Note

For reels of 330mm diameter, please inquire.

#### Dimensions Unit:mm PC board land dimensions



### Circuit Diagram



#### ■ List of Varieties

	Time	Sharp Feeling Type										
	Туре	Surface Mount										
	Series	SKST	SKRA	SKHM	SKHU	SKTD	SKSN	SKSL	SKSC	SKRT	SKRV	SKRH
	Photo	NEW	9	100		NEW		0,3				
	Features		ddle vel	_	_	Low- profile	Mid- mount	Half- mount	Low- profile	_		n switch+ switch
w	ater-proof	_	0	_	0	•	_	_	_	_	_	_
D	oust-proof	0	0	_	0	•	0	0	0	_	_	_
Operatin	Toppush	•	•	•	•	_	_	_	_	_	•	•
direction	n Sidepush	_	_	_	_	•	•	•	•	•	_	_
	W	8.5	□ 6.2	6.2	6.2	2.9	6.2	4.5	3.5	4.5	6.45	7.35
Dimension (mm)	ns D	8.5	U.2	6.5	6.3	3.9	2.55	2.6	3.5	55	6.4	7.5
	Н	3.95	3.4	3.1	2.5	1.55	3.5	2.2	1.25	3.3	4	5
Operation force	2N~3N			Ţ	Ţ	<b>\$</b>	<b>\$</b>	<b>‡</b>	1	<b></b>	÷	*
coverag	e 3N~4N 4N~5N	<b>‡</b>	<b>—</b>									
Ti	ravel (mm)	0.9	*	0.	25	0.15	0.2	0.15	0.	2	;	*
Gro	und terminal	_	_	•	•	•	•	•	•	•	_	_
Operati	ing temperature range	e − 30°C to + 85°C − 40°C to + 90°C − 30°C to + 85°C				-20°C to +70°C	- 40°C to + 85°C					
Auto	omotive use	•	0	_	0	_	_	_	_	_	_	_
L	ife Cycle	<b>*</b> 2	*3	*3	*3	<b>*</b> 2	<b>*</b> 2	<b>*</b> 2	<b>*</b> 2	<b>*</b> 2	<b>★</b> 2	<b>*</b> 2
	iting (max.) sistive load)	50mA 16V DC 50mA 12V DC										
Ra (Re	ating (min.) sistive load)					1	0 μ A 1V D	С				
Electrical	Insulation resistance		100M $\Omega$ min. 100V DC for 1min.									
performance	Voltage proof	250V AC for 1min. 100V AC for 1min. 250V AC for 1min. 100V AC for 1min. 100V AC for 1min.						for 1min.				
	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										
Durability -	Lifetime	Shall be in accordance with individual specifications.										
	Cold	- 30±2°C for 96h					96h	- 40 ± 2°C for 96h				
Environmental performance	Dry heat	80±2°C for 96h 90°C fo			or 96h $80\pm2^{\circ}\text{C}$ for 96h $90\pm2^{\circ}\text{C}$				90 ± 2°C for 96h			
	Damp heat	60±2°C , 90 to 95%RH for 96h					1					
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D: Depth. The most outer dimension excluding terminal portion.

H: Height. The minimum dimension if there are variances.

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#### Notes

- The automotive operating temperature range to be individually discussed upon request.
  indicates applicability to all products in the series, while \(\circ\) indicates applicability to some products in the series.
- 3. \* See the relevant pages for respective product descriptions

**Rotary Encoders** Power Dual-in-line Package Type

TACT Switch™

**Detector** 

Push

Slide

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

Type

# TACT Switch™ Soldering Conditions

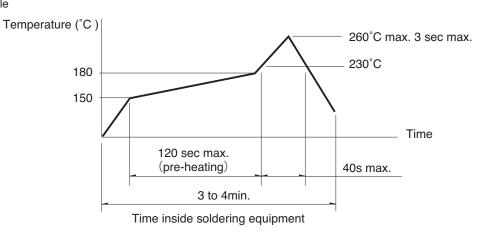
#### Condition for Reflow

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



Detector

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Dual-in-line Package Type

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

Radial Type

**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

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

#### SKHH、SKPD 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. 110°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

#### SKOJ. SKOK. SKEG Series

SNQJ. SNQN. SNEG 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°C max.			
Preheating time	45s max.			
Soldering temperature	255℃ max.			
Duration of immersion	5s max.			
Number of soldering	2times max.			

#### Manual Soldering (Except SKRT Series)

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

#### SKHH、SKHW、SKRG、SKPD Series

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

#### SKQJ、SKQK、SKEG Series

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

### **Notes**

- 1. Consult with us for availability of TACT Switch<sup>™</sup> washing.
- 2. Prevent flux penetration from the top side of the TACT Switch  $^{\text{TM}}$ .
- 3. Switch terminals and a PC board should not be coated with flux prior to soldering.
- 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.)