

4.2 × 3.2mm Compact High Operating Force (Surface Mount Type)





High operation force satisfies the needs in automotive applications. Wide stem & good mountability.



Typical Specifications

Items	Specifications			
Rating (max.)	50mA 16V DC			
Rating (min.)	10μA 1V DC			
Initial contact resistance	500mΩ max.			
Travel (mm)	0.2			

Detector

Push

Slide

Rotary

Encoders

Dual-in-line

Package Type

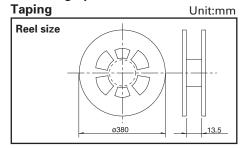
Power

TACT Switch™

Product Line

Product No.	Operating force	Operating direction	Operating direction Operating life Stom		Minimum order unit (pcs.)		
Product No.	Operating force	Operating direction	(5mA 5V DC)	Stem color	Japan	Export	
SKRPABE010	1.57N		100,000cycles	Natural			
SKRPACE010	2.55N	Toppush	50,000cycles	Naturai	4,000	4,000	
SKRPADE010	4N		100,000cycles	Black			

Packing Specifications



Numbe	er of packages	(pcs.)		Export package
1 reel	1 case / Japan	1 case / export packing	Tape width (mm)	measurements (mm)
4,000	40,000	40,000	12	401 × 401 × 214

Sharp Feeling Soft

Feeling Snap-in

Type

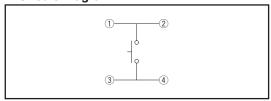
Surface Mount Type

Radial Type

For reels of 330mm diameter, please inquire.

Dimensions	Unit:mm
Style	PC board land dimensions (Viewed from switch mounting face)
4.6 4.2 3 3 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3.1 5.2

Circuit Diagram



TACT Switch™

■ List of Varieties

Detector Push Slide **Rotary Encoders** Power

Dual-in-line Package Type TACT Switch™

Sharp Feeling Soft **Feeling**

Snap-in Type

Surface Mount Type

Radial Type

	Туре		Sharp Feeling Type										
	Series	SKRN	SKSE	SKSV	SKSW	SKSF	Surface	Mount	SKRK	SKRP	SKQM	SKQY	SKSU
	Photo	SKHI	SKSE	NEW	NEW .	SNOF	NEW	SKSG	SKAK	SKAP	SKQW	SKQT	NEW
	Features	Double	action	-	Compa Low-	act size orofile		Compa Low-	act size orofile	High operation force Compact size	Compa	act size	Middle travel
,	Water-proof	_	_	•	•	_	•	_	_	_	_	_	•
	Dust-proof		_	•	•	0	•	_	_	_	_	0	•
Operati		•	_	•	•	•	•	•	•	•	•	•	•
direction	Sidepush	_	•	_	_	_	_	_	_	_	_	_	_
Dimensi (mm)		- □ 6	5.9 2.87	2.8 1.9	3.0	2.8	3.4 2.9	2.7	3.9 2.9	4.2 3.2	6 3.5	6.1 3.7	5.3 5.4
(IIIII)	Н	0.9	3	0.5	0.58	0.65	0.7	1.4	1.5	2.5	4.3	2.5	3.85
Operati force covera	2N~3N	*	*	1	‡		\$		1	1			‡
	Travel (mm)	*	*	0.12	0.13	0	.1	0.12	0.13	0.2	0.:	25	0.7
Gr	ound terminal	•	•	_	_	_	_	•	_	_	_	•	_
Opera	ting temperature range						- 30°C to) + 85°C					
Au	tomotive use	_	_	_	_	_	_	0	_	•	•	•	•
	Life Cycle	* 2	* 2	* 2	* 2	* 2	* 2	*3	* 2	*3	* 2	* 2	*3
	lating (max.) esistive load)				50mA 1	2V DC				50mA 16V DC	50mA 1	2V DC	50mA 16V DC
	Rating (min.) esistive load)						10 <i>μ</i> A	1V DC					
Electrical	Insulation resistance		100M Ω min. 100V DC for 1min.										
performance	Voltage proof	250V AC for 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 2hours respectively										
Durubinty	Lifetime		Shall be in accordance with individual specifications.										
	Cold		− 30±2°C for 96h										
Environmental performance	Dry heat		80±2°C for 96h										
	Damp heat		60±2℃ , 90 to 95%RH for 96h										
	Page	255	256	257	258	259	260	261	262	263	264	265	266

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.

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Notes

- 1. The automotive operating temperature range to be individually discussed upon request.
- 2. indicates applicability to all products in the series, while \(\) indicates applicability to some products in the series.
- 3. * See the relevant pages for respective product descriptions

TACT Switch™ Soldering Conditions

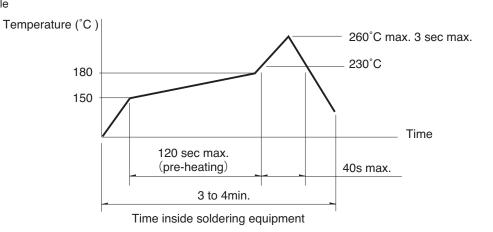
Condition for Reflow

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



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Dual-in-line Package Type

TACT Switch™

Sharp Feeling Soft

Feeling Snap-in Type Surface Mount Type

Radial Type

Notes

- 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

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	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHH、SKPD 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. 110°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKOJ. SKOK. SKEG Series

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

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.

Notes

- 1. Consult with us for availability of TACT Switch[™] washing.
- 2. Prevent flux penetration from the top side of the TACT Switch $^{\text{TM}}$.
- 3. Switch terminals and a PC board should not be coated with flux prior to soldering.
- 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.)