

TACT Switch™

Low-profile with High Operation Force (Snap-in Type)

SKPE Series

www.DataSheet4U.com



High operation force best suitable for automotive use.

- Detector
- Push
- Slide
- Rotary
- Encoders
- Power
- Dual-in-line
Package Type
- TACT Switch™
- Custom-Products



Product Line

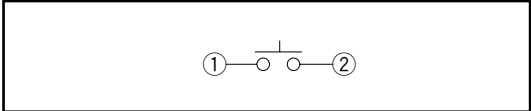
Product No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Rating (min.)	Operating life (5mA 5V DC)	Initial contact resistance	Rubber color	Minimum order unit (pcs.)
SKPEADA010	1.18N	Vertical	1.3	5mA 12V DC	10μ A 1V DC	50,000cycles	1kΩ max.	Light blue	1,000
SKPEAAA010	2.45N							Green	
SKPEABA010	2.94N							Blue	

Dimensions

Unit:mm

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

Circuit Diagram



Note

Using a 1.6mm thick PC board is recommended.

List of Varieties

Soft Feeling Type

Series			SKEG	SKPE	SKEG	SKEY	SKPF	SKPM	SKPN	SKPG	SKPL	SKPD
Photo												
Type			Snap-in					Surface mount			Radial	
Features			—		Horizontal type	—	High operation force and long stroke	Low contact resistance		—	Round terminal and low contact resistance	—
Operating direction	Vertical		•	•	—	•	•	•	•	•	•	•
	Horizontal		—		•	—						
Dimensions (mm)		W	□ 6	6.6	7.5	□ 7.8	8	5.9	6	6.6	φ 6.45	□ 7.8
		D		6.3	9.9		9	6	6.7	6.3		
		H	7	5	7.3	5	10	5	7	5		
Contact			Carbon					Silver		Carbon	Silver	Carbon
Operation force coverage			1N	↕	↕	↕	↕	↕	↕	↕	↕	↕
			5N									
Ground terminal			—									
Operating temperature range			-20 to +70 SKEG									
			-40 to +90									
Electrical performance	Insulation resistance		100MΩ min. 100V DC SKEY/PD : 50MΩ min. 100V DC									
	Voltage proof		250V AC for 1min. SKPN : 200V AC for 1min. SKEY/PD : 100V 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									
	Lifetime		Shall be in accordance with individual specifications.									
Environmental performance	Cold		-30 ± 2 for 96h									
	Dry heat		80 ± 2 for 96h									
	Damp heat		60 ± 2 , 90 to 95%RH for 96h									
Page			296	298	296	299	300	301	302	303	304	305

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.

- TACT Switch™ Soldering Conditions306
- TACT Switch™ Cautions307
- Product Line of Knob for TACT Switch™308

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line
Package Type

TACT Switch™

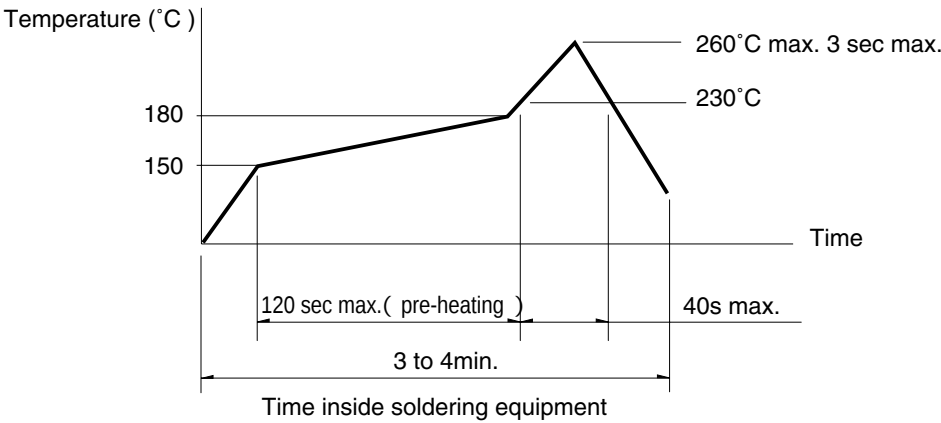
Custom-
ProductsSharp
FeelingSoft
FeelingSnap-in
TypeSurface
Mount TypeRadial
Type

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 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



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 flux
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 Switch™.
- 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.)