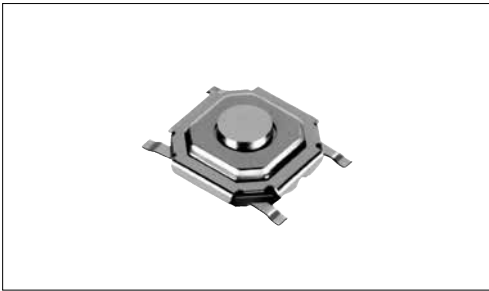


1.5mm height slim type



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

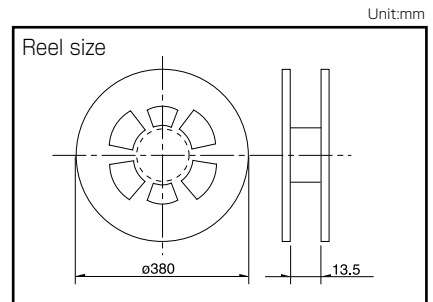
Product Line

Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Minimum order unit (pcs.)	
				Japan	Export
SKQGAFE010	0.98N	Top push	500,000 cycles	4,000	4,000
SKQGABE010	1.57N		1,000,000cycles		
SKQGADE010	2.55N		100,000 cycles		
SKQGAKE020	3.43N				

Packing Specifications

Taping

Number of packages (pcs.)			Tape width (mm)	Export package measurements (mm)
1 reel	1 case / Japan	1 case / export packing		
4,000	40,000	40,000	12	395×395×205



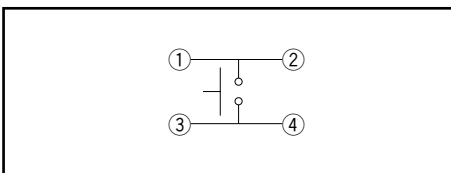
Note

For reels of 330mm diameter, please inquire.















Dimensions

Photo	Style	PC board mounting hole dimensions (Viewed from switch mounting face)
<p>With stem type</p>		<p>Prohibited area of copper tracks</p>

Circuit Diagram



Refer to P.249 for soldering conditions.

Type		Sharp Feeling Type						SKTC
		Surface Mount						
Series		SKSH	SKRW	SKRM	SKRB	SKRR	SKQG	SKTC
Photo								
Features		Low-profile				Low-profile and long life	Low-profile	Double action
Water-proof		—	—	—	—	—	—	●
Dust-proof		—	—	—	—	—	—	●
IP standard		—	—	—	—	—	—	67 equivalent
Operating direction	Top push	●	●	●	●	●	●	●
	Side push	—	—	—	—	—	—	—
Dimensions (mm)	W	3.3	□3.7	□4.5	□4.8	7.5	□5.2	3.4
	D	2.9				7		2.2
	H	0.35		0.4	0.55	0.6	1.5	0.62
Operation force coverage	1N max.	↕	↕	↕	↕	↕	↕	See the relevant pages for respective product descriptions
	1N to 2N							
	2N to 3N							
	3N to 4N							
4N to 5N								
Travel (mm)		0.15		0.15/0.2		0.25		See the relevant pages for respective product descriptions
Ground terminal		—	—	—	—	—	—	—
Operating temperature range		-30°C to +85°C			-40°C to +85°C		-40°C to +90°C	-30°C to +85°C
Automotive use		—	—	—	●	—	○	—
Life Cycle								
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	100V AC 1min.				250V AC 1min.		100V 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°C 96h						
	Dry heat	90°C 96h						
	Damp heat	60°C, 90 to 95%RH 96h						
Page		201	202	203	204	205	206	207

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 249
TACT Switch™ Cautions 250

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.

■ Condition for Reflow

Available for Surface Mount Type.

Temperature profile



Notes

1. Please confirm the specifications of our product for the detailed condition.
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°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHH 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°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHL Top Push Type, SKQJ 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°C max.
Preheating time	45s max.
Soldering temperature	255°C max.
Duration of immersion	5s max.
Number of soldering	2times 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.)

■ Manual Soldering

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

SKHH, SKHW Series

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

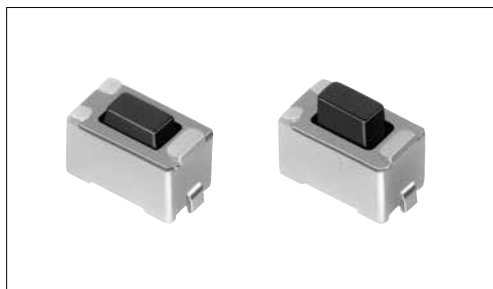
SKTD, SKTG, SKQJ Series

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

Tall height (4.3mm and 5.0mm) and surface mount type



Typical Specifications



Items	Specifications
Rating (max.)	50mA 12V DC
Rating (min.)	10 μ A 1V DC
Initial contact resistance	500m Ω max.
Travel (mm)	0.25

