

# 1.5mm or 2mm stem height contribute to smaller and thinner sets.



Typical	Specifications
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Items	Specifications
Rating (max.)	50mA 12V DC
Rating (min.)	10µA 1V DC
Travel (mm)	0.13

## Rotary Product Line

Detector

Push

Slide

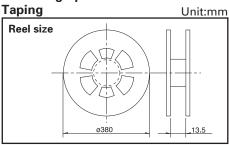
Encoders

TACT Switch<sup>™</sup>

Power Dual-in-line Package Type

		-							
-	Product No. Operating force		Operating	Operating life	Initial contact	Stem	Minimum ord	Drawing	
;			direction (5mA 5V DC)		resistance	height	Japan	Export	No.
-	SKRKAEE010	1.57N			100mΩ max.	2mm	4,500	4,500	1
_	SKRKAHE010	0.98N	Toppush	200,000cycles	500m $\Omega$ max.	2000	4,500	4,500	
	SKRKAGE010	1.57N			100mΩ max.	1.5mm	5,000	5,000	2

# Packing Specifications



Note For reels of 330mm diameter, please inquire.

m						
		Numbe	r of packages	Tape	Export package	
	Series	1 reel	1 case / Japan	1 case / export packing	width (mm)	measurements (mm)
	SKRKAE SKRKAH	4,500	45,000	45,000	12	401 × 401 × 214
	SKRKAG	5,000	50,000	50,000		

Sharp Feeling Soft

Snap-in Type Surface Mount Type Radial Type

# Soft Dimens

No.	Photo	Style	PC board land dimensions (Viewed from switch mounting face
1			(2.5) Resist coating
2		4.8 3.9 67 67 67 67 67 67 67 67 67 67 67 67 67	(2.5) Resist coating 

ALPS

### Circuit Diagram



# **TACT Switch**<sup>™</sup>

## List of Varieties

Туре			Sharp Feeling Type Surface Mount										
	Series	SKRN	SKSE	SKSV	SKSW	SKSF	SKSM	SKSG	SKRK	SKRP	SKQM	SKQY	SKS
	Photo	Ô	-	NEW O	NEW	٢	NEW O					۹	NEV
	Features	Doubl	e action			act size profile	•	Compa Low-j	act size profile	High operation force Compact size	Compa	act size	Midd trave
,	Water-proof	_	_	•	•	_	•	_	_			_	•
	Dust-proof	-	_	•	•	0	•	_		_	_	0	•
Operat	Toppush	•	_	•	•	•	•	•	•	•	•	•	•
directi		• —	•	_	_	_	_	_	_	_	_	_	_
Dimonoi	W		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
	H	0.9	3	0.5	0.58	0.65	0.7	1.4	1.5	2.5	4.3	2.5	3.8
Operat	ion 1N~	~2N		1	\$	\$	\$	<b>↑</b>	Ļ	1			
force			*	+						L	↓ ↓		\$
oovera	90 3N												•
	Travel (mm)		*	0.12	0.13	C	).1	0.12	0.13	0.2	0.:	25	0.7
Gr	ound terminal	•	•	_	_	_	_	•	_	_	—	•	_
Opera	iting temperatur range	e	- 30°C to + 85°C										
Au	tomotive use	_	_	_	_	_	_	0	_	•	•	•	
	Life Cycle							3		*3			×
	lating (max.) esistive load)		50mA 12V DC 50mA 16V DC 50mA 16V DC 50mA 12V DC 16V DC										
	Rating (min.) esistive load)		10 µ A 1V DC										
Electrical	Insulation resistance					100M	Ω min. 10	00V DC fo	r 1min.				
performance	Voltage proc	of 250V AC			100V AC	for 1min.				250	V AC for 1	min.	
Durability	Vibration			10 to	55 to 10H in the 3	z/min., th direction	e amplitue of X, Y ar	de is 1.5m Id Z for 2h	m for all t nours resp	the freque	encies,		
Durability	Lifetime				Shall be	e in accor	dance wit	th individu	ual specifi	cations.			
	Cold						- 30±2°	C for 96h					
Environmental performance	Dry heat						80±2℃	for 96h					
	Damp heat					60±2	2°C , 90 to	95%RH f	or 96h				
	Page	255	256	257	258	259	260	261	262	263	264	265	26
						W : V D : D	Vidth. Th	e most o e most ou	uter dime	ension ex	cluding t	erminal erminal p	portic portio

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

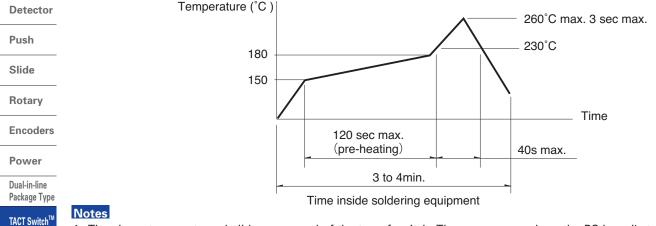
## Condition for Reflow

#### 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)

ltems	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