



Detector

Push

Slide

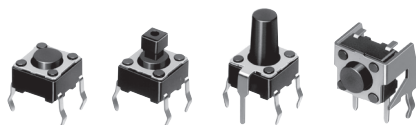
Rotary

Encoders

Power

Dual-in-line
Package Type

TACT Switch™

Sharp
FeelingSoft
FeelingSnap-in
TypeSurface
Mount TypeRadial
Type

■ Typical Specifications

Items	Specifications
Rating (max.)	50mA 12V DC
Rating (min.)	10 μ A 1V DC
Initial contact resistance	100m Ω max.
Travel (mm)	0.25

■ Product Line

Toppush Type

Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Stem color	Stem height	Minimum order unit (pcs.)		Drawing No.
						Japan	Export	
SKHHAJA010	0.98N	Toppush	1,000,000cycles	Black	h=4.3mm	1,000	1,000	1
SKHHALA010	1.57N		500,000cycles	Dark gray				
SKHHAQA010	2.55N		200,000cycles	Red				
SKHHAKA010	0.98N		1,000,000cycles	Black	h=5mm			
SKHHAMA010	1.57N		500,000cycles	Dark gray				
SKHHARA010	2.55N		200,000cycles	Red				
SKHHCQA010	3.53N			Orange				
SKHHCRA010	5.10N			Yellow				
SKHHBVA010	0.98N		1,000,000cycles	Black	h=7mm			
SKHHBWA010	1.57N		500,000cycles	Dark gray				
SKHHBYA010	2.55N		200,000cycles	Red				
SKHHANA010	0.98N		1,000,000cycles	Black	h=9.5mm			
SKHHAPA010	1.57N		500,000cycles	Dark gray				
SKHHBSA010	2.55N		200,000cycles	Red				
SKHHDTA010	0.98N		1,000,000cycles	Black	h=13mm			
SKHHDUA010	1.57N		500,000cycles	Dark gray				
SKHHDHA010	0.98N		300,000cycles	Black	h=17mm			
SKHHDJA010	1.57N			Dark gray				

Joint Stem Type

Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Stem color	Stem height	Minimum order unit (pcs.)		Drawing No.
						Japan	Export	
SKHHCWA010	0.98N	Toppush	1,000,000 cycles	Black	h=7.3mm	1,000	1,000	2
SKHHDAA010	1.57N		500,000 cycles	Dark gray				
SKHHDGA010	2.55N		200,000 cycles	Red				

■ Product Line

With Ground Terminal Type

Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Stem color	Stem height	Minimum order unit (pcs.)		Drawing No.
						Japan	Export	
SKHHPJA010	0.98N	Toppush	1,000,000 cycles	Black	h=4.3mm	1,000	1,000	3
SKHHPLA010	1.57N		500,000 cycles	Dark gray				
SKHHPQA010	2.55N		200,000 cycles	Red				
SKHHPKA010	0.98N		1,000,000 cycles	Black	h=5mm			
SKHHPMA010	1.57N		500,000 cycles	Dark gray				
SKHHPRA010	2.55N		200,000 cycles	Red				
SKHHQVA010	0.98N		1,000,000 cycles	Black	h=7mm			
SKHHQWA010	1.57N		500,000 cycles	Dark gray				
SKHHQYA010	2.55N		200,000 cycles	Red				
SKHHPNA010	0.98N		1,000,000 cycles	Black	h=9.5mm			
SKHHPPA010	1.57N		500,000 cycles	Dark gray				
SKHHQNA010	2.55N		200,000 cycles	Red				

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Sidepush Type

Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Stem color	Stem length	Minimum order unit (pcs.)		Drawing No.
						Japan	Export	
SKHHLMA010	0.98N	Sidepush	1,000,000 cycles	Black	ℓ =3.85mm	1,000	1,000	4
SKHHLNA010	1.57N		500,000 cycles	Dark gray				
SKHHLPA010	2.55N		200,000 cycles	Red				
SKHHLQA010	0.98N		1,000,000 cycles	Black	ℓ =8.35mm			
SKHHLRA010	1.57N		500,000 cycles	Dark gray				
SKHHLSA010	2.55N		200,000 cycles	Red				
SKHHLUA010	0.98N		1,000,000 cycles	Black	ℓ =5.85mm			
SKHHLVA010	1.57N		500,000 cycles	Dark gray				
SKHHLWA010	2.55N		200,000 cycles	Red				
SKHHNHA010	0.98N		500,000 cycles	Black	ℓ =15.85mm			
SKHHNJA010	1.57N		300,000 cycles	Dark gray				
SKHHNKA010	2.55N		200,000 cycles	Red				

Sharp
FeelingSoft
FeelingSnap-in
TypeSurface
Mount TypeRadial
Type

■ Packing Specifications

Bulk

Series	Number of packages (pcs.)		Export package measurements (mm)
	1 case / Japan	1 case / export packing	
Other	10,000	30,000	309 × 476 × 347
SKHHDJ, SKHHDH, SKHHDJ, SKHHNH, SKHHNJ, SKHHNK	5,000	15,000	

Dimensions

Unit:mm

No.	Photo	Style	PC board mounting hole dimensions (Viewed from switch mounting face)														
1		<table><tr><th>h</th><th>A</th></tr><tr><td>4.3</td><td>3.5</td></tr><tr><td>5</td><td>3.5</td></tr><tr><td>7</td><td>3.3</td></tr><tr><td>9.5</td><td>3</td></tr><tr><td>13</td><td>3</td></tr><tr><td>17</td><td>3</td></tr></table>	h	A	4.3	3.5	5	3.5	7	3.3	9.5	3	13	3	17	3	
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3		<table><tr><th>h</th><th>A</th></tr><tr><td>4.3</td><td>3.5</td></tr><tr><td>5</td><td>3.5</td></tr><tr><td>7</td><td>3.3</td></tr><tr><td>9.5</td><td>3</td></tr></table>	h	A	4.3	3.5	5	3.5	7	3.3	9.5	3					
h	A																
4.3	3.5																
5	3.5																
7	3.3																
9.5	3																