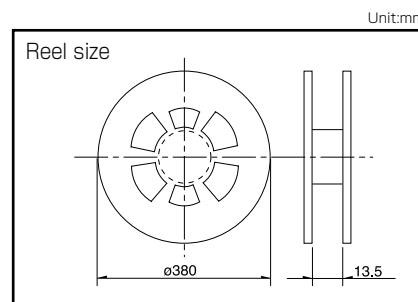
Product Line

Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Stem color	Height	Minimum order unit (pcs.)	
						Japan	Export
SKQBAE010	0.98N	Top push	50,000 cycles	Black	h=4.3mm	2,000	2,000
SKQMASE010	1.57N			Red			
SKQMAQE010	2.55N		Black	h=5mm			
SKQMATE010	0.98N		Red				
SKQMBBE010	1.57N		Black				
SKQMARE010	2.55N		Red				

Packing Specifications

Taping

Number of packages (pcs.)			Tape width (mm)	Export package measurements (mm)
1 reel	1 case / Japan	1 case / export packing		
2,000	20,000	20,000	12	395×395×205



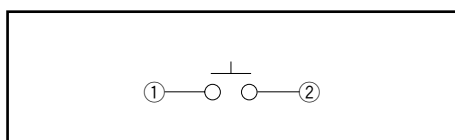
Note

For reels of 330mm diameter, please inquire.

















Dimensions

Style	PC board land dimensions (Viewed from switch mounting face)			
<table border="1"> <tr><td>h</td></tr> <tr><td>4.3</td></tr> <tr><td>5</td></tr> </table>	h	4.3	5	
h				
4.3				
5				

Circuit Diagram



Refer to P.249 for soldering conditions.

Type		Sharp Feeling Type							
		Surface Mount							
Series		SKRK	SKTH	SKRP	SKQM	SKQY	SKTQ	SKTR	SKSU
Photo									
Features		Compact size Low-profile	Compact size	High operation force Compact size	Compact size		Middle travel		
Water-proof		—	—	—	—	—	—	—	●
Dust-proof		—	●	—	—	—	—	—	●
IP standard		—	—	—	—	—	—	—	67 equivalent
Operating direction	Top push	●	●	●	●	●	●	●	●
	Side push	—	—	—	—	—	—	—	—
Dimensions (mm)	W	3.9	3.5	4.2	6	6.1	5.3	□6.1	5.3
	D	2.9	3.2		3.5	3.7	5.4		5.4
	H	1.5/2	1.8/2.5	2.5	4.3/5	2.5	4.25	4.1	3.85/4.34
Operation force coverage	1N max.	↕	↕	↕	↕	↕	↕	↕	↕
	1N to 2N								
	2N to 3N								
	3N to 4N								
4N to 5N									
Travel (mm)		0.13	0.12	0.2	0.25		0.71	0.72	0.7/0.9
Ground terminal		—	—	—	—	○	—	—	—
Operating temperature range		-40°C to +85°C			-40°C to +90°C				
Automotive use		—	●	●	●	●	●	●	●
Life Cycle									
Electrical performance	Rating (max.) (Resistive load)	50mA 12V DC	25mA 16V DC	50mA 16V DC	50mA 12V DC		50mA 16V DC		
	Rating (min.) (Resistive load)	10μA 1V DC							
	Insulation resistance	100MΩ min. 100V DC 1min.							
	Voltage proof	250V AC 1min.	100V AC 1min.	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°C 96h		-40°C 1,000h	-40°C 96h		-40°C 1,000h		
	Dry heat	90°C 96h		90°C 1,000h	90°C 96h		90°C 1,000h		
	Damp heat	60°C, 90 to 95%RH 96h		60°C, 90 to 95%RH 1,000h	60°C, 90 to 95%RH 96h		60°C, 90 to 95%RH 1,000h		
Page		218	220	222	224	225	227	228	229

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 249
TACT Switch™ Cautions 250

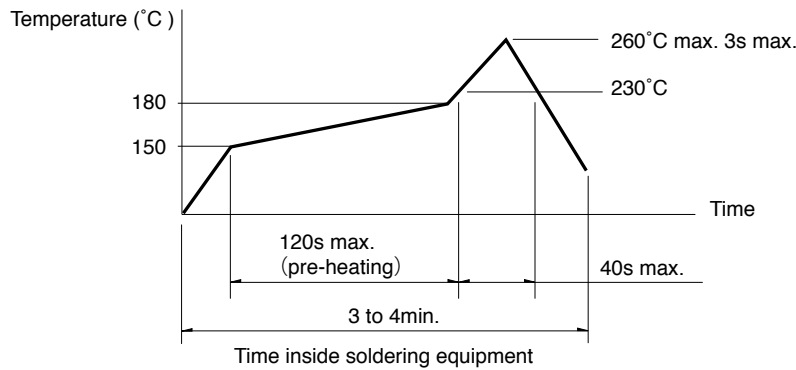
Notes

- 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.

Condition for Reflow

Available for Surface Mount Type.

Temperature profile



Notes

1. Please confirm the specifications of our product for the detailed condition.
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°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHH 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°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHL Top Push Type, SKQJ 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°C max.
Preheating time	45s max.
Soldering temperature	255°C max.
Duration of immersion	5s max.
Number of soldering	2times 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.)

