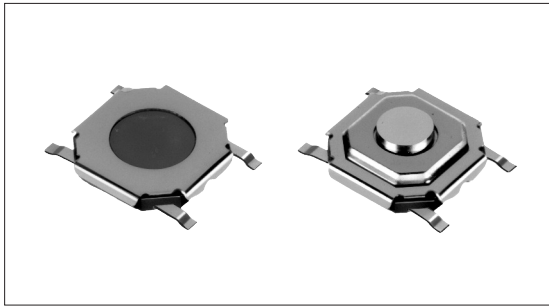


# TACT Switch™ 5.2mm Square Low-profile (Surface Mount Type) SKQG Series



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

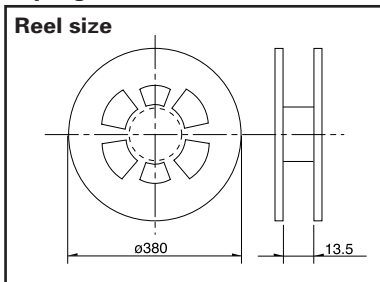


## Product Line

Product No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Rating (min.)	Operating life (5mA 5V DC)	Initial contact resistance	Stem	Minimum order unit (pcs.)	Drawing No.
SKQGAE010	0.98N	Vertical	0.25	50mA 12V DC	10μA 1V DC	500,000cycles	100mΩ max.	Without stem	5,000	1
SKQGAE010	1.57N									
SKQGACE010	2.55N									
SKQGA010	0.98N					With stem		4,000	2	500,000cycles
SKQGA010	1.57N									
SKQGA010	2.55N									
SKQGA010	3.43N									

## Packing Specifications

Taping Unit:mm



Series	Number of packages (pcs.)			Tape width (mm)	Export package measurements (mm)
	1 reel	1 case /Japan	1 case /export packing		
SKQGAA SKQGAC SKQGAE	5,000	50,000	50,000	12	401 × 401 × 214
SKQGA010 SKQGA010 SKQGA010 SKQGA010	4,000	40,000	40,000		

## Notes

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

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

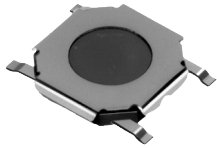
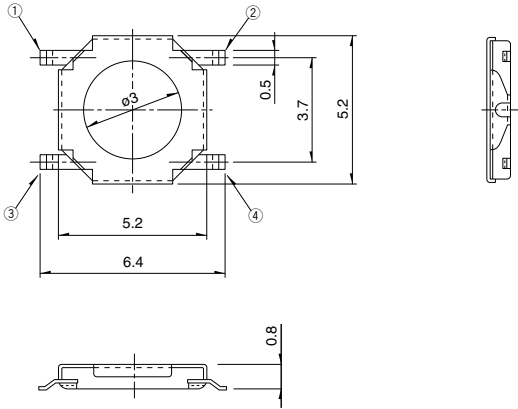
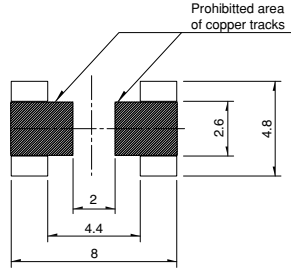
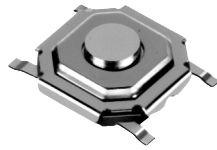
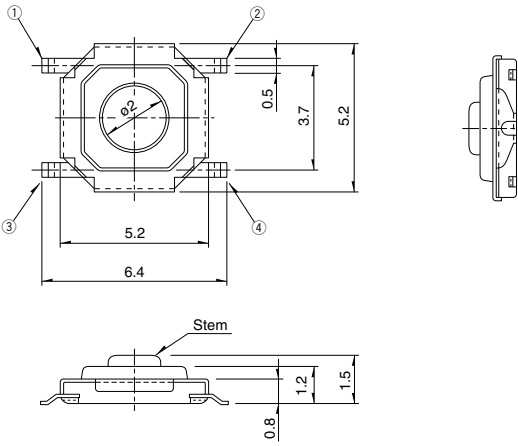
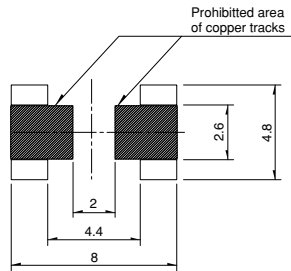


Automotive  
Use

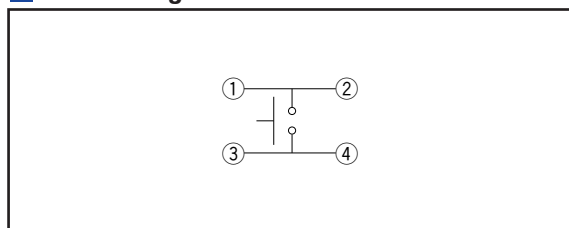
Refer to P.334 for soldering conditions.

