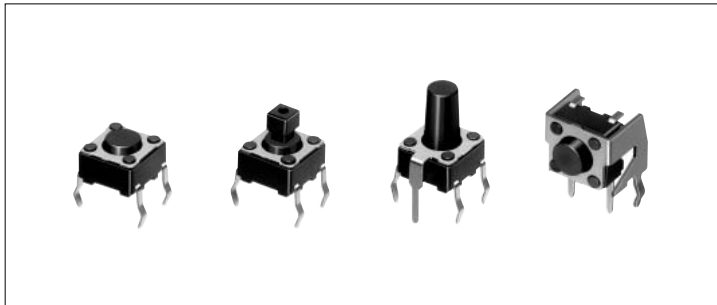


# TACT Switch™ 6mm Square (Snap-in Type)

SKHH Series



User friendly 6×6mm type, available in a wide variety.



Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line  
Package Type

TACT Switch™

Custom-  
Products

Sharp  
Feeling

Soft  
Feeling

Snap-in  
Type

Surface  
Mount Type

Radial  
Type

## Product Line

### Vertical Type

Product No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Rating (min.)	Operating life (5mA 5V DC)	Initial contact resistance	Stem color	Stem height	Minimum order unit (pcs.)	Drawing No.
SKHHAJA010	0.98N	Vertical	0.25	50mA 12V DC	10μA 1V DC	1,000,000cycles	100m max.	Black	h=4.3mm	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			
SKHHCA010	3.53N					200,000cycles		Orange	h=7mm		
SKHHCRA010	5.10N					1,000,000cycles		Yellow			
SKHHBVA010	0.98N					500,000cycles		Black			
SKHHBWA010	1.57N					500,000cycles		Dark gray	h=9.5mm		
SKHHBYA010	2.55N					200,000cycles		Red			
SKHHANA010	0.98N					1,000,000cycles		Black			
SKHHAPA010	1.57N					500,000cycles		Dark gray	h=13mm		
SKHHBSA010	2.55N					200,000cycles		Red			
SKHHDTA010	0.98N					1,000,000cycles		Black			
SKHHDUA010	1.57N					500,000cycles		Dark gray	h=17mm		
SKHHDHA010	0.98N					1,000,000cycles		Black			
SKHHDJA010	1.57N					300,000cycles		Dark gray			

### Joint Stem Type

Product No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Rating (min.)	Operating life (5mA 5V DC)	Initial contact resistance	Stem color	Stem height	Minimum order unit (pcs.)	Drawing No.
SKHHCWA010	0.98N	Vertical	0.25	50mA 12V DC	10μA 1V DC	1,000,000 cycles	100m max.	Black	h=7.3mm	1,000	2
SKHHDAA010	1.57N					500,000 cycles		Dark gray			
SKHHDGA010	2.55N					200,000 cycles		Red			

Refer to P.306 for soldering conditions.  
Refer to P.308 for standard knobs.

**Product Line**  
With Ground Terminal Type

	Product No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Rating (min.)	Operating life (5mA 5V DC)	Initial contact resistance	Stem color	Stem height	Minimum order unit (pcs.)	Drawing No.
Detector	SKHHPJA010	0.98N	Vertical	0.25	50mA 12V DC	10μA 1V DC	1,000,000 cycles	100m max.	Black	h=4.3mm	1,000	3
Push	SKHHPLA010	1.57N							Dark gray			
Slide	SKHHPOA010	2.55N							Red			
Rotary	SKHHPKA010	0.98N							Black	h=5mm		
Encoders	SKHHPMA010	1.57N							Dark gray			
Power	SKHHQVA010	0.98N							Red			
Dual-in-line Package Type	SKHHQWA010	1.57N							Black	h=7mm		
TACT Switch™	SKHHQYA010	2.55N							Dark gray			
Custom-Products	SKHHPNA010	0.98N							Red			
	SKHHPPA010	1.57N							Black	h=9.5mm		
	SKHHQNA010	2.55N							Dark gray			
									Red			