Manual Soldering

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

SKHH, SKHW Series

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

SKTD, SKTG, SKQJ Series

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

Compact switch with contact sealing structure, also available with ground terminal



■ Typical Specifications



Items	Specifications
Rating (max.)	50mA 12V DC
Rating (min.)	10μA 1V DC
Initial contact resistance	500mΩ max.
Travel (mm)	0.25

■ Product Line

Top push type

Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Minimum order unit (pcs.)	
				Japan	Export
SKQYACE010	0.98N	Top push	50,000 cycles	3,000	3,000
SKQYAAE010	1.57N				
SKQYABE010	2.55N				
SKQYAFE010	3.14N				

With ground terminal type

Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Minimum order unit (pcs.)	
				Japan	Export
SKQYPCE010	0.98N	Top push	50,000 cycles	3,000	3,000
SKQYPAE010	1.57N				
SKQYPBE010	2.55N				
SKQYPDE010	3.14N				

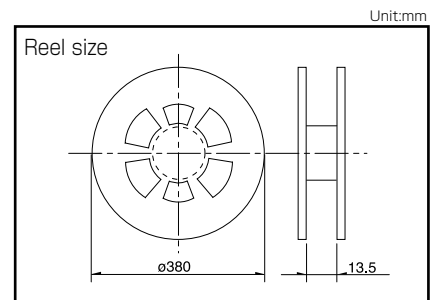
■ Packing Specifications

Taping

Number of packages (pcs.)			Tape width (mm)	Export package measurements (mm)
1 reel	1 case / Japan	1 case / export packing		
3,000	30,000	30,000	12	395×395×205

Note

For reels of 330mm diameter, please inquire.



Refer to P.249 for soldering conditions.

SKQY 6.1 × 3.7mm (Surface Mount Type)

TACT Switch™

Sharp Feeling

Soft Feeling

Snap-In Type

Surface Mount Type

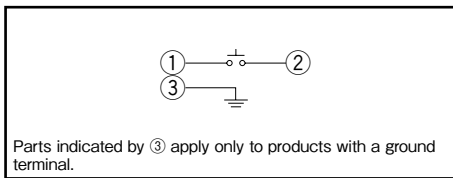
Radial Type

















■ Dimensions

Unit:mm

Style	PC board land dimensions (Viewed from switch mounting face)
<p>Parts indicated by ※ apply only to products with a ground terminal.</p>	<p>※ Ground terminal land exists only on types with ground terminal.</p>

■ Circuit Diagram



Type		Sharp Feeling Type							
		Surface Mount							
Series		SKRK	SKTH	SKRP	SKQM	SKQY	SKTQ	SKTR	SKSU
Photo									
Features		Compact size Low-profile	Compact size	High operation force Compact size	Compact size		Middle travel		
Water-proof		—	—	—	—	—	—	—	●
Dust-proof		—	●	—	—	—	—	—	●
IP standard		—	—	—	—	—	—	—	67 equivalent
Operating direction	Top push	●	●	●	●	●	●	●	●
	Side push	—	—	—	—	—	—	—	—
Dimensions (mm)	W	3.9	3.5	4.2	6	6.1	5.3	□6.1	5.3
	D	2.9	3.2		3.5	3.7	5.4		5.4
	H	1.5/2	1.8/2.5	2.5	4.3/5	2.5	4.25	4.1	3.85/4.34
Operation force coverage	1N max.	↕	↕	↕	↕	↕	↕	↕	↕
	1N to 2N								
	2N to 3N								
	3N to 4N								
4N to 5N									
Travel (mm)		0.13	0.12	0.2	0.25		0.71	0.72	0.7/0.9
Ground terminal		—	—	—	—	○	—	—	—
Operating temperature range		-40°C to +85°C			-40°C to +90°C				
Automotive use		—	●	●	●	●	●	●	●
Life Cycle									
Electrical performance	Rating (max.) (Resistive load)	50mA 12V DC	25mA 16V DC	50mA 16V DC	50mA 12V DC		50mA 16V DC		
	Rating (min.) (Resistive load)	10μA 1V DC							
	Insulation resistance	100MΩ min. 100V DC 1min.							
	Voltage proof	250V AC 1min.	100V AC 1min.	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°C 96h		-40°C 1,000h	-40°C 96h		-40°C 1,000h		
	Dry heat	90°C 96h		90°C 1,000h	90°C 96h		90°C 1,000h		
	Damp heat	60°C, 90 to 95%RH 96h		60°C, 90 to 95%RH 1,000h	60°C, 90 to 95%RH 96h		60°C, 90 to 95%RH 1,000h		
Page		218	220	222	224	225	227	228	229

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 249
TACT Switch™ Cautions 250

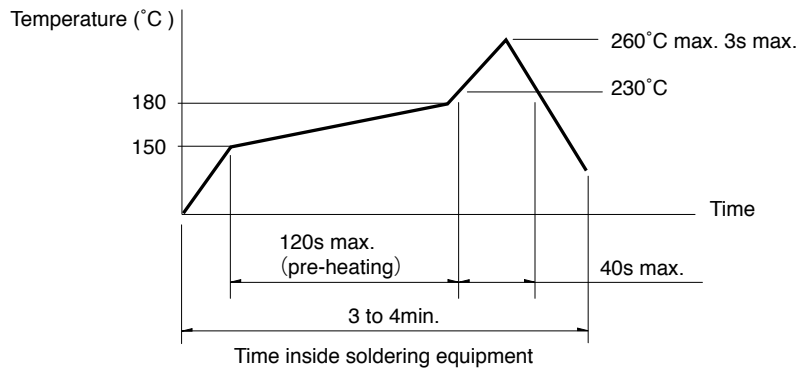
Notes

- 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.

