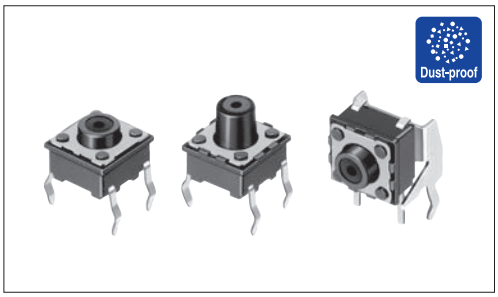
SKQJ 6.6mm Square (Snap-in Type)

Dust proof with sharp operational feel suitable for general purpose



Typical Specifications

Items	Specifications
Rating (max.)	50mA 12V DC
Rating (min.)	10μA 1V DC
Initial contact resistance	100mΩ max.
Travel (mm)	0.25

Product Line

Top push type

Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Stem color	Stem height	Minimum order unit (pcs.)		Drawing No.
						Japan	Export	
SKQJAAA010	0.98N	Top push	1,000,000 cycles	Black	h=5mm	1,000	1,000	1
SKQJABA010	1.57N		500,000 cycles	Dark gray				
SKQJADA010	0.98N		1,000,000 cycles	Black	h=7mm			
SKQJAEA010	1.57N		500,000 cycles	Dark gray				
SKQJAJA010	0.98N		200,000 cycles	Black	h=9.5mm			
SKQJAKA010	1.57N			Dark gray				

Side push type

Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Stem color	Minimum order unit (pcs.)		Drawing No.
					Japan	Export	
SKQJLAA010	0.98N	Side push	1,000,000 cycles	Black	1,000	1,000	2
SKQJLBA010	1.57N		500,000 cycles	Dark gray			

Packing Specifications

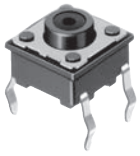
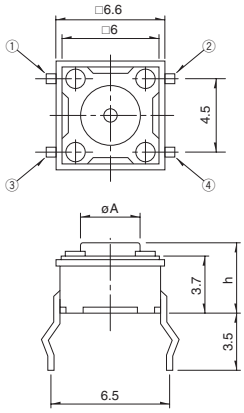
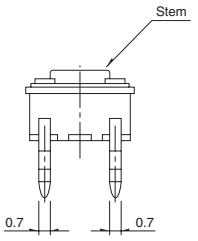
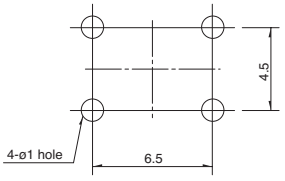
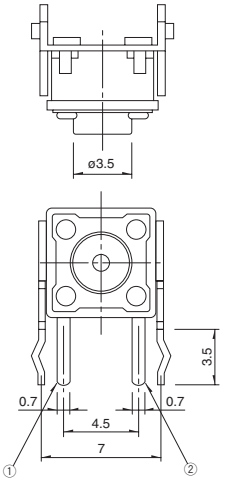
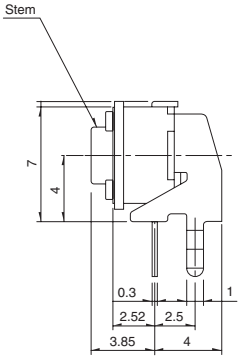
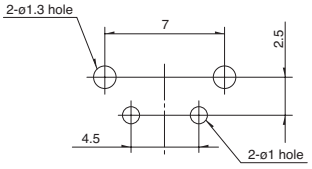
Bulk

Number of packages (pcs.)		Export package measurements (mm)
1 case / Japan	1 case / export packing	
10,000	30,000	309×476×347

Refer to P.259 for soldering conditions.

Dimensions

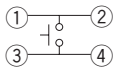
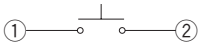
Unit:mm

No.	Photo	Style	PC board mounting hole dimensions (Viewed from switch mounting face)
1	Top push type 	 	h / A: 5 / 3.5; 7 / 3.3; 9.5 / 3 
2	Side push type	 	

Note

Please use 1.6mm thick PC boards.

Circuit Diagram

Top push type	Side push type
	

TACT Switch™

List of Varieties

Type		Sharp Feeling Type						
		Snap-in						
Series		**SKHL**	**SKHH**	**SKHW**	**SKQJ**	**SKQB**	**SKQE**	**SKHC**
Photo								
Features		—	—	—	—	—	Long-life	—
Water-proof		—	—	○	—	●	—	—
Dust-proof		—	—	●	●	●	●	—
IP standard		—	—	—	—	—	—	—
Operating direction	Top push	●	●	●	●	●	●	●
	Side push	—	—	—	—	—	—	—
Dimensions (mm)	W	6	□6		□6.6	□10	□12	
	D	3.5						
	H	4.3/5	See the relevant pages for respective product descriptions	4.3/5	5	5/13/23.2	See the relevant pages for respective product descriptions	
Operation force coverage	to 1N	↕	↕	↕	↕	↕	↕	↕
	1N to 2N							
	2N to 3N							
	3N to 4N							
	4N to 5N							
Travel (mm)		0.25		0.3	0.25	0.3		
Ground terminal		—	●	—	—	—	—	—
Operating temperature range		−40℃ to +90℃			−20℃ to 70℃	−40℃ to +90℃		−40℃ to +85℃
Automotive use		●	●	—	—	●	—	—
Life Cycle		★2	★3	★3	★2	★2	★2	★2
Electrical performance	Rating (max.) (Resistive load)	50mA 12V DC						
	Rating (min.) (Resistive load)	10μA 1V DC						
	Insulation resistance	100MΩ min. 100V DC 1min.						
	Voltage proof	250V AC 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 2 hours respectively						
	Lifetime	Shall be in accordance with individual specifications.						
Environmental performance	Cold	−40℃ 96h			−30℃ 96h	−40℃ 96h		
	Dry heat	90℃ 96h			80℃ 96h	90℃ 96h		
	Damp heat	60℃, 90 to 95%RH 96h				60℃, 90 to 95%RH 1,000h	60℃, 90 to 95%RH 96h	
Page		193	195	199	200	202	204	206