Dimensions

Unit:mm

Dimensions				Unit:mm									
No.	Photo	Style	PC board mounting hole dimensions (Viewed from switch mounting face)										
4		Sidepush type <table><tr><th>ℓ</th><th>A</th></tr><tr><td>3.85</td><td>3.5</td></tr><tr><td>5.85</td><td>3.3</td></tr><tr><td>8.35</td><td>3</td></tr><tr><td>15.85</td><td>3</td></tr></table>	ℓ	A	3.85	3.5	5.85	3.3	8.35	3	15.85	3	
			ℓ	A									
			3.85	3.5									
			5.85	3.3									
			8.35	3									
15.85	3												

Note

Please use 1.6mm thick PC boards.

Circuit Diagram

Toppush type / Joint stem type	With ground terminal type	Sidepushtype

Product Line of Knobs

Unit:mm

Applicable model	Dimensions	Variety	
		Color	Model
SKHH		Red Blue Ivory Black Yellow	Keytop SK2AA00410 SK2AA00420 SK2AA00430 SK2AA00440 SK2AA00450

Note

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

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Type

List of Varieties

Type		Sharp Feeling Type									
		Snap-in									
Series		SKHR	SKHL	SKHH	SKHW	SKQJ	SKQB	SKQE	SKHC	SKHL	SKHH
Photo											
Features		—	—	—	—	—	—	Long Life	—	—	—
Water-proof		—	—	—	○	—	●	—	—	—	—
Dust-proof		—	—	—	●	●	●	●	—	—	—
Operating direction	Top push	●	●	●	●	●	●	●	●	—	—
	Side push	—	—	—	—	—	—	—	—	●	●
Dimensions (mm)	W	□ 4.5	6	□ 6		□ 6.6	□ 10	□ 12		7.3	7.5
	D		3.5							7.22	7.85
	H	3.8	4.3		5	5	4.3		7.4		
Operation force coverage	~1N										
	1N~2N										
	2N~3N										
	3N~4N										
	4N~5N										
Travel (mm)		0.25			0.3	0.25	0.3			0.25	
Ground terminal		—	—	●	—	—	—	—	—	●	●
Operating temperature range		- 30℃ to + 85℃	- 40℃ to + 90℃			- 30℃ to + 85℃	- 40℃ to + 90℃		- 40℃ to + 85℃	- 40℃ to + 90℃	
Automotive use		—	●	●	—	—	—	—	—	—	—
Life Cycle											
Rating (max.) (Resistive load)		50mA 12V DC									
Rating (min.) (Resistive load)		10 μA 1V DC									
Electrical performance	Insulation resistance	100M Ω min. 100V DC for 1min.									
	Voltage proof	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									
	Lifetime	Shall be in accordance with individual specifications.									
Environmental performance	Cold	- 40 ± 2℃ for 96h				- 30 ± 2℃ for 96h	- 430 ± 2℃ for 96h				
	Dry heat	90 ± 2℃ for 96h				- 80 ± 2℃ for 96h	90 ± 2℃ for 96h				
	Damp heat	60 ± 2℃ , 90 to 95%RH for 96h				60 ± 2℃ , 90 to 95%RH for 1000h	60 ± 2℃ , 90 to 95%RH for 96h				
Page		229	230	232	236	237	239	241	243	230	232

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

- The automotive operating temperature range to be individually discussed upon request.
- indicates applicability to all products in the series, while ○ indicates applicability to some products in the series.

TACT Switch™ Soldering Conditions

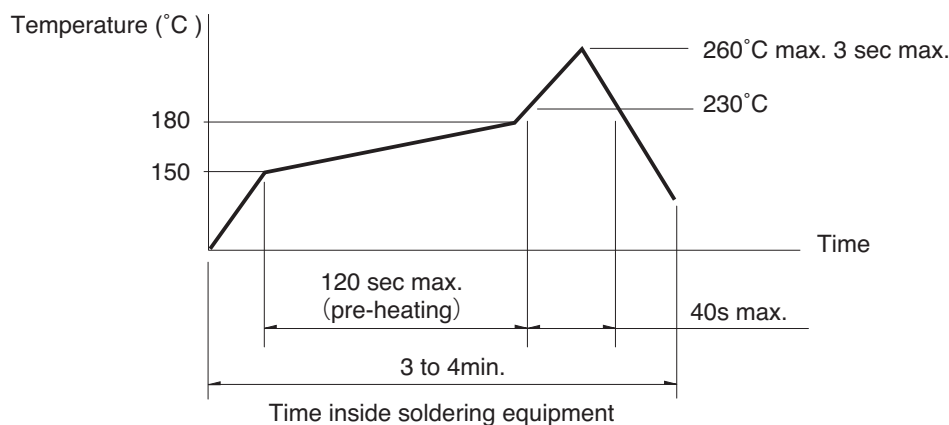
Condition for Reflow

Available for Surface Mount Type.

1. Heating method: Double heating method with infrared heater.
2. Temperature measurement: Thermocouple 0.1 to 0.2 φ CA (K) or CC (T) at solder joints (copper foil surface).
A heat resistive tape should be used to fix thermocouple.

3. Temperature profile

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Notes

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

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	60s max.
Soldering temperature	260°C 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 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™ 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.)

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