Condition for Reflow

Available for Surface Mount Type.

Temperature profile



Notes

1. Please confirm the specifications of our product for the detailed condition.
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°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHH 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°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHL Top Push Type, SKQJ 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°C max.
Preheating time	45s max.
Soldering temperature	255°C max.
Duration of immersion	5s max.
Number of soldering	2times 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.)

Manual Soldering

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

SKHH, SKHW Series

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

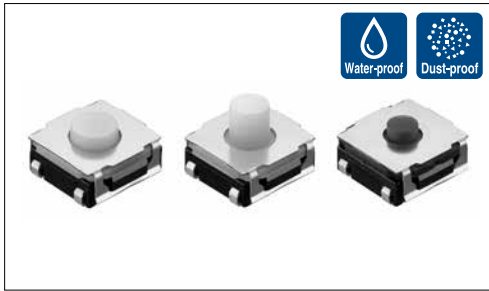
SKTD, SKTG, SKQJ Series

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

Rubber stem helps to achieve travel of 0.3 to 0.55mm & over travel



■ Typical Specifications



Items	Specifications
Rating (max.)	50mA 12V DC
Rating (min.)	10 μ A 1V DC
Initial contact resistance	100m Ω max.
Protective structure ※	IP67 equivalent (Except SKRAAW)

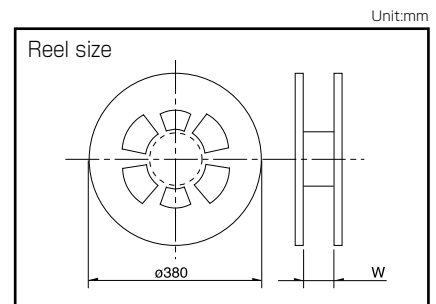
■ Product Line

Product No.	Operating force	Operating direction	Travel (mm)	Operating life (5mA 5V DC)	Stem color	Minimum order unit (pcs.)	
						Japan	Export
SKRAAWE010	0.6N	Top push	0.3	4,000,000 cycles	Blue	3,000	3,000
SKRAAKE010	2.45N				White		
SKRAALE010	3.92N		100,000 cycles	0.35	Blue	1,400	1,400
SKRAAME010	1.96N			0.5			
SKRAAQE010	3.43N			0.55			

■ Packing Specifications

Taping

Series	Number of packages (pcs.)			Reel width W (mm)	Tape width (mm)	Export package measurements (mm)
	1 reel	1 case / Japan	1 case / export packing			
SKRAAK SKRAAL SKRAAW	3,000	30,000	30,000	13.5	12	395×395×205
SKRAAM SKRAAQ	1,400	11,200	11,200	17.5	16	



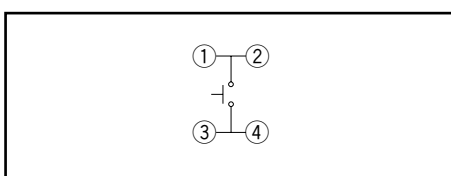
Note

For reels of 330mm diameter, please inquire.

■ Dimensions

Style	PC board land dimensions (Viewed from switch mounting face)												
<table border="1"> <thead> <tr> <th></th> <th>h</th> <th>A</th> </tr> </thead> <tbody> <tr> <td>SKRAAW</td> <td>3.4</td> <td>2.0</td> </tr> <tr> <td>SKRAAK · SKRAAL</td> <td>3.4</td> <td>2.9</td> </tr> <tr> <td>SKRAAM · SKRAAQ</td> <td>5.1</td> <td>2.5</td> </tr> </tbody> </table>		h	A	SKRAAW	3.4	2.0	SKRAAK · SKRAAL	3.4	2.9	SKRAAM · SKRAAQ	5.1	2.5	
	h	A											
SKRAAW	3.4	2.0											
SKRAAK · SKRAAL	3.4	2.9											
SKRAAM · SKRAAQ	5.1	2.5											

■ Circuit Diagram



※ Assumes the switch is left alone without being operated. Under the specified conditions, dust and water ingress with a significant impact on the switch's on-off function is prevented.
IP67 dust and water resistance is guaranteed for the switch alone and performance may not be guaranteed depending on the mounting conditions and usage.

Refer to P.249 for soldering conditions.

