## 3 × 2.7mm Compact High Operating Force (Surface Mount Type)

# High operating force type for automotive needs with 1.4mm height







### ■ Typical Specifications

Items	Specifications
Rating (max.)	50mA 12V DC
Rating (min.)	10μA 1V DC
Initial contact resistance	100mΩ max.
Travel (mm)	0.12

### ■ Product Line

Top push type

Product No.	Operating force	Operating direction	Operating life	Stem color	Minimum order unit (pcs.)	
1 1000011101	Operating force		(5mA 5V DC)	Otom color	Japan	Export
SKSGACE010	1.6N		200,000 cycles	Natural		
SKSGAFE010	2.8N	Top push		Black	12,000	12,000
SKSGAAE010	4N			DIACK		

### With ground terminal type

Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Stem color	Minimum ord Japan	er unit (pcs.) Export
SKSGPCE010	1.6N		200,000 cycles	Natural		
SKSGPGE010	2.8N	Top push		Black	12,000	12,000
SKSGPAE010	4N			DIACK		

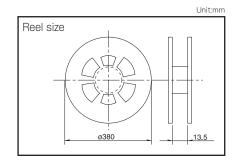
### ■ Packing Specifications

Taping

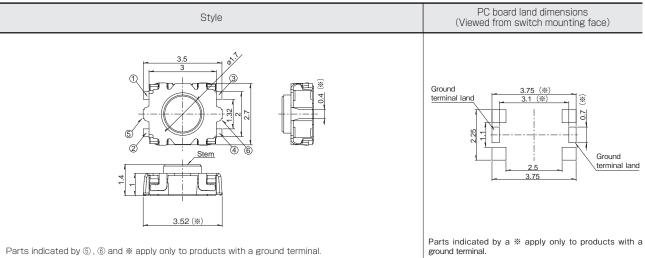
Num	ber of packages (	Tape width	Export package	
1 reel	1 case / Japan	1 case / export packing	(mm)	measurements (mm)
12,000	120,000	120,000	12	395×395×205

### Note

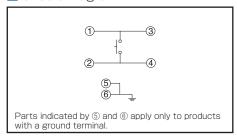
For reels of 330mm diameter, please inquire.



Dimensions Unit:mm



### ■ Circuit Diagram



	Ty	ype -	Sharp Feeling Type						
						Surface Mount			
	Se	eries	SKSD	SKRN	SKTA	SKSV	SKSW	SKTK	SKSG
	Ph	noto	-		0	0		0	•
	Fea	tures	Double	action		Compact size Low-profile		Long life	High operation force Compact size
	Wate	er-proof	_	_	•	•	•	•	_
	Dus	tproof	_	_	•	•	•	•	_
	IP sta	andard	_	_	67 equivalent	67 equivalent	67 equivalent 68 equivalent in some cases	67 equivalent	_
Operatir	ng	Top push	•	•	•	•	•	•	•
directio	on	Side push	_	_	_	_	_	_	_
		W	4.1		2.6	2.8	3	5.9	3
Dimensio (mm)		D	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		1N max. 1N to 2N 2N to 3N 3N to 4N 4N to 5N	See the rele for respect descri		<b>*</b>	1	1	<b>\$</b>	1
Travel (mm) Ground terminal		l (mm)	See the relev respective prod		0.11	0.12	See the relevant pages for respective product descriptions	0.25	0.12
		terminal	•	•	_	_	_	_	0
Operatin	ng tem	nperature range	-40°C t	o +90℃		-30°C t	to +85°C		-40℃ to +85℃
А	utomo	otive use	_	_	_	_	_	_	•
	Life	Cycle	<b>*</b> 2	<b>*</b> 2	*3	*3	*3	<b>*</b> 2	<b>*</b> 2
		Rating (max.) Resistive load)				50mA 12V DC			
Electrical	(F	Rating (min.) Resistive load)	10µA 1V DC						
performance	Insul	lation resistance	100MΩ min. 100V DC 1min.						
	\	/oltage proof	100V AC 1min. 250V AC 1min. 100V 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						
_ a.aəmey		Lifetime	Shall be in accordance with individual specifications.						
		Cold	-40℃ 96h						
Environmental performance		Dry heat				90℃ 96h			
		Damp heat			60°C	c, 90 to 95%RH	96h		
	Pa	age	195	196	197	198	199	201	202

Sharp Feeling Type

### Notes

W : Width. The most outer dimension excluding terminal portion. D : Depth. The most outer dimension excluding terminal portion.

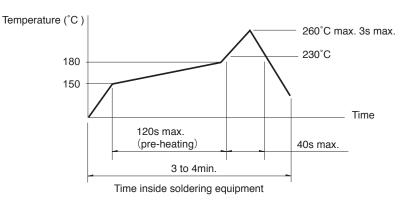
H: Height. The minimum dimension if there are variances.

<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 O indicates applicability to some 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.
- 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.

### SKHLTop 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°C 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, SKSN 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.)

