TACT Switch™ 12mm Square (Snap-in Type)

SKHC Series

RoHS compliant

Joint stem & flat stem with stable operation feeling.

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line

Package Type

TACT Switch[™] Custom-Products

Product No. Operating force		Operating direction	Travel Ratin (mm) (max		Rating (min.)	Operating life (5mA 5V DC)	Initial contact resistance
SKHCBJA010	0.74N					500,000 cycles	
SKHCBEA010	1.27N					1,000,000 cycles	
SKHCBGA010	2.55N	Vertical	0.3	50mA	10 <i>µ</i> A	500,000	100m Ω
SKHCBKA010	0.74N	ventical	0.3	12V DC	1V DC	cycles	max.

Feeling Soft Feeling Snap-in Type

Sharp

Surface Mount Type Radial

Туре

Packing Specifications Bulk

1.27N

2.55N

Product Line

SKHCBFA010

SKHCBHA010

Number of pa	Number of packages (pcs.)					
1 case /Japan	1 case /export packing	measurements (mm)				
5,000	15,000	$309 \times 476 \times 347$				

Note

Please place purchase orders per minimum order unit N (integer).

Stem

color

Blue

Black

Dark gray

Blue

Black

Dark

gray

1,000,000

cycles

500,000

cycles

Stem

Joint

stem

Flat

stem

Minimum order

unit (pcs.)

1,000

Drawing

No.

1

2



ALPS



Circuit Diagram



Note

Please use 1.6mm thick PC boards.

List of Varieties

Sharp Feeling Type

	Sna	arp ⊦ee	ling I	уре										
		Series		SKQB	SKQE	SKHC	SKSH	SKRW	SKRM	SKRB	SKRR	SKQG	SKSK	SKSD
Detector	Photo				Q,	\diamondsuit	٩	۲	۲		••••			
Push	Type Features		Snap-in						Surface	e mount				
ide			Water–proof Horizontal type	proof Long ontal Life —		Low-profile				Low-profile and long life		Double action		
ary	Opei dire	Vert	ical	_	•	•	•	•	•	•	•	•	•	•
lers	ating	Operating Horizontal		•		1					1	1	-	
			w	11.5			3.3				7.5		3.5	4.1
ne Type		mensions D	D	11.9		□ 12	2.9	3.7	4.5	4.8	7	□5.2	3.2	3.9
itch™		F	н	11.3	4	.3	0.3	35	0.4	0.55	0.6	0.8	0.	.6
tom- ducts	1N Operation force coverage		1N 5N	•	\$	Ţ	\$	\$	\$	Ĵ	Ì	Ì	respective	ant pages for e product ptions
	Travel (mm)			0.3			0.15 0.2				0.25		See the relevant pages for respective product descriptions	
	Grou	Ind term	ninal						0	.2	-			
arp Iling It Iling ap-in	Operating temperature range			-30°C to +85°C										
e ce	Automotive use			•	• - 0 -									
nt Type ial	Ele	Insula resista		I				100M	Ω min. 10	IOV DC				
pe	Electrical performance	Volta pro		250V AC for 1min. SKSH/RW/RB/RR/SK/SD : 100V AC for 1min.										
		Vibra	tion	10 to 55 to 10Hz/min, the amplitude is 1 5mm for all the frequencies										
	Durability	Lifeti	ime			Sh	all be in a	ccordance	e with ind	lividual s	pecificatio	ons.		
	Env	Col	ld					-30	±2℃ for	96h				
	Environmental performance	Dry h	eat	80±2°C for 96h										
	ental ance	Damp	heat	at 60±2°C, 90 to 95%RH for 96h										
		Page		292	294	295	297	298	299	300	301	302	304	305
						1			Vidth. The	most out	er dimensi	on excludi	na termina	al portio

 $\begin{array}{l} W: Width. \ The \ most \ outer \ dimension \ excluding \ terminal \ portion. \\ D & : \ Depth. \ The \ most \ outer \ dimension \ excluding \ terminal \ portion. \\ H & : \ Height. \ The \ minimum \ dimension \ if \ there \ are \ variances. \end{array}$

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Notes

 The automotive operating temperature range to be individually discussed upon request.
○marks in "Available for automotive use" indicate that some of the series products can work at the operating temperature range from -40°C to +85°C, ●marks in "Available for automotive use" indicate that all of the series products can work at the operating temperature range from -40°C to +85°C.



Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line Package Type

TACT Switch™

Custom-

Products

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 ¢ CA (K) or CC (T) at solder joints (copper foil surface). A heat resistive tape should be used to fix thermocouple.
- 3. 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.
- 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 (Except, SKHL, SKQJ, SKQK, SKEG 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. 100°C max.						
Preheating time	60s max.						
Soldering temperature	260°C max.						
Duration of immersion	5s max.						
Number of soldering	2times max.						

Manual Soldering (Except SKRT Series)

ltems	Condition				
Soldering temperature	350°Cmax.				
Duration of soldering	3s max.				
Capacity of soldering iron	60W max.				

Sharp Feeling Soft Feeling Snap-in Type Surface Mount Type Radial Type

Notes

- 1. Consult with us for availability of TACT Switch[™] washing.
- 2. Prevent flux penetration from the top side of the TACT Switch[™].
- 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.)



Product Line of Knobs

						Unit:mm	
Applicable model		Variety	Label dimensions (Unit:mm)				
			Color	Mo	del	(Unit:mm)	Detector
				Keytop			
SKHH			Red Blue Ivory	SK2AA00410 SK2AA00420 SK2AA00430			Push Slide
Applicable to joint stem type			Black Yellow	SK2AA00440 SK2AA00450			Rotary Encoders
				Сар			Power
			Clear	SK2AA00510		10	Dual-in-line Package Type
SKHC SKQE			Keytop		Keytop + Cap	w ^{R1}	TACT Switch™
Applicable to joint stem type		Key top	Red Blue Ivory Black	SK2AA00010 SK2AA00020 SK2AA00030 SK2AA00040	SK2AA00060 SK2AA00070 SK2AA00080 SK2AA00090	Thickness 0.1	Custom- Products
			Сар				
			Clear	SK2AA00540			
SKEG		Cap	Кеутор		Keytop + Cap	uro ⁵	Sharp Feeling
		Key top	Red Blue Ivorv	SK2AA00310 SK2AA00320 SK2AA00330	SK2AA00360 SK2AA00370 SK2AA00380		Soft Feeling
Applicable to joint stem type			Black Yellow	SK2AA00340 SK2AA00350	SK2AA00390 SK2AA00400	Thickness 0.1	Snap-in Type Surface

Notes

1. The knob will be delivered together with the switch but packed separately.

2. The label is not included.

3. For SK2AA00010 to SK2AA00090 types, please check the mounting direction.



arp eling ft eling ap-in pe Surface Mount Type

Radial Туре