TACT Switch™

List of Varieties

TACT Switch™

















Sharp Feeling Type

Soft Feeling Type

Snap-In Type

Surface Mount Type

Radial Type

Type		Sharp Feeling Type							
		Surface Mount							
Series		SKST	SKRA	SKHM	SKHU	SKTD	SKSN	SKTG	SKSL
Photo									
Features		Middle travel		—	—	Low-profile	Mid-mount	Half-mount	
Water-proof		—	○	—	○	●	—	●	—
Dust-proof		—	○	—	○	●	—	●	—
IP standard		—	67 equivalent	—	—	67 equivalent	—	67 equivalent	—
Operating direction	Top push	●	●	●	●	—	—	—	—
	Side push	—	—	—	—	●	●	●	●
Dimensions (mm)	W	□8.5	□6.2	6.2	6.2	3.9	6.2	5.2	4.5
	D			6.5	6.3	2.9	3	3.5	2.6
	H	3.95	3.5/5.2	3.1	2.5/3.1	1.55	3.5	1.55	2.2
Operation force coverage	1N max.	4N to 10N	↕	↕	↕	↕	↕	↕	↕
	1N to 2N								
	2N to 3N								
	3N to 4N								
4N to 5N									
Travel (mm)		0.9	See the relevant pages for respective product description	0.25		0.15	0.2	0.15	
Ground terminal		—	—	●	●	●	●	●	●
Operating temperature range		-40°C to +90°C		-40°C to +85°C		-30°C to +85°C	-40°C to +85°C	-30°C to +85°C	
Automotive use		●	○	—	○	—	—	—	—
Life Cycle									
Electrical performance	Rating (max.) (Resistive load)	50mA 16V DC	50mA 12V DC						
	Rating (min.) (Resistive load)	10μA 1V DC							
	Insulation resistance	100MΩ min. 100V DC 1min.							
	Voltage proof	250V AC 1min.			100V AC 1min.		250V AC 1min.		100V 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°C 1,000h		-40°C 96h					
	Dry heat	90°C 1,000h		90°C 96h	85°C 96h	90°C 96h	85°C 96h	90°C 96h	
	Damp heat	60°C, 90 to 95%RH 1,000h		60°C, 90 to 95%RH 96h					
Page		230	231	232	233	235	236	237	238

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 249
TACT Switch™ Cautions 250

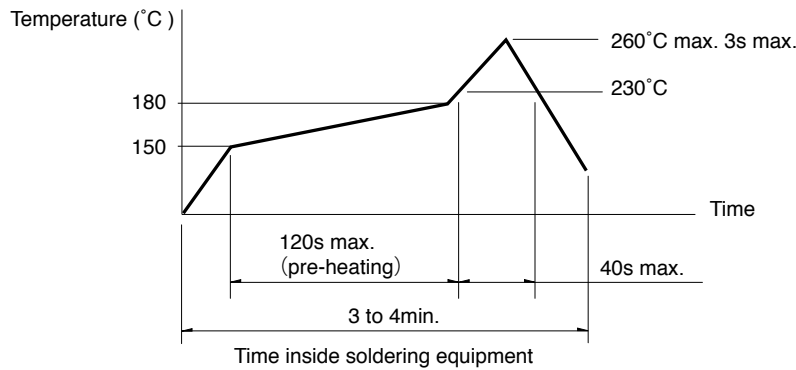
Notes

- 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.

Condition for Reflow

Available for Surface Mount Type.

Temperature profile



Notes

1. Please confirm the specifications of our product for the detailed condition.
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°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHH 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°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHL Top Push Type, SKQJ 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°C max.
Preheating time	45s max.
Soldering temperature	255°C max.
Duration of immersion	5s max.
Number of soldering	2times 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.)

Manual Soldering

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

SKHH, SKHW Series

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

SKTD, SKTG, SKQJ Series

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

Compact, low-profile type with a height of 0.55mm



TACT Switch™

Sharp Feeling

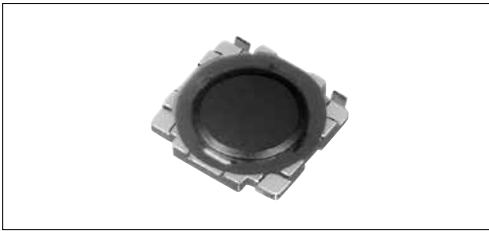
Soft Feeling

Snap-In Type

Surface Mount Type

Radial Type

■ Typical Specifications



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

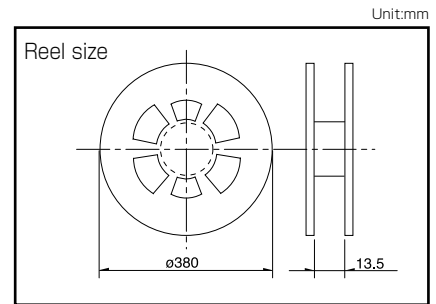
■ Product Line

Product No.	Operating force	Operating direction	Travel (mm)	Operating life (5mA 5V DC)	Minimum order unit (pcs.)	
					Japan	Export
SKRBAGE010	1.1N	Top push	0.15	2,000,000 cycles	10,000	10,000
SKRBAAE010	1.57N			1,000,000 cycles		
SKRBACE010	2.55N		500,000 cycles			
SKRBAKE010	3.5N		200,000 cycles			

