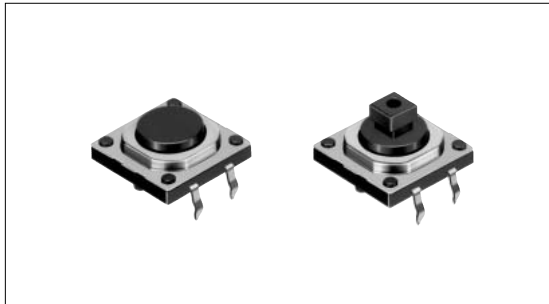


TACT Switch™ 12mm Square Long-life (Snap-in Type)

SKQE Series



Long-life type with unique dust-proof structure and highly reliable metal contacts.



Product Line

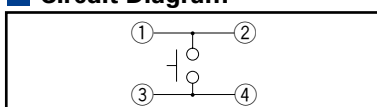
Product No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Rating (min.)	Operating life (5mA 5V DC)	Initial contact resistance	Stem color	Variety	Minimum order unit (pcs.)	Drawing No.
SKQEAAA010	1.57N	Vertical	0.3	50mA 12V DC	10μA 1V DC	10,000,000 cycles	100m max.	Dark gray	Joint stem	1,000	1
SKQEACA010	2.55N							Red			
SKQEABA010	1.57N							Dark gray	Flat stem		2
SKQEADA010	2.55N							Red			

Dimensions

Unit:mm

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

Circuit Diagram



Note

Please use 1.6mm thick PC boards.

Refer to P.306 for soldering conditions.
Refer to P.308 for standard knobs.

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	
Detector	Photo											
Push	Type Snap-in					Surface mount						
Slide	Features 4-direction switch + push switch		Water-proof Horizontal type	Long Life		Long Stem	Low-profile			Low-profile and long life	Low-profile	
Rotary	Operating direction	Vertical										
Encoders		Horizontal										
Power	Dimensions (mm)	W	10	11.5	12		3.7	4.5	4.8		7.5	5.2
Dual-in-line Package Type		D		11.9							7	
TACT Switch™		H	7.1	11.3	4.3		12	0.35	0.4	0.5	0.55	0.6
Custom-Products	Operation force coverage		1N See the relevant pages for respective product descriptions	•	↕	↕↕	•	↕	↕	↕	↕↕	↕
			5N									
	Ground terminal											
	Operating temperature range -30 to +85											
Sharp Feeling	Electrical performance	Insulation resistance	100M min. 100V DC									
Soft Feeling		Voltage proof	250V AC for 1min. SKRW/RM/RB/RR : 100V AC for 1min.									
Snap-in 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									
Surface Mount Type		Lifetime	Shall be in accordance with individual specifications.									
Radial Type	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 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.)

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 of Knobs

Unit:mm

	Applicable model	Dimensions	Variety		Label dimensions (Unit:mm)				
			Color	Model					
Detector	SKHH Applicable to joint stem type		Keytop						
Push			Red Blue Ivory Black Yellow	SK2AA00410 SK2AA00420 SK2AA00430 SK2AA00440 SK2AA00450					
Slide						Cap			
Rotary						Clear	SK2AA00510		
Encoders						Keytop		Keytop + Cap	
Power	SKHC SKQE Applicable to joint stem type		Cap		 Thickness 0.1				
Dual-in-line Package Type			Clear	SK2AA00510		Keytop + Cap			
TACT Switch™			Red Blue Ivory Black	SK2AA00010 SK2AA00020 SK2AA00030 SK2AA00040		SK2AA00060 SK2AA00070 SK2AA00080 SK2AA00090			
Custom-Products							Keytop		Keytop + Cap
							Cap		
	Clear	SK2AA00520			Keytop + Cap				
Sharp Feeling	SKHJ Applicable to joint stem type		Cap		 Thickness 0.1				
Soft Feeling			Red Blue Ivory Black Yellow	SK2AA00210 SK2AA00220 SK2AA00230 SK2AA00240 SK2AA00250		SK2AA00260 SK2AA00270 SK2AA00280 SK2AA00290 SK2AA00300			
Snap-in Type							Keytop		Keytop + Cap
Surface Mount Type							Cap		
Radial Type							Clear	SK2AA00540	Keytop + Cap
	SKEG Applicable to joint stem type		Cap		 Thickness 0.1				
			Red Blue Ivory Black Yellow	SK2AA00310 SK2AA00320 SK2AA00330 SK2AA00340 SK2AA00350		SK2AA00360 SK2AA00370 SK2AA00380 SK2AA00390 SK2AA00400			
							Keytop		Keytop + Cap
							Cap		
							Clear	SK2AA00540	Keytop + Cap

Notes

1. The knob will be delivered together with the switch but packed separately.
2. The label is not included.
3. For SK2AA00010 to SK2AA00090 types, please check the mounting direction.

