## TACT Switch™ 5.2mm Square Low-profile (Surface Mount Type)

**SKQG** Series





### Available in two types - 0.8mm height without stem or 1.5mm height with stem.

Detector

Push

Slide

Rotary

**Encoders** 

Power

Dual-in-line Package Type

TACT Switch™

Custom-**Products** 

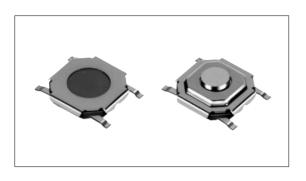
Sharp Feeling Soft

Feeling

Snap-in Type

Surface **Mount Type** 

Radial Type

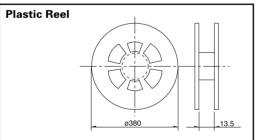


#### Product Line

Product No.	Operating force	Operating direction		Rating (max.)	Rating (min.)	Operating life (5mA 5V DC)	Initial contact resistance	Variety	Minimum order unit (pcs.)	Drawing No.
SKQGAEE010	0.98N		cal 0.25 12		10μA 1V DC	500,000cycles	100m max.	Without stem	5,000	1
SKQGAAE010	1.57N									
SKQGACE010	2.55N			50mA 12V DC		50,000cycles				
SKQGAFE010	0.98N	Vertical				500,000cycles		With stem	4,000	2
SKQGABE010	1.57N									
SKQGADE010	2.55N					100,000cycles				
SKQGAKE010	3.43N									

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

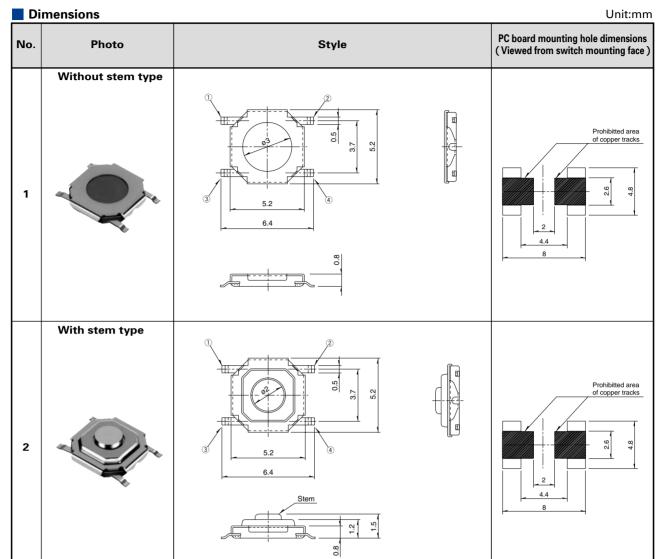
#### Reel Size Unit:mm



	Numb	Tape			
Series	1 reel	1 case /Japan	1 case /export packing	width (mm)	
SKQGAA SKQGAC SKQGAE	5,000	50,000	50,000	12	
SKQGAB SKQGAD SKQGAF SKQGAK	4,000	40,000	40,000	12	

#### 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.



Push

Detector

Slide

**Rotary** 

**Encoders** 

Power

Dual-in-line Package Type

TACT Switch™

Custom-**Products** 

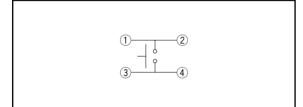
Sharp Feeling

Soft **Feeling** Snap-in

Type Surface Mount Type

Radial Type

Circuit Diagram



Detector

Push

Slide

Rotary

**Encoders** 

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

## ist of Varieties

#### Sharp Feeling Type

Sr Sr	Sharp Feeling Type												
	Series		sкou	SKQB	SKQE	SKHC	SKHK	SKRW	SKRM	SKQR	SKRB	SKRR	SKQG
	Photo							<b>(</b>					•
	Туре			Snap-in				Surface mount					
	Features		4-direction switch + push switch	Water-proof Horizontal type	Long Life		Long Stem		Low-	orofile		Low-profile and long life	Low-profile
Oper	Ver	tical											
ating	Operation Horizontal												
	Dimensions (mm)		10	11.5	12			3.7	4.5	4.8		7.5	5.2
				11.9	12			3.7	4.5	4.0		7	3.2
		Н	7.1	11.3	4	.3	12	0.35	0.4	0.5	0.55	0.6	0.8
fc	Operation force coverage		See the relevant pages for respective product descriptions	•	\$	1	•	1	1	<b>1</b>	$\bigcap$	<b>‡</b>	$\bigcap$
Gro	Ground terminal												
	Operating temperature range		-30 to +85										
Insulation resistance 100M min. 100V E					0V DC								
trical	Insulation resistance  Voltage proof			250V AC for 1min. SKRW/RM/RB/RR : 100V AC 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					es,								

Type Surface **Mount Type** 

Sharp Feeling Soft Feeling Snap-in

Radial Type

W: Width. The most outer dimension excluding terminal portion.
D: Depth. The most outer dimension excluding terminal portion.

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

TACT Switch™ Soldering Conditions .......306

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Shall be in accordance with individual specifications.

 $60 \pm 2$  , 90 to 95%RH for 96h

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for 96h

for 96h

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-30 ± 2

 $80 \pm 2$ 

Product Line of Knob for TACT Switch™.....

#### Note

**Environmental** performance

Lifetime

Cold

**Dry heat** 

Damp heat

Page

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

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**Detector** 

Push

Slide

**Rotary** 

**Encoders** 

Power

Dual-in-line Package Type

TACT Switch<sup>11</sup>

Custom-

**Products** 

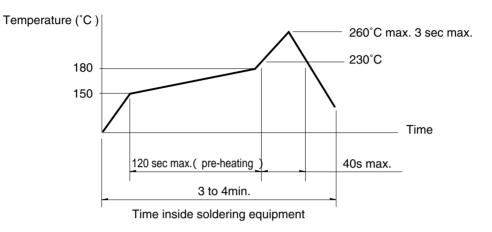
Snap-in Type Surface Mount Type Radial Type

## **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.

# Sharp Feeling 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  $\widetilde{Switch}^{TM}$ .
- 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.)