■ Packing Specifications

Taping

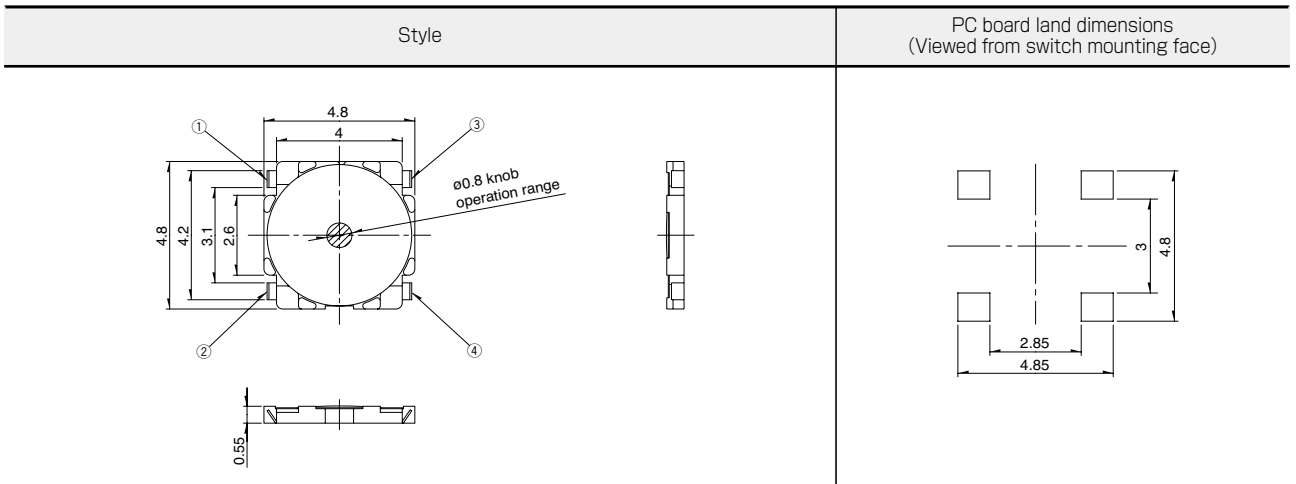
Number of packages (pcs.)			Tape width (mm)	Export package measurements (mm)
1 reel	1 case / Japan	1 case / export packing		
10,000	100,000	100,000	12	395×395×205



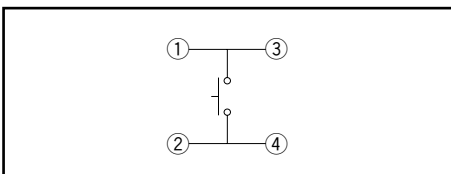
Note















For reels of 330mm diameter, please inquire.

■ Dimensions



■ Circuit Diagram



Type		Sharp Feeling Type						SKTC
		Surface Mount						
Series		SKSH	SKRW	SKRM	SKRB	SKRR	SKQG	SKTC
Photo								
Features		Low-profile				Low-profile and long life	Low-profile	Double action
Water-proof		—	—	—	—	—	—	●
Dust-proof		—	—	—	—	—	—	●
IP standard		—	—	—	—	—	—	67 equivalent
Operating direction	Top push	●	●	●	●	●	●	●
	Side push	—	—	—	—	—	—	—
Dimensions (mm)	W	3.3	□3.7	□4.5	□4.8	7.5	□5.2	3.4
	D	2.9				7		2.2
	H	0.35		0.4	0.55	0.6	1.5	0.62
Operation force coverage	1N max.	↕	↕	↕	↕	↕	↕	See the relevant pages for respective product descriptions
	1N to 2N							
	2N to 3N							
	3N to 4N							
4N to 5N								
Travel (mm)		0.15		0.15/0.2		0.25		See the relevant pages for respective product descriptions
Ground terminal		—	—	—	—	—	—	—
Operating temperature range		-30°C to +85°C			-40°C to +85°C		-40°C to +90°C	-30°C to +85°C
Automotive use		—	—	—	●	—	○	—
Life Cycle								
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	100V AC 1min.				250V AC 1min.		100V 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°C 96h						
	Dry heat	90°C 96h						
	Damp heat	60°C, 90 to 95%RH 96h						
Page		201	202	203	204	205	206	207

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 249
TACT Switch™ Cautions 250

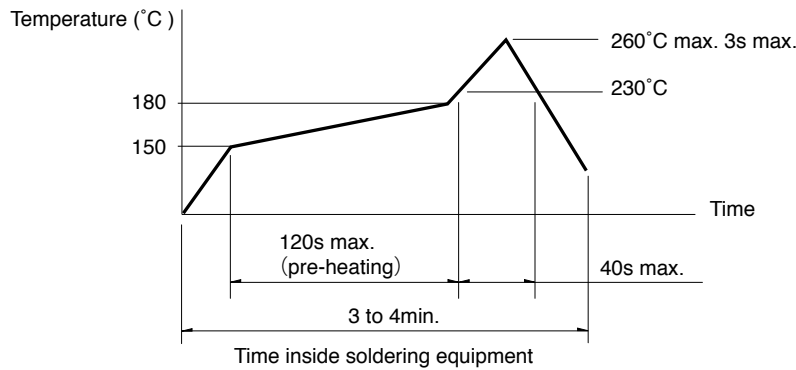
Notes

- 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.

Condition for Reflow

Available for Surface Mount Type.

Temperature profile



Notes

1. Please confirm the specifications of our product for the detailed condition.
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°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHH 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°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHL Top Push Type, SKQJ 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°C max.
Preheating time	45s max.
Soldering temperature	255°C max.
Duration of immersion	5s max.
Number of soldering	2times 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.)