■ Dimensions

Unit:mm

No.	Photo	Style	PC board mounting hole dimensions (Viewed from switch mounting face)
1			
2			

■ Circuit Diagram



# List of Varieties

## Sharp Feeling Type

Series	SKQB	SKQE	SKHC	SKSH	SKRW	SKRM	SKRB	SKRR	SKQG	SKSK	SKSD	
Detector	Photo											
Push	Snap-in			Surface mount								
Slide	Water-proof Horizontal type	Long Life	—	Low-profile				Low-profile and long life	Low-profile	Double action		
Rotary	Operating direction	Vertical	●	●	●	●	●	●	●	●	●	
Encoders		Horizontal	●	—								
Power	Dimensions (mm)	W	11.5	□12	3.3	□3.7	□4.5	□4.8	7.5	□5.2	3.5	4.1
Dual-in-line Package Type		D	11.9		2.9		0.4	0.55	0.6		0.8	3.2
TACT Switch™		H	11.3	4.3	0.35	0.4	0.55	0.6	0.8	0.6		
Custom-Products	Operation force coverage	1N	●	↕	↕	↕	↕	↕	↕	↕	See the relevant pages for respective product descriptions	
		5N	↕	↕	↕	↕	↕	↕	↕			
	Travel (mm)	0.3		0.15		0.15		0.25		See the relevant pages for respective product descriptions		
	Ground terminal	—								●	●	
	Operating temperature range	-30°C to +85°C										
Sharp Feeling	Automotive use	●	—				●	—	○	—		
Soft Feeling	Electrical performance	Insulation resistance	100MΩ min. 100V DC									
Snap-in Type		Voltage proof	250V AC for 1min. SKSH/RW/RB/RR/SK/SD : 100V AC for 1min.									
Surface Mount Type	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									
Radial Type		Lifetime	Shall be in accordance with individual specifications.									
	Environmental performance	Cold	-30±2°C for 96h									
		Dry heat	80±2°C for 96h									
		Damp heat	60±2°C, 90 to 95%RH for 96h									
	Page	292	294	295	297	298	299	300	301	302	304	305

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.

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

### Notes

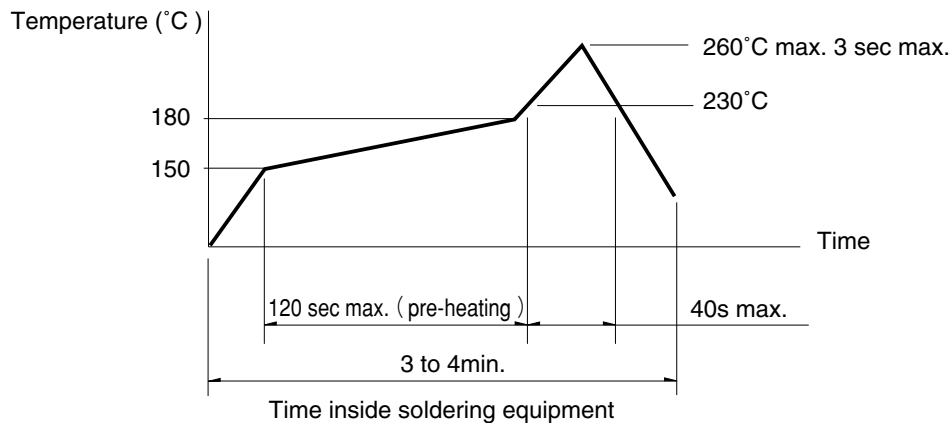
- The automotive operating temperature range to be individually discussed upon request.
- marks in "Available for automotive use" indicate that some of the series products can work at the operating temperature range from -40°C to +85°C, ●marks in "Available for automotive use" indicate that all of the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

## 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