

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

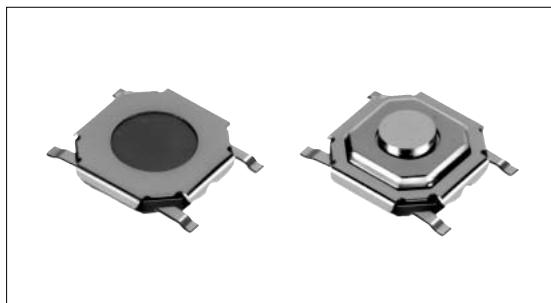
Sharp
Feeling

Soft
Feeling

Snap-in
Type

Surface
Mount Type

Radial
Type

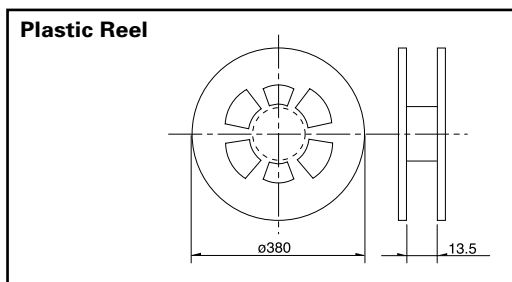


Product Line

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

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

Reel Size Unit:mm

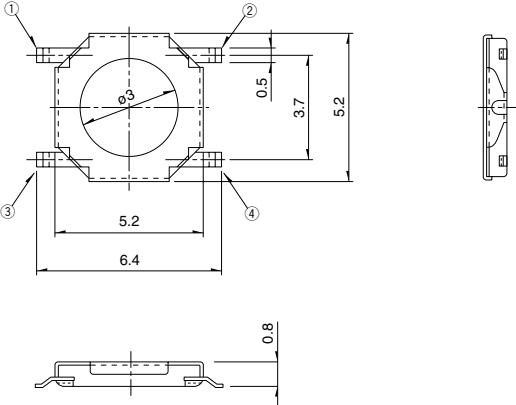
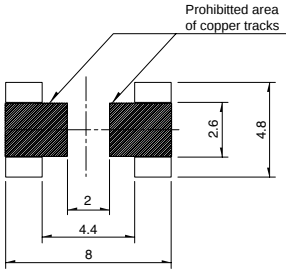
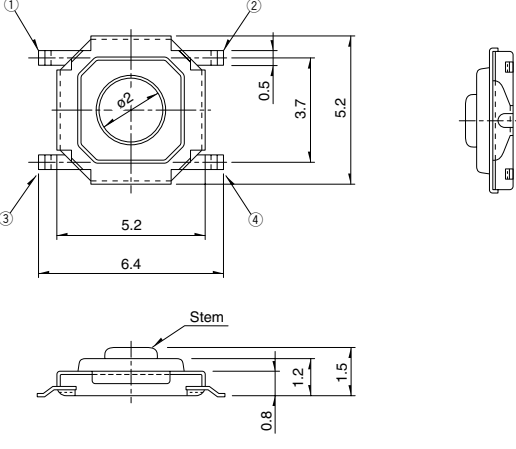
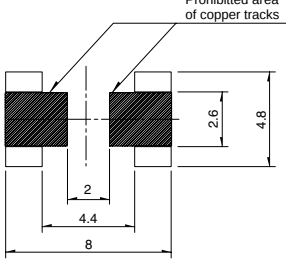


Series	Number of packages (pcs.)			Tape width (mm)
	1 reel	1 case /Japan	1 case /export packing	
SKQGAA SKQGAC SKQGAE	5,000	50,000	50,000	12
SKQGAB SKQGAD SKQGAF SKQGAKE	4,000	40,000	40,000	

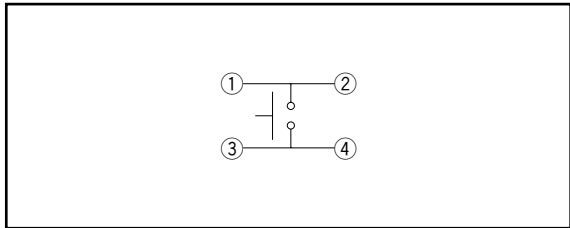
Note

- Please place purchase orders for taping products per minimum order unit (1 reel or a case).
- For ø330mm diameter reel requirements, please contact us.

Refer to P.306 for soldering conditions.

Dimensions			Unit:mm
No.	Photo	Style	PC board mounting hole dimensions (Viewed from switch mounting face)
1	Without stem type		
2	With stem type		

Circuit Diagram



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		SKQU	SKQB	SKQE	SKHC	SKHK	SKRW	SKRM	SKQR	SKRB	SKRR	SKQG
Photo												
Type		Snap-in					Surface mount					
Features		4-direction switch + push switch	Water-proof Horizontal type	Long Life	—	Long Stem	Low-profile				Low-profile and long life	Low-profile
Operating direction	Vertical	●	—	●	●	●	●	●	●	●	●	●
	Horizontal	—	●	—								
Dimensions (mm)		W	□ 10	11.5	□ 12		□ 3.7	□ 4.5	□ 4.8		7.5	□ 5.2
		D	11.9	7								
		H	7.1	11.3	4.3		12	0.35	0.4	0.5	0.55	0.6
Operation force coverage		1N 5N	See the relevant pages for respective product descriptions	●	↕	↕	●	↕	↕	↕	↕	↕
Ground terminal		—										
Operating temperature range		-30 to +85										
Electrical performance	Insulation resistance	100MΩ min. 100V DC										
	Voltage proof	250V AC for 1min. SKRW/RM/RB/RR : 100V 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										
	Dry heat	80 ± 2 for 96h										
	Damp heat	60 ± 2 , 90 to 95%RH for 96h										
Page		482	265	267	268	270	271	272	273	274	275	276

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 Conditions306
- TACT Switch™ Cautions307
- Product Line of Knob for TACT Switch™308

Note

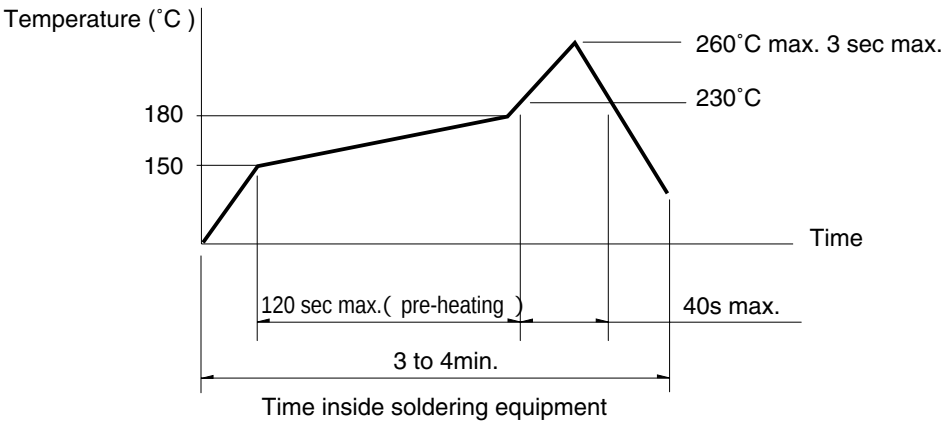
The automotive operating temperature range to be individually discussed upon request.

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 φ 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.)