# 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	perating direction Operating life		Stem	Minimum ord	Drawing	
	Operating force	- p	(5mA 5V DC)	Stem color		Japan	Export	No.
SKQEAAA010	1.57N			Dark gray	Joint stem	1.000	1.000	1
SKQEACA010	2.55N	- Top push	10,000,000 cycles	Red				'
SKQEABA010	1.57N			cycles	Dark gray	Flat stem	1,000	1,000
SKQEADA010	2.55N			Red	i iai Steili			

## Packing Specifications

## Bulk

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

## Dimensions

Unit:mm

No.	Photo	S	tyle	PC board mounting hole dimensions (Viewed from switch mounting face)
1	Joint stem type	3 3 4 916 12.5 14	Guide bosses  3.8  Stem	4-ø1.25 hole 2-ø1.7 hole

Dimensions

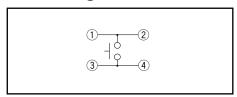
Unit:mm

No.	Photo	Style PC board mounting hole dimens (Viewed from switch mounting	
2	Flat stem type	Guide bosses  125 14	4-o1.25 hole 2-o1.7 hole

## Note

Please use 1.6mm thick PC boards.

## ■ Circuit Diagram



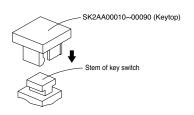
## ■ Product Line of Knobs

Unit:mm

						Unit:mm
Applicable model	Dimensions		Color	Variety	del	Label dimensions
			COIOI	IVIC	uei	
				Cap		
		110	Clear	SK2AA00510		<u> </u>
SKQE		Cap		Keytop	Keytop + Cap	w.Kr.
Applicable to joint stem type		Key top	Red Blue Ivory Black	SK2AA00010 SK2AA00020 SK2AA00030 SK2AA00040	SK2AA00060 SK2AA00070 SK2AA00080 SK2AA00090	Thickness 0.1

## 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.



Туре		Sharp Feeling Type							
			T		Snap-in			I	
	Series	SKHL	SKHH	SKHW	SKQJ	SKQB	SKQE	SKHC	
	Photo								
	Features	_	_	_	_	_	Long-life	_	
	Water-proof	_	_	_	_	•	_	_	
	Dust-proof	_	_	•	•	•	•	_	
	IP standard	_	_	_	_	_	_	_	
Operatir	Top push	•	•	•	•	•	•	•	
directio		_	_	_	_	_	_	_	
Dim	W	6		16	□6.6	□10	П	12	
Dimensio (mm)		3.5							
	Н	4.3/5	See the relevant pages for respective product descriptions	4.3/5	5	5/13/23.2	See the relev respective prod	vant pages for luct descriptions	
Operation force coverage	2N to 3N	•		1	Ţ	1	1	Ţ	
	Travel (mm)	0.25		0.3	0.25	0.3			
Ground terminal		_	•	_	_	_	_	_	
Operatin	ng temperature range		-40℃ to +90℃	;	-20℃ to +70℃	-40℃ t	o +90℃	-40℃ to +85℃	
A	utomotive use	•	•	_	_	•	_	_	
	Life Cycle	<b>*</b> 2	*3	*3	<b>2</b>	<b>*</b> 2	<b>*</b> 2	<b>*</b> 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.							
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 2 hours respectively							
Durubinty	Lifetime Shall be in accordance with individual specifications.					5.			
	Cold	-40°C 96h -30°C 96h -40°C			-40℃ 96h				
Environmental performance	Dry heat		90°C 96h		80℃ 96h		90°C 96h		
	Damp heat		60°C, 90 to 95%RH 96h			60°C, 90 to 95%RH 1,000h	60°C, 90 to	95%RH 96h	
	Page	186	188	192	193	195	197	199	

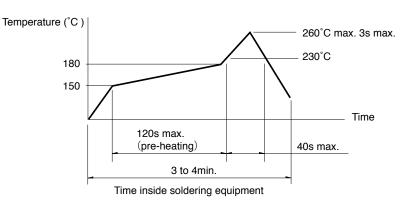
 $\ensuremath{\mathsf{W}}$  : Width. The most outer dimension excluding terminal portion.

 $\ensuremath{\mathsf{D}}$  : Depth. The most outer dimension excluding terminal portion.  $\ensuremath{\mathsf{H}}$  : Height. The minimum dimension if there are variances.

- 1. The automotive operating temperature range to be individually discussed upon request.
- 2. Indicates applicability to all products in the series.

# TACT Switch™ / Soldering Conditions

# Condition for Reflow Available for Surface Mount Type. Temperature profile



## Notes

- 1. Please confirm the specifications of our product for the detailed condition.
- 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.

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℃ max.
Duration of immersion	5s max.
Number of soldering	2times max.

## **SKHH 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.

## SKHL Top Push Type, SKQJ 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 Series

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

## SKTD, SKTG, SKQJ 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.)

