## **TACT** Switch<sup>™</sup> 4.2 × 3.2mm Compact High Operating Force (Surface Mount Type)

SKRP Series



High operation force satisfy the needs in automotive applications. Wide stem & good mountability.



Push

Slide

Rotary

Sharp

Soft

Туре

Surface

Radial Туре

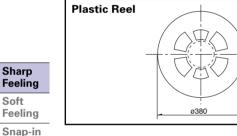
Mount Type



Encoders	Product Line									
Power	Product No.	Operating force	Operating direction			Rating (min.)	Operating life (5mA 5V DC)	Initial contact resistance	Stem color	Minimum order unit ( pcs. )
Dual-in-line Package Type	SKRPABE010	1.57N					100,000cycles		Natural	
TACT Switch <sup>™</sup>	SKRPACE010	2.55N	Vertical	0.2	50mA 16V DC	10 <i>µ</i> A 1V DC	50,000cycles	500m max.	Naturai	4,000
Custom- Products	SKRPADE010	4N					100,000cycles		Black	

#### Specification of Embossed Taping Package (Taping Packaging for Auto-insertion) **Reel Size**

Unit:mm



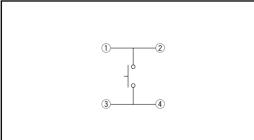
Reel		
	ø380	

Num			
1 reel	1 case /Japan	1 case /export packing	Tape width (mm)
4,000	40,000	40,000	12

### Dimensions

PC board land dimensions Style (Viewed from switch mounting face) 4.6 4.2 Γ ဖ 2.2 Rı Stem 5.2

## Circuit Diagram



### Note

- 1. Please place purchase orders for taping products per minimum order unit (1 reel or a case).
- 2. For 330mm diameter reel requirements, please contact us.



## List of Varieties

### Sharp Feeling Type

		sing i	ype		i									
	Series		SKSD	SKRN	SKSE	SPEE	SKRK	SKRP	SKQM	SKQY	SKRA	SKHM	SKHU	
Photo			$\diamond$	101	Ser.					C.		C.		
Туре							Su	irface moi	unt					
Features		s	Double action Horizon Double		ntal type e action	Compact size Low-profile	High operation force Compact size	Compact size		Middle stroke	Dust–proo type is available			
Oper dire	Vert	tical												
Operating direction	Horiz	ontal		•							•			
		w	4.1	6	5.9	4	3.9	4.2	6	6.1	6.2	6	6.2 6.5	
	nsions m)	D	3.9 6		2.87	5	2.9	3.2	3.5	3.7	6.2	6		
		Н	0.6	0.9	3	1.22	1.5	2.5	4.3	2.5	3.4	3.1	2.5	
1N Operation force coverage		See the	e relevant p product de	ages for res escriptions	spective	\$	Ì	Ĵ	↓ ↓	Ì	1	↓ ↓		
5N Ground terminal														
Operating temperature range			-30	0 to +8	5	-10 to +60		-30 to +85						
Performance Insulation resistance Voltage proof Vibration			100M	min. 10	00V DC	10M min. 100V DC	100M min. 100V DC							
				V AC for 1 : 100V AC		100V AC for 1min.								
		ation		1(	0 to 55 to in t	10Hz/min he 3 direc	n., the amplitude is 1.5mm for all the frequencies, ction of X, Y and Z for 2hours respectively							
Durability	Lifetime Shall be in accordance with individual specifications.													
Envi	Co	old	-30	±2 for	96h	-40 ± 2 for 96h	-30 ± 2 for 96h							
Environmenta	Dry	heat	80	±2 for 9	96h	85 ± 2 for 96h	80 ± 2 for 96h							
ental	Damp	heat	60 ± 2	, 90 to 95 96h	%RH for	40 ± 2 , 90 to 95%RH for 96h	60 ± 2 , 90 to 95%RH for 96h							
	Page		278	279	280	84	281	282	283	284	285	286	287	
					•	•				·				

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.

Note

The automotive operating temperature range to be individually discussed upon request.

# 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.

## Push 3. Temperature profile

Slide

Detector

Rotary

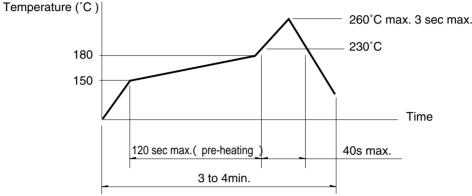
Encoders

Power

Dual-in-line Package Type

TACT Switch<sup>™</sup>

Custom-Products



Time inside soldering equipment

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

## nıgr

## Conditions for Auto-dip Available for Snap-in Type and Radial Type

(Except SKHJ, SKHL, SKQJ, SKQK, SKEG series)

ltems	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.				
Duration of soldering	3s max.				
Capacity of soldering iron	60W max.				

#### Notes

- 1. Consult with us for availability of TACT Switch<sup>™</sup> washing.
- 2. Prevent flux penetration from the top side of the TACT Switch<sup>™</sup>.
- 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.)