TACT Switch™

0.5mm Height Low-profile (Surface Mount Type)

SKQR Series





4.8×4.8mm with height of 0.5mm. Compact & low profile.



Detector

Push

Slide

Silue

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 5V DC)	Initial contact resistance	Minimum order unit (pcs.)
SKQRAAE010	1.57N	Vertical	0.2	50mA	10 <i>μ</i> Α	500,000cycles	100m max.	10,000
SKQRACE010	2.35N	vertical	0.2	12V DC	1V DC	50,000cycles	100m max.	

Specification of Embossed Taping Package (Taping Packaging for Auto-insertion) Reel Size Unit:mm

Plastic Reel

Numl				
1 reel	1 case /Japan	1 case /export packing	Tape width (mm)	
10,000	100,000	100,000	12	

Soft Feeling Soft Feeling Snap-in Type

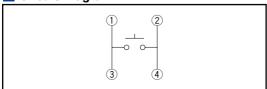
Surface

Mount Type Radial Type

■ **Dimensions** Unit:mm

Differences	O I I I I I I I I I I I I I I I I I I I
Style	PC board land dimensions (Viewed from switch mounting face)
2.8 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6	1.9 3.7

Circuit Diagram



Note

- 1. Please place purchase orders for taping products per minimum order unit (1 reel or a case).
- 2. For 330mm diameter reel requirements, please contact us.

Refer to P.306 for soldering conditions.

List of Varieties

Sharp Feeling Type

O 11.	a.p c.	anng i	ype										
	Series		SKQU	SKQB	SKQE	sкнс	ѕкнк	SKRW	SKRM	SKQR	SKRB	SKRR	SKQG
Photo		•	9			4	(•			•	
Туре				Snap-in					Surface	mount			
Features		s	4-direction switch + push switch	Water-proof Horizontal type	f Long Long Life Stem		Low-profile			Low-profile and long life	Low-profile		
Operating direction	Ver	tical											
ating tion	Horiz	ontal											
		w	10	11.5		12		3.7	4.5		4.8	7.5	5.2
Dimensions (mm)		D	10	11.9	12			3.7	4.5	4.0		7	0.2
		Н	7.1	11.3	4	.3	12	0.35	0.4	0.5	0.55	0.6	0.8
fo	ration rce erage	1N 5N	See the relevant pages for respective product descriptions	•	1	1	•	1	1	1		‡	\uparrow
Grou	ınd terr	minal											
Operating temperature range		-30 to +85											
Insulation resistance 100M min. 100V DC													
Performance Insulation resistance Voltage proof		250V AC for 1min. SKRW/RM/RB/RR : 100V AC for 1min.											

Sharp Feeling Soft Feeling

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Snap-in Type Surface Mount Type

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.

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TACT Switch™ Soldering Conditions306TACT Switch™ Cautions307Product Line of Knob for TACT Switch™308

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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

Shall be in accordance with individual specifications.

 60 ± 2 , 90 to 95%RH for 96h

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for 96h

for 96h

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-30 ± 2

 80 ± 2

Note

Durability

Environmental performance

Vibration

Lifetime

Cold

Dry heat

Damp heat

Page

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

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Detector

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Rotary

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Power

Dual-in-line Package Type

TACT Switch¹¹

Custom-

Products

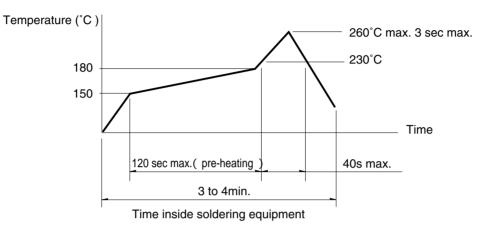
Snap-in Type Surface Mount Type Radial Type

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.)