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.

TACT Switch™ Soldering Conditions · · ·

Type		Sharp Feeling Type						
		Snap-in				Radial		
Series		**SKHL**	**SKHH**	**SKQJ**	**SKQB**	**SKRG**	**SKQK**	**SKRC**
Photo								
Features		—	—	—	—	Round terminal type	—	Round terminal type
Water-proof		—	—	—	●	—	—	●
Dust-proof		—	—	●	●	—	—	●
IP standard		—	—	—	—	—	—	—
Operating direction	Top push	—	—	—	—	●	●	●
	Side push	●	●	●	●	—	—	—
Dimensions (mm)	W	7.3	7.5	7.5	11.5	ϕ6.2	□6.6	ϕ9
	D	7.22	7.85	7.85	11.9			
	H	4.3	7.4	7.3	11.3	See the relevant pages for respective product descriptions	5	13
Operation force coverage	to 1N	↕	↕	↕	↕	↕	↕	↕
	1N to 2N							
	2N to 3N							
	3N to 4N							
	4N to 5N							
Travel (mm)		0.25			0.3	0.25		
Ground terminal		●	●	—	—	—	—	—
Operating temperature range		−40℃ to +90℃		−20℃ to +70℃	−40℃ to 95℃	−40℃ to +90℃	−20℃ to +70℃	−30℃ to +85℃
Automotive use		—	—	—	●	●	—	—
Life Cycle		★2	★3	★2	★2	★2	★2	★2
Electrical performance	Rating (max.) (Resistive load)	50mA 12V DC						
	Rating (min.) (Resistive load)	10μA 1V DC						
	Insulation resistance	100MΩ min. 100V DC 1min.						
	Voltage proof	250V AC 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 2 hours respectively						
	Lifetime	Shall be in accordance with individual specifications.						
Environmental performance	Cold	−40℃ 96h		−30℃ 96h	−40℃ 96h		−30℃ 96h	−40℃ 96h
	Dry heat	90℃ 96h		80℃ 96h	90℃ 96h		80℃ 96h	90℃ 96h
	Damp heat	60℃, 90 to 95%RH 96h			60℃, 90 to 95%RH 1,000h	60℃, 90 to 95%RH 96h		60℃, 90 to 95%RH 1,000h
Page		193	195	200	202	246	248	249

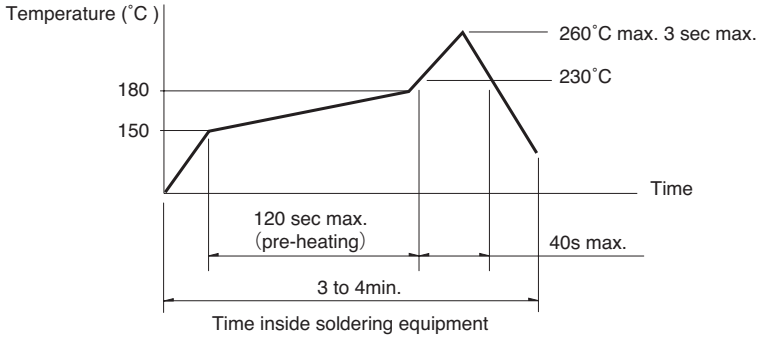
W : Width. The most outer dimension excluding terminal portion.
D : Depth. The most outer dimension excluding terminal portion.
H : Height. The minimum dimension if there are variances.

TACT Switch™ Soldering Conditions · · ·

Condition for Reflow

Available for Surface Mount Type.

1. Temperature measurement: Thermocouple ϕ 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.
2. Temperature profile



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 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.

SKHH, SKPD 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. 110℃ max.
Preheating time	60s max.
Soldering temperature	260℃ 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 flux
Preheating temperature	Ambient temperature of the soldered surface of PC board. 100℃ max.
Preheating time	45s max.
Soldering temperature	255℃ max.
Duration of immersion	5s max.
Number of soldering	2times max.

Manual Soldering

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

SKHH, SKHW, SKRG, SKPD Series

Items	Condition
Soldering temperature	360℃ max.
Duration of soldering	3s max.
Capacity of soldering iron	60W max.

SKTD, SKTG, SKQJ, SKQK, SKEG Series

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

Notes

1. Prevent flux penetration from the top side of the TACT Switch™.
2. Switch terminals and a PC board should not be coated with flux prior to soldering.
3. The second soldering should be done after the switch is stable with normal temperature.
4. Use the flux with a specific gravity of min 0.81.
   (EC-19S-8 by TAMURA Corporation, or equivalents.)