12mm Square Long-life (Snap-in Type)

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





■ Typical Specifications

Items	Specifications
Rating (max.)	50mA 12V DC
Rating (min.)	10 µA 1V DC
Initial contact resistance	100mΩ max.
Travel (mm)	0.3

Product Line

Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Stem color	Stem	Minimum ord Japan	er unit (pcs.) Export	Drawing No.						
SKQEAAA010	1.57N			Dark gray		22,52								
SKQEACA010	2.55N	Top puch	10,000,000 cycles	Red	Joint stem	1.000	1.000							
SKQEABA010	1.57N	Top push		cycles	cycles	cycles	cycles	cycles	cycles	Dark gray	Flat stem	1,000	1,000	2
SKQEADA010	2.55N			Red	- Flat Stelli									

Packing Specifications

Bulk

Number of pa	Export package measurements (mm)		
1 case / Japan	1 case / Japan 1 case / export packing		
4,000	12,000	309×476×347	

Dimensions

Di	Dimensions						
No.	Photo	Style	PC board mounting hole dimensions (Viewed from switch mounting face)				
1	Joint stem type	3.8 Stem Guide bosses 12.5 14	2-e1.7 hole				



Dimensions

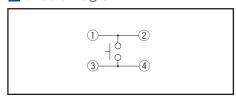
Unit:mm

No.	Photo	Style	PC board mounting hole dimensions (Viewed from switch mounting face)
2	Flat stem type	3 Guide bosses Stem 12.5 14	4-o1.25 hole 2-o1.7 hole

Note

Please use 1.6mm thick PC boards.

Circuit Diagram



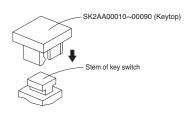
Product Line of Knobs

Unit:mm

				Variety		Unit:mm
Applicable model	D	limensions	Color	Model		Label dimensions
				Cap		
		0 2	Clear	SK2AA00510		□10 <u> </u>
SKQE		Cap		Keytop	Keytop + Cap	N. K.
Applicable to joint stem type		Key top	Red Blue Ivory Black	SK2AA00010 SK2AA00020 SK2AA00030 SK2AA00040	SK2AA00060 SK2AA00070 SK2AA00080 SK2AA00090	

Notes

- $\ensuremath{\mathsf{1}}.$ 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.





	Т				Sharp Feeling Typ	De					
	Туре	Snap-in									
	Series	SKHL	SKHH	SKHW	SKQJ	SKQB	SKQE	SKHC			
Photo											
	Features	_	_	_	_	_	Long-life	_			
	Water-proof							_			
	Dust-proof	_	_	•	•	•	•	_			
	IP standard	_	_	_	_	_	_	_			
Operati	Top push	•	•	•	•	•	•	•			
directio		_	_	_	_	_	_	_			
	W	6									
Dimension (mm)		3.5	3.5 □6		□6.6	□10	L]12			
(11111)	Н	4.3/5	See the relevant pages for respective product descriptions	4.3/5	5	5/13/23.2	See the relevant pages for respective product descriptions				
Operati force coverag	2N to 3N	1		Į.	1	1	Ţ	Ţ			
	Travel (mm)	C).25	0.3	0.25						
G	round terminal	_	•	_	_	_	_	_			
Operatir	ng temperature range		-40°C to +90°C		-20℃ to 70℃	-40℃ to	-40℃ to +85℃				
А	utomotive use	•	•	_	_	•	_	_			
	Life Cycle	*2	*3	*3	* 2	* 2	*2	* 2			
	Rating (max.) (Resistive load)				50mA 12V DC						
Electrical	Rating (min.) (Resistive load)				10μA 1V DC						
performance	Insulation resistance		100MΩ min. 100V DC 1min.								
	Voltage proof	250V AC 1min.									
Db.ilit	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 2 hours respectively									
Durability	Lifetime	Shall be in accordance with individual specifications.									
	Cold		-40°C 96h		-30°C 96h		-40℃ 96h				
Environmental performance	Dry heat		90°C 96h		80°C 96h		90℃ 96h				
	Damp heat		60°C, 90 to	95%RH 96h		60°C, 90 to 95%RH 1,000h	60°C, 90 tc	95%RH 96h			
	Page	193	195	199	200	202	204	206			
			-		\/\ : \/\idth_T	he meet outer dim	oncion ovaludin				

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 | Conditions |
 | 259 |
|------------------------|------------|------|------|------|------|------|------|------|-------|
| TACT Switch™ Cautions | |
 | . 260 |

Notes

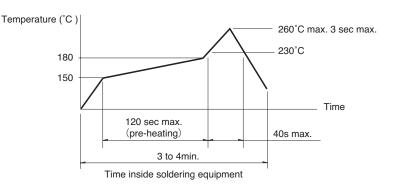
- 1. The automotive operating temperature range to be individually discussed upon request.
- 2. Indicates applicability to all products in the series, while \bigcirc indicates applicability to some products in the series.

TACT Switch™ Soldering Conditions

Condition for Reflow

Available for Surface Mount Type.

- 1. Temperature measurement: Thermocouple ϕ 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.
- 2. Temperature profile



Notes

- 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.
- 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.

	3.
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.

SKHH, SKPD 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. 110°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

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	45s max.
Soldering temperature	255℃ max.
Duration of immersion	5s max.
Number of soldering	2times max.

Manual Soldering

Items	Condition
Soldering temperature	350℃ max.
Duration of soldering	3s max.
Capacity of soldering iron	60W max.

SKHH, SKHW, SKRG, SKPD Series

Items	Condition
Soldering temperature	360°C max.
Duration of soldering	3s max.
Capacity of soldering iron	60W max.

SKTD, SKTG, SKQJ, SKQK, SKEG Series

Items	Condition
Soldering temperature	350°C max.
Duration of soldering	3s max.
Capacity of soldering iron	20W max.

Notes

- 1. Prevent flux penetration from the top side of the TACT Switch™.
- 2. Switch terminals and a PC board should not be coated with flux prior to soldering.
- 3. The second soldering should be done after the switch is stable with normal temperature.
- 4. Use the flux with a specific gravity of min 0.81. (EC-19S-8 by TAMURA Corporation, or equivalents.)

