### **TACT** Switch™

## Long-travel with High Operation Force (Snap-in Type)

**SKPF** Series





## 8×9mm size. Combination of long travel and high operation force prevent malfunction.

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line Package Type

TACT Switch™

Custom-Products

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#### Product Line

Product No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Rating (min.)	Operating life (5mA 5V DC)	Initial contact resistance	Minimum order unit ( pcs. )
SKPFAAA010	3.92N	Vertical	1.75	5mA	10 <i>μ</i> Α	100,000cycles	1k max.	1.000
SKPFACA010	1.96N	Vertical	1.75	12V DC	1V DC	100,000cycles	1k max.	1,000

Sharp Feeling

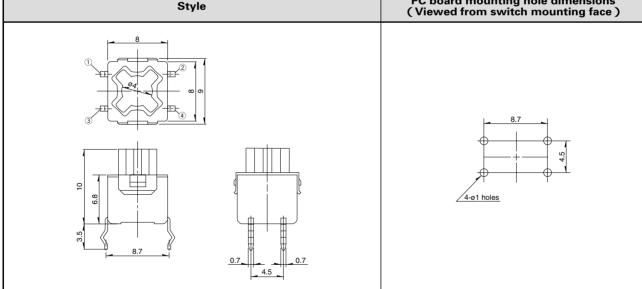
Soft Feeling

Snap-in Type

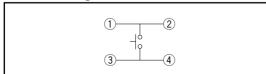
Surface Mount Type

Radial Type

## Dimensions Style PC board mounting hole dimensions (Viewed from switch mounting face)



#### Circuit Diagram



Note

Using a 1.6mm thick PC board is recommended.

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## **List of Varieties**

#### Soft Feeling Type

								OVED					
Series		SKEG	SKPE	SKEG	SKEY	SKPF	SKPM	SKPN	SKPG	SKPL	SKPD		
Photo			W.										
Туре				Snap-in					Surface mount			Radial	
Features				Horizontal type		High operation force and long stroke	Low contact resistance			Round terminal and low contact resistance			
Oper	Vert	tical											
Operating direction	Horizontal												
Dimen ( mr		w	6	6.6	7.5	7.0	8	5.9	6	6.6	- φ6.45	7.8	
		D		6.3	9.9	7.8	9	6	6.7	6.3			
		н	7	5	7.3	5	10	5	7		5		
Contact		t	Carbon						ver	Carbon	Silver	Carbon	
1N Operation force coverage 5N		1	1	1	<b>1</b>	1	1	<b>\$</b>	1	<b>‡</b>	1		
Ground terminal													
Operating temperature range		-20 to +70 SKEG -40 to +90											
Insulation resistance SKEY/PD: 50M r						n. 100V DC min. 100V DC							
Electrical performance	Volt	age oof	250V AC for 1min. SKPN : 200V AC for 1min. SKEY/PD : 100V AC for 1min.										
	Vibra	ation	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										
Vibration  10 to 55 to 10Hz/min., the amplitude is 1.5mm for all the free in the 3 direction of X, Y and Z for 2hours respective.  Shall be in accordance with individual specification.						ations.							
Envi	Co	old	-30 ± 2 for 96h										
Environmenta performance	Dry	heat	80 ± 2 for 96h										
ental nce	<b>Damp heat</b> 60 ± 2 , 90 to 95%RH for 96h												
	Page		296	298	296	299	300	301	302	303	304	305	
							14/ 14/ 1/1	The second section 4		ncion ovelu			

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.

Product Line of Knob for TACT Switch™......308

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Custom-**Products** 

Sharp Feeling Soft **Feeling** Snap-in Type

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Dual-in-line Package Type

TACT Switch<sup>11</sup>

Custom-

**Products** 

Sharp Feeling

Soft

**Feeling** 

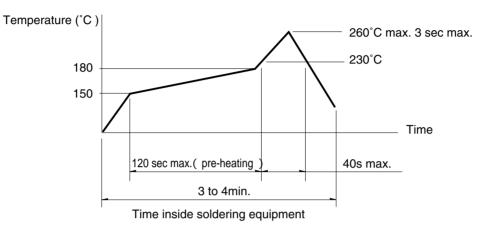
Snap-in Type Surface Mount Type Radial Type

## **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 CA( K )or CC( T )at solder joints( copper foil surface ). A heat resistive tape should be used to fix thermocouple.
- 3. Temperature profile



#### Note

- 1. The above temperature shall be measured on the mounting surface of a PC board. 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 (Except SKHJ, SKHL, 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 max.
Preheating time	60s max.
Soldering temperature	260 max.
Duration of immersion	5s max.
Number of soldering	2times max.

#### Manual Soldering (Except SKRT Series)

Items	Condition
Soldering temperature	350 max.
Duration of soldering	3s max.
Capacity of soldering iron	60W max.

#### Notes

- 1. Consult with us for availability of TACT Switch™ washing.
- 2. Prevent flux penetration from the top side of the TACT  $\tilde{S}$ witch $^{TM}$ .
- 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.)