**Horizontal Type**

	Product No.	Operating force	Operating direction	Travel (mm)	Rating (max.)	Rating (min.)	Operating life (5mA 5V DC)	Initial contact resistance	Stem color	Stem length	Minimum order unit (pcs.)	Drawing No.
Sharp Feeling	SKHHLMA010	0.98N	Horizontal	0.25	50mA 12V DC	10μA 1V DC	1,000,000 cycles	100m max.	Black	ℓ=3.85mm	1,000	4
Soft Feeling	SKHHLNA010	1.57N							Dark gray			
Snap-in Type	SKHHLPA010	2.55N							Red			
Surface Mount Type	SKHHLQA010	0.98N							Black	ℓ=8.35mm		
Radial Type	SKHHLRA010	1.57N							Dark gray			
	SKHHLSA010	2.55N							Red			
	SKHHLUA010	0.98N							Black	ℓ=5.85mm		
	SKHHLVA010	1.57N							Dark gray			
	SKHHLWA010	2.55N							Red			
	SKHHNHA010	0.98N							Black	ℓ=15.85mm		
	SKHHNJA010	1.57N							Dark gray			
	SKHHNKA010	2.55N							Red			

Dimensions

Unit:mm

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

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line  
Package Type

TACT Switch™

Custom-  
Products

Sharp  
Feeling

Soft  
Feeling


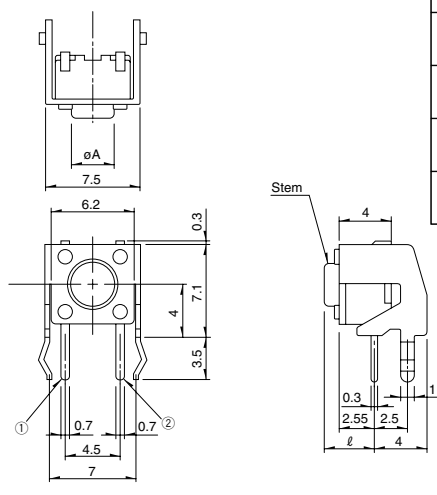
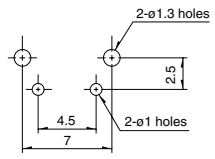
Snap-in  
Type

Surface  
Mount Type

Radial  
Type

**Dimensions**

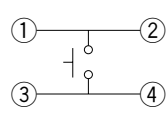
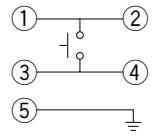
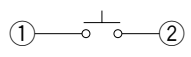
Unit:mm

No.	Photo	Style	PC board mounting hole dimensions (Viewed from switch mounting face)										
4			<table border="1"> <thead> <tr> <th><math>\ell</math></th> <th>A</th> </tr> </thead> <tbody> <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> </tbody> </table>	$\ell$	A	3.85	3.5	5.85	3.3	8.35	3	15.85	3
			$\ell$	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**












Vertical type/Joint stem type	With ground terminal type	Horizontal type
		

- Detector
- Push
- Slide
- Rotary
- Encoders
- Power
- Dual-in-line Package Type
- TACT Switch™**
- Custom-Products

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

## List of Varieties

### Sharp Feeling Type

Series	SKHR	SKHL	SKHH	SKHW	SKRD	SKQJ	SKHL	SKHH	SKQJ	SKHJ	SKQB	
Photo												
Type	Snap-in											
Features				Dust-proof type	Horizontal type	Horizontal type			With LED	Water-proof		
Operating direction	Vertical											
	Horizontal											
Dimensions (mm)	W	4.5	6	6	6.2	6.6	7.3	7.5	8	10		
	D		3.5		7.15		7.22	7.85				
	H	3.8	4.3		7.4	5	4.3	7.4	7.3	8.5	5	
Operation force coverage	1N	↕	↕	↕	↕	↕	↕	↕	↕	↕	↕	
	5N			↕								
Ground terminal												
Operating temperature range	-20 to +70 SKHJ/HL( Vertical Type ) /QJ											
	-30 to +85											
Electrical performance	Insulation resistance	100M min. 100V DC										
	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	-30 ± 2 for 96h										
	Dry heat	80 ± 2 for 96h										
	Damp heat	60 ± 2 , 90 to 95%RH for 96h										
Page	252	253	255	259	260	261	253	255	261	263	265	

