

TACT Switch™ Low Contact Resistance (Surface Mount Type)

SKPM Series



Soft feeling with metal contact provides low contact resistance.

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

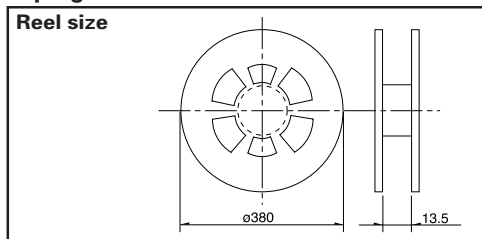


Product Line

Product No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Rating (min.)	Operating life (1mA 5V DC)	Initial contact resistance	Minimum order unit (pcs.)
SKPMAME010	1.57N	Vertical	1.3	50mA 16V DC	10μA 1V DC	100,000cycles	100mΩ max.	2,000
SKPMANE010	1.96N							
SKPMAPE010	2.45N							
SKPMBHE010	3N							

Packing Specifications

Taping



Number of packages (pcs.)			Tape width (mm)	Export package measurements (mm)
1 reel	1 case /Japan	1 case /export packing		
2,000	20,000	20,000	12	401 × 401 × 214

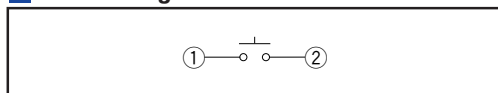
- Sharp Feeling
- Soft Feeling**
- Snap-in Type
- Surface Mount Type
- Radial Type

Dimensions

Unit:mm

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

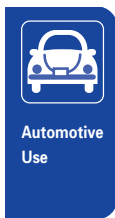
Circuit Diagram



Notes










1. For φ330mm diameter reel requirements, please contact us.
2. Please place purchase orders per minimum order unit N (integer).

Refer to P.334 for soldering conditions.



List of Varieties

Soft Feeling Type

Series		SKEG	SKEG	SKEY	SKPF	SKPM	SKPG	SKPR	SKPL	SKPD	
Photo											
Type		Snap-in				Surface mount			Radial		
Features		—	Horizontal type	—	High operation force and long travel	Low contact resistance	—	High operation force and Low contact resistance	Round terminal and low contact resistance	—	
Operating direction	Vertical	●	—	●	●	●	●	●	●	●	
	Horizontal	—	●	—							
Dimensions (mm)	W	□6	7.5	□7.8	8	5.9	6.6	7.5	φ 6.45	□7.8	
	D		9.9		9	6	6.3	7.8			
	H	7	7.3	5	10	5		6.5	5		
Contact		Carbon				Silver	Carbon	Silver		Carbon	
Operation force coverage		1N	↕	↕	↕	↕	↕	↕	↕	↕	
		5N						●			
Travel (mm)		1		1 1.2	See the relevant pages for respective product descriptions	1.3		1	1.3	See the relevant pages for respective product descriptions	
Ground terminal		—									
Operating temperature range		-20°C to +70°C			-40°C to +90°C						
Automotive use		—		●	●	●	●	●	●	●	
Electrical performance	Insulation resistance	100MΩ min. 100V DC SKEY/PDAC, PDAL, PDAM : 50MΩ min. 100V DC									
	Voltage proof	250V AC for 1min. SKEY/PDAC, PDAL, PDAM : 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°C for 96h									
	Dry heat	80±2°C for 96h									
	Damp heat	60±2°C, 90 to 95%RH for 96h									
Page		325	327	328	329	330	331	332	333		

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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 Conditions334
- TACT Switch™ Cautions335
- Product Line of Knobs for TACT Switch™336

Note

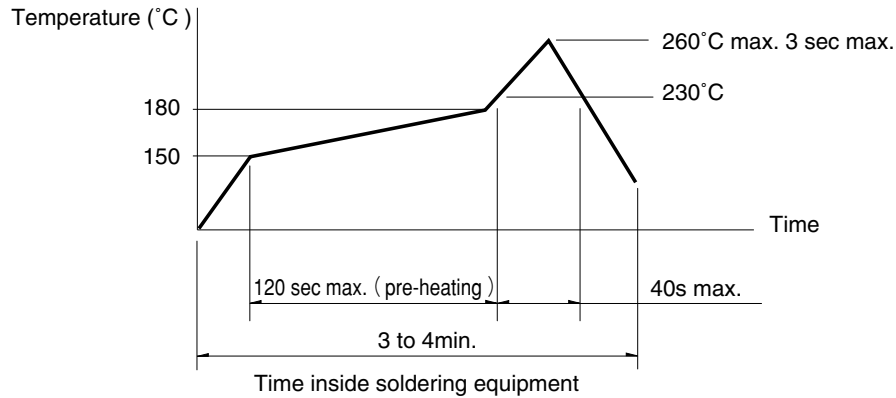
●marks in "Available for automotive use" indicate that all of the series products can work at the operating temperature range from -40°C to +85°C.

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 0.2φ CA (K) or CC (T) at solder joints (copper foil surface). A heat resistive tape should be used to fix thermocouple.
3. Temperature profile



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
(Except, 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°C max.
Preheating time	60s max.
Soldering temperature	260°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 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.)

Manual Soldering (Except SKRT Series)

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

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line
Package Type

TACT Switch™

Custom-
Products

Sharp
Feeling

Soft
Feeling

Snap-in
Type

Surface
Mount Type

Radial
Type