Unit:mm

# Compact type with 2mm width contributing to thinner product designs





#### ■ Typical Specifications

Items	Specifications
Rating (max.)	50mA 12V DC
Rating (min.)	10μA 1V DC
Initial contact resistance	500mΩ max.
Travel (mm)	0.13 (SKSWDG: 0.12)
Protective structure **	IP67 equivalent IP68 equivalent (SKSWD series)

#### ■ Product Line

Product No.	Operating force	Operating direction	Operating life	Minimum ord	Drawing	
T TOUGGE TWO.	Operating force	Operating direction	(5mA 5V DC)	Japan	Export	No.
SKSWCEE010	1.8N		300,000 cycles	20,000	20,000	
SKSWCFE010	2.4N	Top push	500,000 cycles			1
SKSWCGE010	3.3N	τορ ρασιτ	300,000 cycles			
SKSWDAE010	2.4N		300,000 cycles			2

**ALPS/ILPINE** 

#### Packing Specifications

#### Taping

Number of packages (pcs.)			Tape width	Export package
1 reel	1 case / Japan 1 case / export packing		(mm)	measurements (mm)
20,000	200,000	200,000	12	395×395×205

# Reel size

#### Note

For reels of 330mm diameter, please inquire.

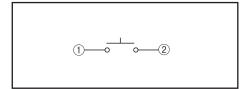
\*\* Assumes the switch is left alone without being operated. Under the specified conditions, dust and water ingress with a significant impact on the switch's on-off function is prevented.

IP67-level, or IP68-level, dust and water resistance is guaranteed for the switch alone and performance may not be guaranteed depending on the mounting conditions and usage.

#### Dimensions

No.	Style	PC board mounting hole and land dimensions (Viewed from switch mounting face)
1	3.5	
	900	3.8
2	3.5	
	000	

#### ■ Circuit Diagram



Туре		Sharp Feeling Type						
		Surface Mount						
	Series	SKSD	SKRN	SKTA	SKSV	SKSW	SKTK	SKSG
	Photo			0	0		0	
	Features	Double	action		Compact size Low-profile		Long life	High operation force Compact size
	Water-proof	_	_	•	•	•	•	_
	Dustproof	_	_	•	•	•	•	_
	IP standard	_	_	67 equivalent	67 equivalent	67 equivalent 68 equivalent in some cases	67 equivalent	_
Operatir	Top push	•	•	•	•	•	•	•
directio		_	_	_	_	_	_	_
	W	4.1		2.6	2.8	3	5.9	3
Dimensio (mm)		3.9	- □6	1.6	1.9	2	4	2.7
	Н	0.6	0.9	0.53	0.5	0.6	0.78	1.4
Operation force coverage	2N to 3N	for respect	evant pages ive product iptions	<b>\$</b>	1		\$	1
	Travel (mm)		ant pages for uct descriptions	0.11	0.12	See the relevant pages for respective product descriptions	0.25	0.12
Ground terminal		•	•	_	_	_	_	0
Operating temperature range		-40℃ t	o +90°C	−30°C to +85°C −4			-40°C to +85°C	
А	utomotive use	_	_	_	_	_	_	•
Life Cycle		<b>*</b> 2	<b>*</b> 2	<b>*</b> 3	*3	<b>*</b> 3	*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	100V AC 1min.	250V AC 1min.			100V AC 1min.		
Durability	Vibration		10 to 55 tin 1	to 10Hz/min., the the 3 direction o	e amplitude is 1.5 f X, Y and Z for 2	5mm for all the fre 2 hours respective	equencies, ely	
Durability	Lifetime	Shall be in accordance with individual specifications.						
	Cold	-40℃ 96h						
Environmental performance	Dry heat	90°C 96h						
	Damp heat	60°C, 90 to 95%RH 96h						
	Page	195	196	197	198	199	201	202

W : Width. The most outer dimension excluding terminal portion.  $\mbox{\bf D}$  : Depth. The most outer dimension excluding terminal portion.

#### Notes

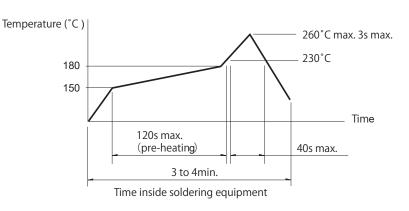
H: Height. The minimum dimension if there are variances.

<sup>1.</sup> The automotive operating temperature range to be individually discussed upon request.

<sup>2. •</sup> 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. 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°C 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 $^{\circ}$ 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°C max.
Duration of soldering	3s max.
Capacity of soldering iron	60W max.

#### SKHH, SKHW Series

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

#### SKTD, SKTG, SKQJ, SKSN Series

Items	Condition
Soldering temperature	350℃ 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.)

## **Mouser Electronics**

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SKSWCEE010 SKSWCGE010 SKSWCFE010