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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 TACT Switch™ Cautions .....307  
 Product Line of Knob for TACT Switch™ .....308

### Note

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

- Detector
- Push
- Slide
- Rotary
- Encoders
- Power
- Dual-in-line Package Type
- TACT Switch™
- Custom-Products

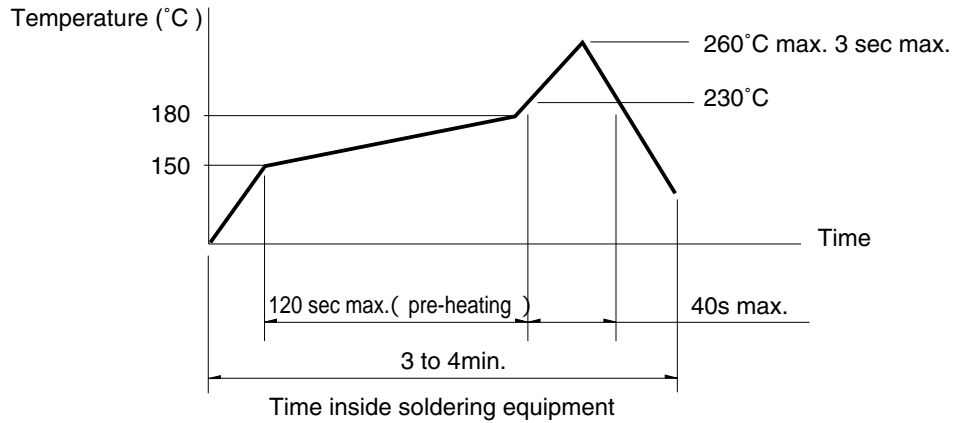
- Sharp Feeling
- Soft Feeling
- Snap-in Type
- Surface Mount Type
- Radial Type

## 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



### Note

1. The above temperature shall be measured on the mounting surface of a PC board. 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 SKHJ, SKHL, 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 max.
Preheating time	60s max.
Soldering temperature	260 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 )


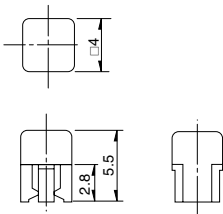

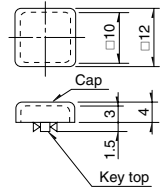
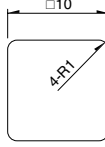

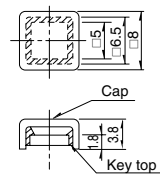
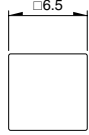

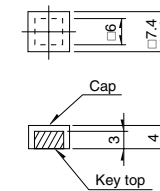

Items	Condition
Soldering temperature	350 max.
Duration of soldering	3s max.
Capacity of soldering iron	60W max.

- Detector
- Push
- Slide
- Rotary
- Encoders
- Power
- Dual-in-line Package Type
- TACT Switch™
- Custom-Products

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

# Product Line of Knobs

Unit:mm

Applicable model	Dimensions		Variety		Label dimensions (Unit:mm)
			Color	Model	
Detector					
Push					
Slide					
Rotary					
Encoders					
Power					
Dual-in-line Package Type					
TACT Switch™					
Custom-Products					
SKHH			<b>Keytop</b> Red SK2AA00410 Blue SK2AA00420 Ivory SK2AA00430 Black SK2AA00440 Yellow SK2AA00450		
Applicable to joint stem type					
SKHC SKQE			Clear SK2AA00510	<b>Cap</b> <b>Keytop</b>	Keytop + Cap  Thickness 0.1
Applicable to joint stem type					
SKHJ			Clear SK2AA00520	<b>Cap</b> <b>Keytop</b>	Keytop + Cap  Thickness 0.1
Sharp Feeling					
Soft Feeling					
Snap-in Type					
Surface Mount Type					
Radial Type					
SKEG			Clear SK2AA00540	<b>Cap</b> <b>Keytop</b>	Keytop + Cap  Thickness 0.1
Applicable to joint stem type					

**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.

