# 3.5 × 3.2mm Compact Dust Proof (Surface Mount Type)

# Meets automotive needs with a sealed contact structure for dust resistance







# ■ Typical Specifications

Items	Specifications
Rating (max.)	25mA 16V DC
Rating (min.)	10 µA 1V DC
Initial contact resistance	500mΩ max.
Travel (mm)	0.12

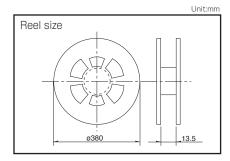
## ■ Product Line

Product No.	Operating force	Operating direction	Operating life	Stem height	Minimum ord	Drawing	
Floudet No.	Operating force	Operating unection	(5mA 5V DC)	(5mA 5V DC)		Export	No.
SKTHBAE010	3N		200,000 cycles	2.5mm	4,000	4,000	1
SKTHACE010	1.4N	Top push	100,000 cycles	1.8mm	5.000	5.000	2
SKTHAEE010	5N		200,000 cycles	1.75mm	3,000	3,000	3

## Packing Specifications

## Taping

Series	Numb	er of packages	Tape width	Export package		
Selles	1 reel	1 case /Japan	1 case / export packing	(mm)	measurements (mm)	
SKTHBA	4,000	40,000	40,000	12	395×395×205	
SKTHAC SKTHAE	5,000	50,000	50,000	12	393/393/203	



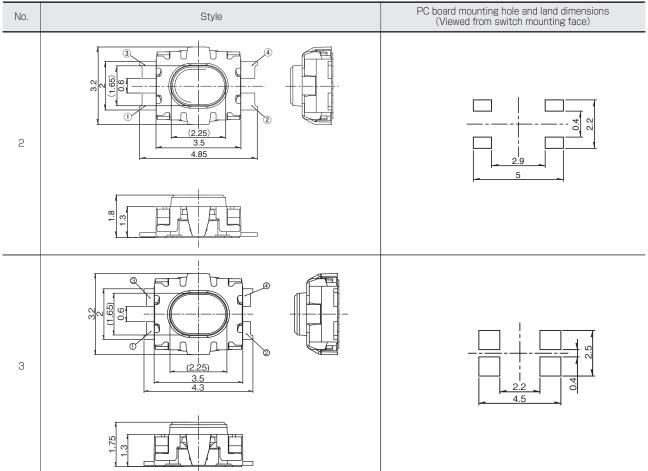
For reels of 330mm diameter, please inquire.

Dimensions Unit:mm PC board mounting hole and land dimensions (Viewed from switch mounting face) No. Style 1

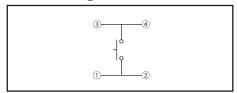


Dimensions

Unit:mm



# ■ Circuit Diagram



	Tuno				Sh	arp Feeling T	уре			
	Туре				;	Surface Mour	nt			
	Series	SKRK	SKTH	SKRP	SKQM	SKQY	SKSU	SKST	SKRA	SKHM
	Photo								0	
	Features	Compact size Low-profile	Compact size	High operation force Compact size	Compa	act size		Middle trave	el	_
	Water-proof	_	_	_	_	_	•	_	0	_
	Dust-proof	_	•	_	_	_	•	_	0	_
	IP standard	-	_	_	_	_	67 equivalency	_	67 equivalency	_
Operatir	Top push	•	•	•	•	•	•	•	•	•
directio		_	_	_	_	_	_	_	_	_
	W	3.9	3.5	4.2	6	6.1	5.3			6.2
Dimensio (mm)		2.9	3.2	3.2	3.5	3.7	5.4	8.5	□6.2	6.5
(11111)	Н	1.5/2	1.8/2.5	2.5	4.3/5	2.5	3.85	3.95	3.5/5.2	3.1
Operation force coverage	2N to 3N	1			1		<b>‡</b>	<b>+</b>	1	
	Travel (mm)	0.13	0.12	0.2	0.	25	0.7	0.9	See the relevant pages for respective product descriptions	0.25
G	round terminal	_	_	_	_	0	_	_	_	•
Operating temperature range		-40℃ to +85℃			_	40℃ to +90	)°C			-40℃ to +85℃
А	utomotive use	_	•	•	•	•	•	•	0	_
	Life Cycle	<b>*</b> 2	<b>*</b> 2	*3	<b>*</b> 2	<b>*</b> 2	*3	<b>*</b> 2	*3	*3
	Rating (max.) (Resistive load)	50mA 12V DC	25mA 16V DC	50mA 16V DC	50mA	12V DC	50mA 1	16V DC	50mA	12V DC
Electrical	Rating (min.) (Resistive load)	10μΑ 1V DC								
performance	Insulation resistance	100MΩ min. 100V DC 1min.								
	Voltage proof	250V AC 100V AC 1min. 250V AC 1min.								
Durahilit	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	-40°C 1,000h -40°C 96h				-40℃ 1,000	lh	-40℃ 96h
Environmental performance	Dry heat	90°C	96h	90°C 1,000h 90°C 96h			90°C 1,000h			90℃ 96h
	Damp heat	60°C, 90 to	95%RH 96h	60°C, 90 to 95%RH 1,000h		to 95%RH 6h	60°C, 90	0 to 95%RF	H 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

 $<sup>\</sup>hbox{1. The automotive operating temperature range to be individually discussed upon request.}\\$ 

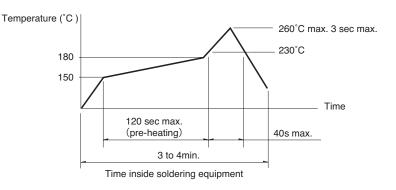
<sup>2.</sup> Indicates applicability to all products in the series, while O indicates applicability to some products in the series.

# 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℃ 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°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.)

