

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 Operating Operating life Stem color		Stem height	Minimum order unit (pcs.)			
Product No.	force	direction	(5mA 5V DC)	Stem color	Stem neight	Japan	Export
SKQMBAE010	0.98N		50,000cycles	Black			
SKQMASE010	1.57N		50,000Cycles	Біаск	h=4.3mm	2.000	2 000
SKQMAQE010	2.55N	Toppush	30,000cycles	Red			
SKQMATE010	0.98N	Toppush	50,000cycles 30,000cycles	Disal		2,000	2,000
SKQMBBE010	1.57N			Black	h=5mm		
SKQMARE010	2.55N			Red			

# Packing Specifications



Detector

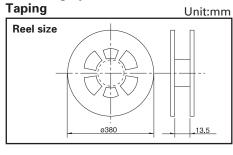
Push

Slide

Rotary

Encoders

Power Dual-in-line Package Type TACT Switch<sup>™</sup>

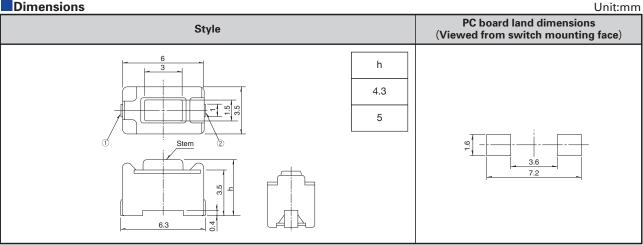


Numbe	er of packages		Export package	
1 reel	1 case / Japan	1 case / export packing	Tape width (mm)	measurements (mm)
2,000	20,000	20,000	12	401 × 401 × 214

## Note

For reels of 330mm diameter, please inquire.

## Dimensions



ALPS

# Circuit Diagram

# **TACT Switch**<sup>™</sup>

# List of Varieties

	Туре	-	Surface Mount											
	Series	5	SKRN	SKSE	SKSV	SKSW	SKSF	SKSM	SKSG	SKRK	SKRP	SKQM	SKQY	SKS
	Photo	<	Ô	-07	NEW	NEW	۲	NEW					۷	NEV
	Features		Double	action	-		act size profile	•		Compact size Low-profile		Compact size		Midd trave
,	Water-proof		_	_	•	•	_	•		_	Compact size		_	•
	Dust-proof		_		•	•	0	•			_		0	•
Operat	Toppus	h	•	_	•	•	•	•	•	•	•	•	٠	•
directi		h	_	•	_	_	_	_	_	_	_	_	_	_
	W		□6	5.9	2.8	3.0	2.8	3.4	3	3.9	4.2	6	6.1	5.3
Dimensi (mm	D			2.87	1.9	2	2.4	2.9	2.7	2.9	3.2	3.5	3.7	5.4
	Н	~1N	0.9	3	0.5	0.58	0.65	0.7	1.4	1.5 <b>1</b>	2.5	4.3	2.5	3.8
Operat	ion <sup>1N</sup>	~1N  ~2N			1	\$	\$	\$	1	Ļ	1			
force		I~3N I~4N	*	×	+						L	¥		\$
oovera	-	I~5N							•					•
	Travel (mm)		*	<b>«</b>	0.12	0.13	C	.1	0.12	0.13	0.2	0.:	25	0.7
Gr	ound terminal		•	٠	_	_	_	_	•	—	_	—	•	_
Opera	iting temperatu range	ire						- 30℃ to	o + 85℃					
Αι	tomotive use		_		_	_	_	_	0	_	•	•	•	
	Life Cycle								*3	2	*3		2	×
	lating (max.) esistive load)		50mA 12V DC 50mA 12V DC 50mA 12V DC 50mA 12V DC 16V DC											
	Rating (min.) esistive load)							10 <i>µ</i> A	1V DC					
Electrical	Insulation resistance						100M	Ω min. 10	0V DC fo	r 1min.				
performance	Voltage pro		50V AC or 1min.							250V AC for 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 2hours respectively											
Durability	Lifetime		Shall be in accordance with individual specifications.											
	Cold		– 30±2°C for 96h											
Environmental performance	Dry heat		80±2°C for 96h											
	Damp hea	t	60±2°C , 90 to 95%RH for 96h											
	Page		255	256	257	258	259	260	261	262	263	264	265	26
							W : V D : D H : H	Vidth. Th epth. The	e most o e most ou	uter dime iter dime	ension ex	cluding t	erminal perminal p	ortio

Notes

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

2. • indicates applicability to all products in the series, while  $\bigcirc$  indicates applicability to some products in the series.

3. X See the relevant pages for respective product descriptions



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# TACT Switch<sup>™</sup> Soldering Conditions

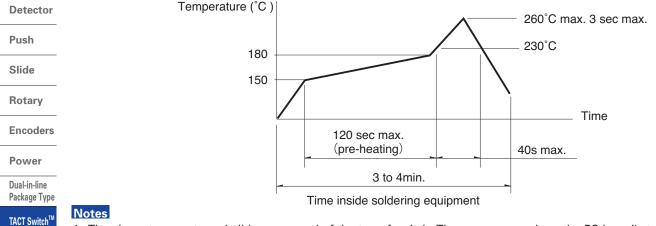
### Condition for Reflow

#### Available for Surface Mount Type.

- 1. Heating method: Double heating method with infrared heater.
- 2. Temperature measurement: Thermocouple 0.1 to 0.2  $\phi$  CA (K) or CC (T) at solder joints (copper foil surface).

A heat resistive tape should be used to fix thermocouple.

#### 3. Temperature profile



# 1. 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.

2. 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

· ·	
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 $^\circ C$ max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

#### SKHH、SKPD 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. 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 fluk
Preheating temperature	Ambient temperature of the soldered surface of PC board. 100°C max.
Preheating time	45s max.
Soldering temperature	255°C max.
Duration of immersion	5s max.
Number of soldering	2times 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>TM</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.)

# Manual Soldering (Except SKRT Series)

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.			

#### SKQJ、SKQK、SKEG Series

Items	Condition				
Soldering temperature	350°C max.				
Duration of soldering	3s max.				
Capacity of soldering iron	20W max.				



Sharp Feeling Soft

Feeling Snap-in Type Surface Mount Type

Radial Type