# **TACT** Switch™

# 6.45mm Diameter Low Contact Resistance with Round Terminals (Radial Type)

**SKPL** Series





## Soft feeling, low contact resistance metal contacts and round terminals with excellent PC board mouting performance.

Detector

Push

Slide

**Rotary** 

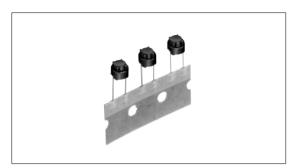
**Encoders** 

Power

Dual-in-line Package Type

TACT Switch™

Custom-**Products** 



#### Product Line

Product No.	Operating force	Operating direction				Operating life (5mA 5V DC)	Initial contact resistance	Rubber color	Minimum order unit ( pcs. )
SKPLAGD010	1.57N			- A				Gray	
SKPLAKD010	1.96N	Vertical	1.3	50mA 16V DC	10μA 1V DC	100,000cycles	100m max.	Green	2,700
SKPLAFD010	2.45N							Yellow	

#### Specification of Radial Taping Package (Taping Packaging for Auto-insertion) **Box Size** Unit:mm

Number of packages( pcs. )						
1 box	1 case /Japan	1 case /export packing				
2,700	27,000	27,000				

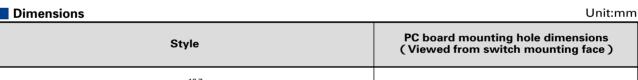
Sharp Feeling

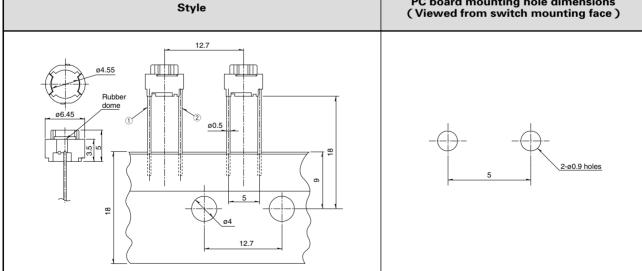
**Feeling** 

Snap-in Type

Surface Mount Type

Radial Type





## Circuit Diagram



## Notes

- 1. Using a 1.6mm thick PC board is recommended.
- 2. Please place purchase orders for taping products per minimum order unit (1 reel or a case).

# **List of Varieties**

## Soft Feeling Type

Soft Feeling Type												
Series		SKEG	SKPE	SKEG	SKEY	SKPF	SKPM	SKPN	SKPG	SKPL	SKPD	
Photo			W.			8						
Туре		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	Vert	tical										
ating	Horiz	ontal										
Dimen ( mi		w	e	6.6	7.5	7.0	8	5.9	6	6.6	16 AE	7.0
		D	6 6.3	9.9	7.8	9	6	6.7	6.3	- φ6.45	7.8	
		н	7	5	7.3	5	10	5	7		5	
(	Contact	t	Carbon					Silver Carbon		Silver	Carbon	
1N Operation force coverage 5N		1N 5N	1	1	1	<b>1</b>	<b>1</b>	1	<b>‡</b>	1	<b>‡</b>	$\uparrow$
Ground terminal												
Operating temperature range		-20 to +70 SKEG -40 to +90										
Insulation resistance SKEY/PD : 50M min. 100V DC												
Electrical performance	Volt		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									
Durability	Lifetime Shall be in accordance with individual specifications.											
Envi per	Co	old	-30 ± 2 for 96h									
invironmenta performance	Cold         -30 ± 2 for 96h           Dry heat         80 ± 2 for 96h           Damp heat         60 ± 2 , 90 to 95%RH for 96h											
ental nce												
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.

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

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Custom-**Products** 

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

Surface Mount Type Radial

Type

**Detector** 

Push

Slide

**Rotary** 

**Encoders** 

Power

Dual-in-line Package Type

TACT Switch<sup>11</sup>

Custom-

**Products** 

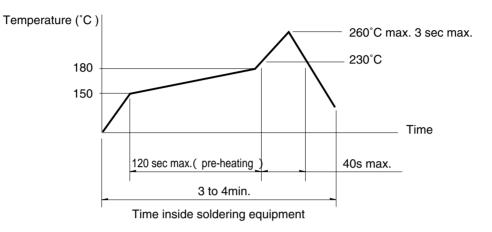
Snap-in Type Surface Mount Type Radial Type

# **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.

# Sharp Feeling 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  $\widetilde{Switch}^{TM}$ .
- 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.)