# 0.9mm low-profile, double action type





## ■ Typical Specifications

Items	Specifications
Rating (max.)	50mA 12V DC
Rating (min.)	10μA 1V DC
Initial contact resistance	100mΩ max.
Travel (mm)	1 st 0.25 All 0.4

# ■ Product Line

Product No.	Operating force	Operating direction	Operating life	Guide bosses	Minimum order unit (pcs.)				
T TOUGGE TVO.	Operating force	Operating direction	(5mA 5V DC)	Odide bosses	Japan	Export			
SKRNPAE010	1st 0.78N			Without					
SKRNPBE010	2nd 2.45N	2nd 2.45N  lst 0.78N 2nd 1.57N  Top push  lst 0.59N 2nd 1.57N		30,000 cycles	With				
SKRNPCE010	1st 0.78N		30,000 Cycles	VVICII	5.000	5.000			
SKRNPDE010	2nd 1.57N		-	TOP PUSIT		Without	3,000	3,000	
SKRNPEE010							100,000 cycles	Without	
SKRNPME010	2nd 1.57N		100,000 Cycles	With					

# ■ Packing Specifications

## Taping

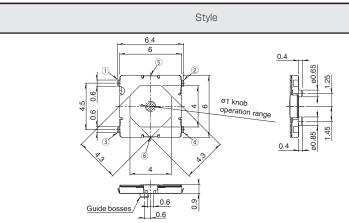
Ī	Num	ber of packages (	Tape width	Export package		
	1 reel	1 reel 1 case / Japan 1 cas		(mm)	measurements (mm)	
	5,000	50,000	50,000	12	395×395×205	

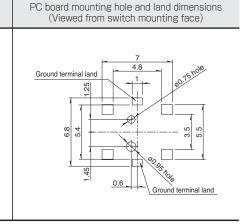
# Reel size

## Note

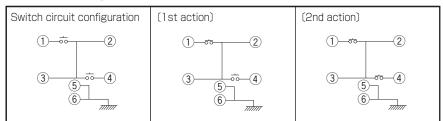
For reels of 330mm diameter, please inquire.

# Dimensions





# ■ Circuit Arrangement



Refer to P.265 for soldering conditions.

Type Sharp Feeling Type										
, ypc			I	T	5	Surface Moun	it		T	ı
	Series	SKSD	SKRN	SKTA	SKSV	SKSW	SKSF	SKSM	SKTK	SKSG
	Photo			NEW	•		•	•	NEW	0
	Features	Double	action			Compact size Low-profile	9		Long life	High operation force Compact size
	Water-proof	_	_	•	•	•	_	•	•	_
	Dust-proof	_	_	•	•	•	_	•	•	_
	IP standard	_	_	67 equivalency	67 equivalency	67 equivalency 68 equivalent in some cases	_	67 equivalency	67 equivalency	_
Operatir	Top push	•	•	•	•	•	•	•	•	•
directio		_	_	_	_	_	_	_	_	_
	W	4.1		2.6	2.8	3	2.8	3.4	5.9	3
Dimensio (mm)	ons D	3.9	□6	1.6	1.9	2	2.4	2.9	4	2.7
(11111)	Н	0.6	0.9	0.53	0.55	0.6	0.65	0.7	0.78	1.4
Operation force coverage	2N to 3N	for respect	evant pages ive product iptions	<b>\$</b>	Ĵ	1	<b></b>	<b>‡</b>	<b>\$</b>	1
	Travel (mm)		ant pages for uct descriptions	0.11	0.12	0.13	(	D.1	0.25	0.12
G	round terminal	•	•	_	_	_	_	_	_	0
Operatin	g temperature range	-40℃ t	o +90°C			_	30℃ to +8!	5°C		
Aı	utomotive use	_	_	_	_	_	_	_	_	•
	Life Cycle	<b>*</b> 2	<b>*</b> 2	<b>*</b> 2	<b>*</b> 2	<b>*</b> 2	<b>X</b> 2	<b>*</b> 2	<b>*</b> 2	<b>*</b> 2
	Rating (max.) (Resistive load)				5	i0mA 12V D	С			
Electrical	Rating (min.) (Resistive load)	10µA 1V DC								
performance	Insulation resistance	100MΩ min. 100V DC 1min. 50MΩ min. 100V DC 1min. 100V DC 1min. 100V DC 1min.								
	Voltage proof	100V AC 250V AC 1min. 100V AC 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								
Durability	Lifetime	Shall be in accordance with individual specifications.								
	Cold	-40°C 96h								
Environmental performance	Dry heat	90° 96h								
	Damp heat	60°C, 90 to 95%RH 96h								
	Page	219	220	221	222	223	225	226	227	228

W: Width. The most outer dimension excluding terminal portion.

#### Notes

 $<sup>\</sup>mathsf{D}:\mathsf{Depth}.$  The most outer dimension excluding terminal portion. H: Height. The minimum dimension if there are variances.

<sup>1.</sup> The automotive operating temperature range to be individually discussed upon request.

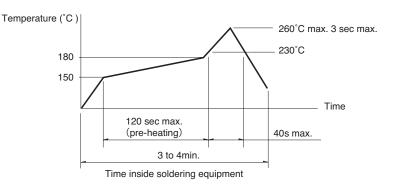
<sup>2. •</sup> Indicates applicability to all products in the series, while  $\bigcirc$  indicates applicability to some products in the series.

# TACT Switch™ Soldering Conditions

#### 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

- 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.
- 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℃ max.
Duration of immersion	5s max.
Number of soldering	2times max.

# Manual Soldering

Items		Condition
Soldering temperature		350℃ 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.)

