

Heavy-operational and equipped with a 1.4mm tall stem and grounding, meeting in-car needs.



Typical Specifications

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

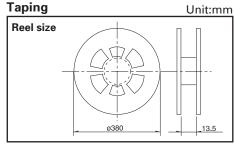
Product Line **Toppush Type**

Product No.	Onerating force	Operating direction	Operating life	Stem color	Minimum ord	ler unit (pcs.)
Product No. Operating force		(5mA 5V DC)		Stelli color	Japan	Export
SKSGACE010	1.6N	Toppych	200,000 avalas	Natural	12 000	12 000
SKSGAAE010	4N	Toppush	Toppush 200,000cycles	Black	12,000	12,000

With Ground Terminal Type

Product No.	Operating force Operating direction Operating life		Champ color	Minimum order unit (pcs.)		
Product No. Operating force		(5mA 5V DC)		Stem color	Japan	Export
SKSGPCE010	1.6N	Toppush	200,000cycles	Natural	12,000	12,000
SKSGPAE010	4N	Toppush	200,000cycles	Black	12,000	

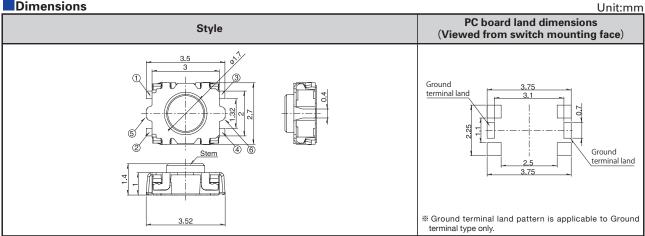
Packing Specifications



Numb	er of packages	_	Export package	
1 reel	1 case / Japan	1 case / export packing	Tape width (mm)	measurements (mm)
12,000	120,000	120,000	12	401 × 401 × 214

Note For reels of 330mm diameter, please inquire.

Dimensions



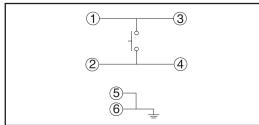
ALPS

Sharp . Feeling Soft Feeling Snap-in Туре Surface Mount Type

Encoders

Power Dual-in-line Package Type TACT Switch[™]

Radial Туре



TACT Switch[™]

List of Varieties

	Туре	-						harp Fee Surface	Mount						
	Series	5	SKRN	SKSE	SKSV	SKSW	SKSF	SKSM	SKSG	SKRK	SKRP	SKQM	SKQY	SKS	
	Photo	<	Ô	-07	NEW	NEW	۲	NEW					۷	NEV	
	Features		Double	action	-		act size profile	•	Compa Low-p		High operation force Compact size	Compa	act size	Midd trave	
,	Water-proof		_	_	•	•	_	•		_			_	•	
	Dust-proof		_		•	•	0	•			_		0	•	
Operat	Toppus	h	•	_	•	•	•	•	•	•	•	•	٠	•	
directi		h	_	•	_	_	_	_	_	_	_	_	_	_	
	W		□6	5.9	2.8	3.0	2.8	3.4	3	3.9	4.2	6	6.1	5.3	
Dimensi (mm	D			2.87	1.9	2	2.4	2.9	2.7	2.9	3.2	3.5	3.7	5.4	
	Н	~1N	0.9	3	0.5	0.58	0.65	0.7	1.4	1.5 1	2.5	4.3	2.5	3.8	
Operat	ion ^{1N}	~1N ~2N			1	\$	\$	\$	1	Ļ	1				
force		I~3N I~4N	*	×	+						L	¥		\$	
oovera	-	I~5N							•					•	
	Travel (mm)		*	«	0.12	0.13	C	.1	0.12	0.13	0.2	0.:	25	0.7	
Gr	ound terminal		•	٠	_	_	_	_	•	—	_	—	•	_	
Opera	iting temperatu range	ire						- 30℃ to	o + 85℃						
Αι	tomotive use		_		_	_	_	_	0	_	•	•	•		
	Life Cycle								*3	2	*3		2	×	
	lating (max.) esistive load)				1	50mA ⁻	12V DC	1			50mA 16V DC	50mA 1	2V DC	50m 16V I	
	Rating (min.) esistive load)							10 <i>µ</i> A	1V DC						
Electrical	Insulation resistance						100M	Ω min. 10	0V DC fo	r 1min.					
performance	Voltage pro		50V AC or 1min.			100V AC	for 1min.	r 1min. 250					0V AC for 1min.		
Durability	Vibration				10 to	55 to 10H in the 3	z/min., th direction	e amplitud of X, Y an	de is 1.5m d Z for 2h	m for all t ours resp	the freque	encies,			
Durability	Lifetime					Shall be	e in accor	dance wit	h individu	ial specifi	cations.				
	Cold		– 30±2°C for 96h												
Environmental performance	Dry heat		80±2°C for 96h												
	Damp hea	t					60±2	°C , 90 to	95%RH f	or 96h					
	Page		255	256	257	258	259	260	261	262	263	264	265	26	
							W : V D : D H : H	Vidth. Th epth. The	e most o e most ou	uter dime iter dime	ension ex	cluding t	erminal perminal p	ortio	

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.

3. X See the relevant pages for respective product descriptions



289

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TACT Switch[™] Soldering Conditions

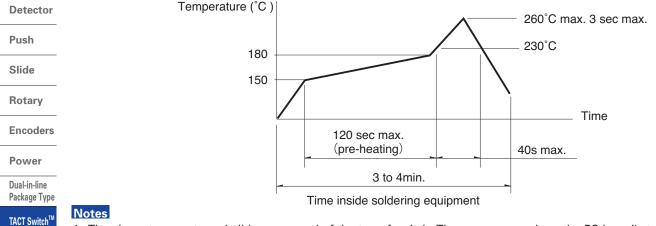
Condition for Reflow

Available for Surface Mount Type.

- 1. Heating method: Double heating method with infrared heater.
- 2. Temperature measurement: Thermocouple 0.1 to 0.2 ϕ CA (K) or CC (T) at solder joints (copper foil surface).

A heat resistive tape should be used to fix thermocouple.

3. Temperature profile



1. 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.

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

· ·	
ltems	Condition
Flux built-up	Mounting surface should not be exposed to fluk
Preheating temperature	Ambient temperature of the soldered surface of PC board. 100 $^\circ C$ max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHH、SKPD Series

ltems	Condition
Flux built-up	Mounting surface should not be exposed to fluk
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 fluk
Preheating temperature	Ambient temperature of the soldered surface of PC board. 100°C max.
Preheating time	45s max.
Soldering temperature	255°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

Notes

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

Manual Soldering (Except SKRT Series)

Items	Condition
Soldering temperature	350°C 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.			

SKQJ、SKQK、SKEG Series

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



Sharp Feeling Soft

Feeling Snap-in Type Surface Mount Type

Radial Type