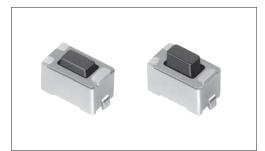
# Tall height (4.3mm and 5.0mm) and surface mount type







# ■ Typical Specifications

Items	Specifications
Rating (max.)	50mA 12V DC
Rating (min.)	10μA 1V DC
Initial contact resistance	500mΩ max.
Travel (mm)	0.25

# ■ Product Line

Product No. Operating force	Operating force	Operating direction	Operating life	Stem color	Stem height	Minimum order unit (pcs.)	
T TOUGGE TWO.	Operating force	Operating direction	(5mA 5V DC)		Otermieight	Japan	Export
SKQMBAE010	0.98N	- Top push	50,000 cycles	Black	h=4.3mm	2,000	2,000
SKQMASE010	1.57N						
SKQMAQE010	2.55N		30,000 cycles	Red			
SKQMATE010	0.98N		50,000 cycles	Black			
SKQMBBE010	1.57N			JU,UUU CYCIES	DIACK	h=5mm	
SKQMARE010	2.55N		30,000 cycles	Red			

# Packing Specifications

# Taping

Number of packages (pcs.)			Tape width	Export package
1 reel	1 case / Japan	1 case / export packing	(mm)	measurements (mm)
2,000	20,000	20,000	12	401×401×214

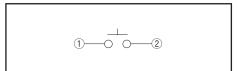
# Reel size

### Note

For reels of 330mm diameter, please inquire.

# Dimensions Style PC board land dimensions (Viewed from switch mounting face) h 4.3 5 5

# Circuit Diagram



	Tuno		,		Sharp Fe	eling Type			
	Type				Surfac	e Mount			
	Series	SKTH	SKRP	SKQM	SKQY	SKSU	SKST	SKRA	SKHM
	Photo	NEW				Car.		9	P
	Features	Compact size	High operation force Compact size	Compact size		Middle travel		ı	_
	Water-proof	_	_	_	_	•	_	0	_
	Dust-proof	•	_	_	_	•	_	0	_
	IP standard	_	_	_	_	67 equivalency	_	67 equivalency	_
Operatir	Top push	•	•	•	•	•	•	•	•
directio	n Side push	_	_	_	_	_	_	_	_
	W	3.5	4.2	6	6.1	5.3	8.5		6.2
Dimensio (mm)	ons D	3.2	3.2	3.5	3.7	5.4	8.5	- □6.2	6.5
, ,	Н	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	Ţ	1			<b>‡</b>	<b>+</b>		Ţ
	Travel (mm)	0.12	0.2	0.	25	0.7	0.9	See the relevant pages for respective product descriptions	0.25
G	round terminal	_	_	_	0	_	_	_	•
Operatin	g temperature range			-	-40°C to +90	C			-40℃ to +85℃
Aı	utomotive use	•	•	•	•	•	•	0	_
	Life Cycle	<b>*</b> 2	*3	<b>*</b> 2	<b>2</b>	*3	<b>*</b> 2	*3	*3
	Rating (max.) (Resistive load)	25mA 16V DC	6V DC 50mA 16V DC 50mA 12V DC 50mA 16V DC 50mA 1				2V DC		
Electrical	Rating (min.) (Resistive load)		10µA 1V DC						
performance	Insulation resistance	100MΩ min. 100V DC 1min.							
	Voltage proof	100V AC 1min. 250V AC 1min.							
Durability	Vibration	O 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							
Dardonity	Lifetime	Shall be in accordance with individual specifications.							
	Cold	-40℃ 96h	-40℃ 1,000h	-40°	C 96h		-40°C 1,000k	n	-40℃ 96h
Environmental performance	Dry heat	90℃ 96h	90°C 1,000h	90℃ 96h		90°C 1,000h		90℃ 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, 9	10 to 95%RH	1,000h	60°C, 90 to 95%RH 96h
	Page	227	229	230	231	233	234	235	236

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.

	The Height. The minimum difficultion in their die variances.
TACT Switch™ Soldering Conditions · · · · · · · · · · · · · · · · · · ·	
TACT Switch <sup>TM</sup> Cautions	

### Notes

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

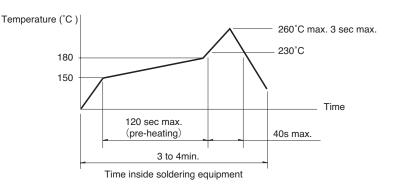
<sup>2.</sup> Indicates applicability to all products in the series, while O indicates applicability to some products in the series.

# 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℃ 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.)

