

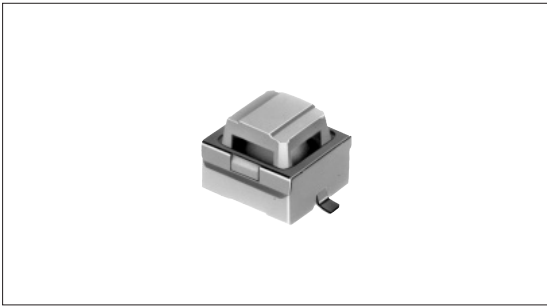
# TACT Switch™ High Operation Force with 5mm Height (Surface Mount Type)

SKPG Series



Low-profile surface mount type with high operation force most suitable for in-car components.

- Detector
- Push
- Slide
- Rotary
- Encoders
- Power



- Dual-in-line Package Type
- TACT Switch™**
- Custom-Products

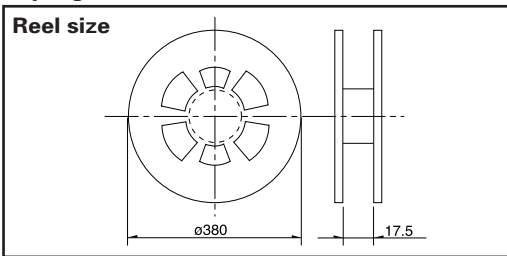
## Product Line

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.)
SKPGACE010	1.18N	Vertical	1.3	5mA 12V DC	10μA 1V DC	50,000cycles	1kΩ max.	Light blue	1,200
SKPGAAE010	2.45N							Green	
SKPGABE010	2.94N							Blue	

## Packing Specifications

### Taping

Unit:mm



Number of packages (pcs.)			Tape width (mm)	Export package measurements (mm)
1 reel	1 case /Japan	1 case /export packing		
1,200	9,600	9,600	16	401×401×214

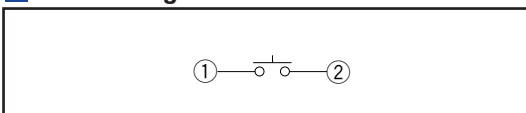
- Sharp Feeling
- Soft Feeling**
- Snap-in Type
- Surface Mount Type
- Radial Type

## 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.328 for soldering conditions.



# List of Varieties

## Soft Feeling Type

Series		SKEG	SKEG	SKEY	SKPF	SKPM	SKPG	SKPL	SKPD
Photo									
Type		Snap-in			Surface mount		Radial		
Features		—	Horizontal type	—	High operation force travel	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	φ6.45	□7.8
	D		9.9		9	6	6.3		
	H	7	7.3	5	10	5	5		
Contact		Carbon				Silver	Carbon	Silver	Carbon
Operation force coverage	1N	↕	↕	↕	↕	↕	↕	↕	↕
	5N				↕	↕	↕	↕	↕
Ground terminal		—							
Operating temperature range		-20°C to +70°C		-40°C to +90°C					
Electrical performance	Insulation resistance	100MΩ min. 100V DC SKEY/PD : 50MΩ min. 100V DC							
	Voltage proof	250V 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°C for 96h							
	Dry heat	80±2°C for 96h							
	Damp heat	60±2°C, 90 to 95%RH for 96h							
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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.

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Detector  
 Push  
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 Dual-in-line  
 Package Type  
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 Custom-  
 Products

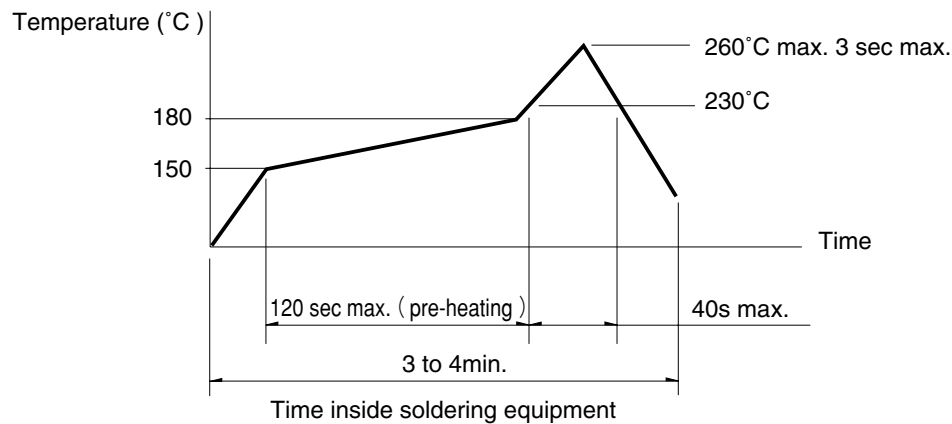
Sharp  
 Feeling  
 Soft  
 Feeling  
 Snap-in  
 Type  
 Surface  
 Mount Type  
 Radial  
 Type

## 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  $\phi$  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 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°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°C max.
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-  
ProductsSharp  
FeelingSoft  
FeelingSnap-in  
TypeSurface  
Mount TypeRadial  
Type