Manual Soldering

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

SKHH, SKHW Series

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

SKTD, SKTG, SKQJ Series

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

High operation force satisfies the needs in automotive applications. Wide stem & good mountability



Typical Specifications



Items	Specifications
Rating (max.)	50mA 16V DC
Rating (min.)	10 μ A 1V DC
Initial contact resistance	500m Ω max.
Travel (mm)	0.2

Product Line

Standard type

Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Stem color	Minimum order unit (pcs.)	
					Japan	Japan
SKRPABE010	1.57N	Top push	100,000cycles	Natural	4,000	4,000
SKRPACE010	2.55N		50,000cycles			
SKRPADE010	4N		100,000cycles	Black		
SKRPARE010	5N		300,000cycles			

Long-life type

Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Stem color	Minimum order unit (pcs.)	
					Japan	Japan
SKRPANE010	1.57N	Top push	1,000,000cycles	Natural	4,000	4,000
SKRPASE010	2.55N		500,000cycles	Black		

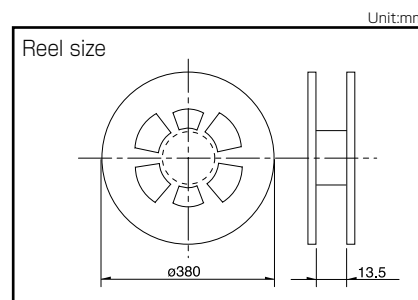
Packing Specifications

Taping

Number of packages (pcs.)			Tape width (mm)	Export package measurements (mm)
1 reel	1 case / Japan	1 case / export packing		
4,000	40,000	40,000	12	395×395×205

Note

For reels of 330mm diameter, please inquire.



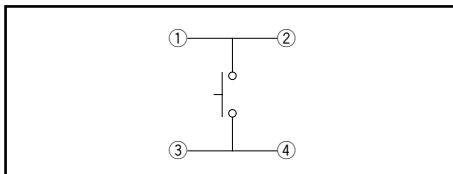
Refer to P.249 for soldering conditions.

















■ Dimensions

Unit:mm

Style	PC board land dimensions (Viewed from switch mounting face)

■ Circuit Diagram



Type		Sharp Feeling Type							
		Surface Mount							
Series		SKRK	SKTH	SKRP	SKQM	SKQY	SKTQ	SKTR	SKSU
Photo									
Features		Compact size Low-profile	Compact size	High operation force Compact size	Compact size		Middle travel		
Water-proof		—	—	—	—	—	—	—	●
Dust-proof		—	●	—	—	—	—	—	●
IP standard		—	—	—	—	—	—	—	67 equivalent
Operating direction	Top push	●	●	●	●	●	●	●	●
	Side push	—	—	—	—	—	—	—	—
Dimensions (mm)	W	3.9	3.5	4.2	6	6.1	5.3	□6.1	5.3
	D	2.9	3.2		3.5	3.7	5.4		5.4
	H	1.5/2	1.8/2.5	2.5	4.3/5	2.5	4.25	4.1	3.85/4.34
Operation force coverage	1N max.	↕	↕	↕	↕	↕	↕	↕	↕
	1N to 2N								
	2N to 3N								
	3N to 4N								
4N to 5N	↕	↕	↕	↕	↕	↕	↕	↕	
Travel (mm)		0.13	0.12	0.2	0.25		0.71	0.72	0.7/0.9
Ground terminal		—	—	—	—	○	—	—	—
Operating temperature range		-40°C to +85°C			-40°C to +90°C				
Automotive use		—	●	●	●	●	●	●	●
Life Cycle									
Electrical performance	Rating (max.) (Resistive load)	50mA 12V DC	25mA 16V DC	50mA 16V DC	50mA 12V DC		50mA 16V DC		
	Rating (min.) (Resistive load)	10μA 1V DC							
	Insulation resistance	100MΩ min. 100V DC 1min.							
	Voltage proof	250V AC 1min.	100V AC 1min.	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°C 96h		-40°C 1,000h	-40°C 96h		-40°C 1,000h		
	Dry heat	90°C 96h		90°C 1,000h	90°C 96h		90°C 1,000h		
	Damp heat	60°C, 90 to 95%RH 96h		60°C, 90 to 95%RH 1,000h	60°C, 90 to 95%RH 96h		60°C, 90 to 95%RH 1,000h		
Page		218	220	222	224	225	227	228	229

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 249
TACT Switch™ Cautions 250

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.

Condition for Reflow

Available for Surface Mount Type.

Temperature profile



Notes

1. Please confirm the specifications of our product for the detailed condition.
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°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHH 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°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHL Top Push Type, SKQJ 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°C max.
Preheating time	45s max.
Soldering temperature	255°C max.
Duration of immersion	5s max.
Number of soldering	2times 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.)

Manual Soldering

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

SKHH, SKHW Series

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

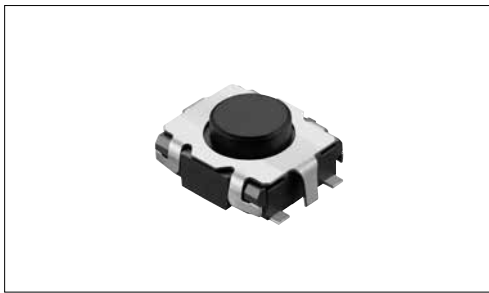
SKTD, SKTG, SKQJ Series

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

Heavy-operational and equipped with a 1.4mm height and grounding, meeting in-car needs



■ Typical Specifications



Items	Specifications
Rating (max.)	50mA 12V DC
Rating (min.)	10 μ A 1V DC
Initial contact resistance	100m Ω max.
Travel (mm)	0.12

