

Switch with soft operating feel available also as joint stem and sidepush types



TACT Switch™

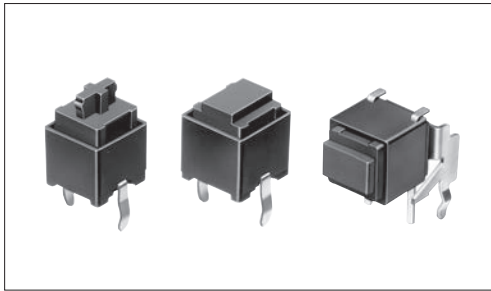
Sharp Feeling

Soft Feeling

Snap-in Type

Surface Mount Type

Radial Type



### Typical Specifications

Items	Specifications
Rating (max.)	5mA 12V DC
Rating (min.)	10 $\mu$ A 1V DC
Initial contact resistance	1k $\Omega$ max.
Travel (mm)	1

### Product Line

Top push type

Product No.	Operating force	Operating direction	Operating life (1mA 5V DC)	Stem color	Stem	Minimum order unit (pcs.)		Drawing No.
						Japan	Export	
<b>SKEGACA010</b>	0.78N	Top push	100,000 cycles	Ivory	Joint stem	1,000	1,000	1
<b>SKEGAEA010</b>	1.96N			Dark gray				
<b>SKEGADA010</b>	0.78N			Ivory	Flat stem			2
<b>SKEGAF010</b>	1.96N			Dark gray				

Side push type

Product No.	Operating force	Operating direction	Operating life (1mA 5V DC)	Stem color	Minimum order unit (pcs.)		Drawing No.
					Japan	Export	
<b>SKEGLAA010</b>	0.78N	Side push	50,000 cycles	Black	1,000	1,000	3
<b>SKEGLBA010</b>	1.96N			Dark gray			

### Packing Specifications

Bulk

Number of packages (pcs.)		Export package measurements (mm)
1 case / Japan	1 case / export packing	
10,000	30,000	309×476×347

### Dimensions

Unit:mm

No.	Photo	Style	PC board mounting hole dimensions (Viewed from switch mounting face)
1			

Refer to P.265 for soldering conditions.

■ Dimensions

Unit:mm

No.	Photo	Style	PC board mounting hole dimensions (Viewed from switch mounting face)
2			
3			

■ Circuit Diagram



**Note**

Please use 1.6mm thick PC boards. (For horizontal type, 1.0mm)

■ Product Line of Knobs

Unit:mm

Applicable model	Dimensions	Variety		Label dimensions
		Color	Model	
<b>SKEG</b>  Applicable to joint stem type	 	Cap		
		Clear	SK2AA00540	
		Keytop		Keytop+Cap
		Red Blue Ivory Black Yellow	SK2AA00310 SK2AA00320 SK2AA00330 SK2AA00340 SK2AA00350	SK2AA00360 SK2AA00370 SK2AA00380 SK2AA00390 SK2AA00400

**Notes**

1. The knob will be delivered together with the switch but packed separately.
2. The label is not included.

# TACT Switch™

## List of Varieties

TACT Switch™

Sharp Feeling

Soft Feeling

Snap-in Type

Surface Mount Type

Radial Type

Type		Soft Feeling Type								
		Snap-in			Surface Mount				Radial	
Series		SKEG	SKEG	SKPF	SKPS	SKPM	SKPG	SKPR	SKPL	SKPD
Photo										
Features		—	—	High operation force Long travel	Low contact resistance	Low contact resistance	—	High operation force Low contact resistance	Round terminal Low contact resistance	—
Water-proof		—	—	—	—	—	—	—	—	—
Dust-proof		—	—	—	—	—	—	—	—	—
IP standard		—	—	—	—	—	—	—	—	—
Operating direction	Top push	●	—	●	●	●	●	●	●	●
	Side push	—	●	—	—	—	—	—	—	—
Dimensions (mm)	W	□6	7.5	8	5.9		6.6	7.5	φ6.45	□7.8
	D		9.9	9	6		6.3	7.8		
	H	See the relevant pages for respective product descriptions	7.3	10	5		6.5	5	See the relevant pages for respective product descriptions	
Contact		Carbon			Silver		Carbon	Silver		Carbon
Operation force coverage	1N max.	↕	↕	↕	↕	↕	↕	↕	↕	↕
	1N to 2N	↕	↕	↕	↕	↕	↕	↕	↕	↕
	2N to 3N	↕	↕	↕	↕	↕	↕	↕	↕	↕
	3N to 4N	↕	↕	↕	↕	↕	↕	↕	↕	↕
Travel (mm)		1		See the relevant pages for respective product descriptions	1.05	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		●	●	●	●	●	●	●	●	●
Life Cycle										
Electrical performance	Rating (max.) (Resistive load)	5mA 12V DC			50mA 16V DC		5mA 12V DC	50mA 16V DC		5mA 12V DC
	Rating (min.) (Resistive load)	10μA 1V DC								
	Insulation resistance	100MΩ min. 100V DC 1min.								50MΩ min. 100V DC 1min. SKPDAF: 100MΩ min. 100V DC 1min.
	Voltage proof	250V AC 1min.								100V AC 1min. SKPDAF: 250V DC 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 2 hours respectively								
	Lifetime	Shall be in accordance with individual specifications.								
Environmental performance	Cold	-30°C 96h	-40°C 96h	-40°C 1,000h	-40°C 96h	-40°C 1,000h	-40°C 96h	-40°C 1,000h	-40°C 96h	
	Dry heat	80°C 96h	90°C 96h	90°C 1,000h	90°C 96h	90°C 1,000h	90°C 96h	90°C 1,000h	90°C 96h	
	Damp heat	60°C, 90 to 95%RH 96h		60°C, 90 to 95%RH 1,000h		60°C, 90 to 95%RH 96h	60°C, 90 to 95%RH 1,000h		60°C, 90 to 95%RH 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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### Notes

- The automotive operating temperature range to be individually discussed upon request.
- Indicates applicability to all products in the series.

## Condition for Reflow

Available for Surface Mount Type.

1. Temperature measurement: Thermocouple  $\phi$  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.
2. 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.

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.

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

### 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	45s max.
Soldering temperature	255°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

## Manual Soldering

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.

### SKTD, SKTG, SKQJ, SKQK, SKEG Series

Items	Condition
Soldering temperature	350°C max.
Duration of soldering	3s max.
Capacity of soldering iron	20W max.

### Notes

1. Prevent flux penetration from the top side of the TACT Switch™.
2. Switch terminals and a PC board should not be coated with flux prior to soldering.
3. The second soldering should be done after the switch is stable with normal temperature.
4. Use the flux with a specific gravity of min 0.81.  
(EC-19S-8 by TAMURA Corporation, or equivalents.)