# 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	Stem color	Stem	Minimum ord	Drawing	
	Operating force	- p	(5mA 5V DC)			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			Dark gray Flat stem	Flot otom			2
SKQEADA010	2.55N			Red	- Fiat Stem			

# 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

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

### Dimensions

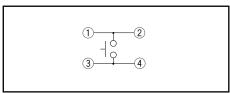
Unit:mm

No.	Photo	Style	PC board mounting hole dimensions (Viewed from switch mounting face)
2	Flat stem type	3  Guide bosses  Stem	4-ø1.25 hole 2-ø1.7 hole

### Note

Please use 1.6mm thick PC boards.

# ■ Circuit Diagram



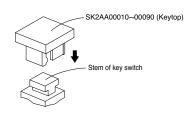
# ■ Product Line of Knobs

Unit:mm

Unitim						Unit:mm
Applicable model	Dimensions			Variety		Label dimensions
, applicable medel		WITH GITTIGHT OF THE STATE OF T	Color	Mo	del	Edber dimensione
				Сар		
		110	Clear	SK2AA00510		<u> </u>
SKQE		Cap		Keytop	Keytop + Cap	N.F.
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.



	Type				Sharp Feeling Typ	е		
	туре				Snap-in	Г	T	T
	Series	SKHL	SKHH	SKHW	SKQJ	SKQB	SKQE	SKHC
	Photo							
	Features	_	_	_	_	_	Long-life	_
	Water-proof	_	_	_	_	•	_	_
	Dust-proof	_	_	•	•	•	•	_
	IP standard	_	_	_	_	_	_	_
Operati	Top push	•	•	•	•	•	•	•
direction		_	_	_	_	_	_	_
	W	6						
Dimension (mm)		3.5		6	□6.6	□10 □12		112
(11111)	Н	4.3/5	See the relevant pages for respective product descriptions	4.3/5	5	5/13/23.2	See the releve	vant pages for duct descriptions
Operatii force coverag	2N to 3N			1	1		1	
	Travel (mm)	0	0.25 0.3		0.25	0.3		
Ground terminal — • — — —		_	_					
Operatir	ng temperature range		-40℃ to +90℃		-20℃ to +70℃	-40℃ t	:o +90°C	-40℃ to +85℃
А	utomotive use	•	•	_	_	•	_	_
	Life Cycle	<b>*</b> 2	*3	*3	<b>*</b> 2	<b>*</b> 2	*2	<b>*</b> 2
	Rating (max.) (Resistive load)				50mA 12V DC			
Electrical	Rating (min.) (Resistive load)				10μΑ 1V DC			
performance	Insulation resistance			1001	MΩ min. 100V DC	1min.		
	Voltage proof	250V AC 1min.						
Durahilitu	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℃ 96h		80°C 96h	90°C 96h		
	Damp heat		60°C, 90 to 9	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
								L.

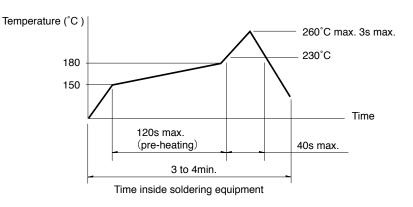
 $\ensuremath{\mathsf{W}}$  : Width. The most outer dimension excluding terminal portion.

 $\ensuremath{\mathsf{D}}$  : Depth. The most outer dimension excluding terminal portion. 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.

# ■ Condition for Reflow Available for Surface Mount Type.

Temperature profile



TACT Switch™ / Soldering Conditions

## Notes

- 1. Please confirm the specifications of our product for the detailed condition.
- 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 $^{TM}$ .
- 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.)