■ Product Line

Top push type

Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Stem color	Minimum order unit (pcs.)	
					Japan	Export
SKSGACE010	1.6N	Top push	200,000 cycles	Natural	12,000	12,000
SKSGAAE010	4N			Black		

With ground terminal type

Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Stem color	Minimum order unit (pcs.)	
					Japan	Export
SKSGPCE010	1.6N	Top push	200,000 cycles	Natural	12,000	12,000
SKSGPAE010	4N			Black		

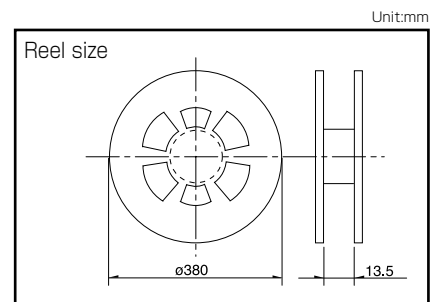
■ Packing Specifications

Taping

Number of packages (pcs.)			Tape width (mm)	Export package measurements (mm)
1 reel	1 case / Japan	1 case / export packing		
12,000	120,000	120,000	12	395×395×205

Note

For reels of 330mm diameter, please inquire.



Refer to P.249 for soldering conditions.

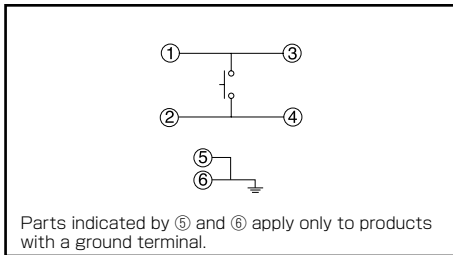
TACT Switch™
Sharp Feeling
Soft Feeling
Snap-In Type
Surface Mount Type
Radial Type

■ Dimensions

Unit:mm

Style	PC board land dimensions (Viewed from switch mounting face)
<p>Parts indicated by ⑤, ⑥ and * apply only to products with a ground terminal.</p>	<p>* Ground terminal land pattern is applicable to Ground terminal type only.</p>

■ Circuit Diagram



TACT Switch™















Sharp Feeling Type

Soft Feeling Type

Snap-In Type

Surface Mount Type

Radial Type

Type		Sharp Feeling Type							
		Surface Mount							
Series		SKSD	SKRN	SKTA	SKSV	SKSW	SKTK	SKSG	
Photo									
Features		Double action			Compact size Low-profile		Long life	High operation force Compact size	
Water-proof		—	—	●	●	●	●	—	
Dust-proof		—	—	●	●	●	●	—	
IP standard		—	—	67 equivalent 68 equivalent in some cases	67 equivalent	67 equivalent 68 equivalent in some cases	67 equivalent	—	
Operating direction	Top push	●	●	●	●	●	●	●	
	Side push	—	—	—	—	—	—	—	
Dimensions (mm)	W	4.1	□6	2.6	2.8	3	5.9	3	
	D	3.9		1.6	1.9	2	4	2.7	
	H	0.6	0.9	0.53	0.55	0.6	0.78	1.4	
Operation force coverage	1N max.	See the relevant pages for respective product descriptions			↕	↕	↕	↕	↕
	1N to 2N								
	2N to 3N								
	3N to 4N								
4N to 5N									
Travel (mm)		See the relevant pages for respective product descriptions			0.11	0.12	See the relevant pages for respective product descriptions	0.25	0.12
Ground terminal		●	●	—	—	—	—	○	
Operating temperature range		-40°C to +90°C			-30°C to +85°C			-40°C to +85°C	
Automotive use		—	—	—	—	—	—	●	
Life Cycle									
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	100V AC 1min.	250V AC 1min.	100V 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°C 96h							
	Dry heat	90°C 96h							
	Damp heat	60°C, 90 to 95%RH 96h							
Page		208	209	210	212	213	215	216	

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 250

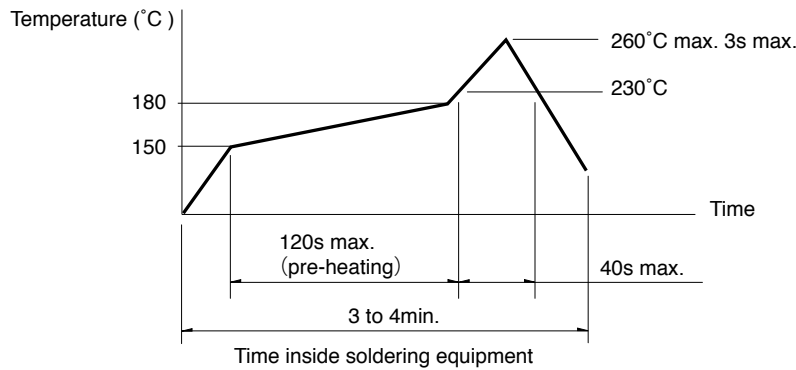
Notes

- 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.

Condition for Reflow

Available for Surface Mount Type.

Temperature profile



Notes

1. Please confirm the specifications of our product for the detailed condition.
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°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHH 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°C max.
Preheating time	60s max.
Soldering temperature	260°C max.
Duration of immersion	5s max.
Number of soldering	2times max.

SKHL Top Push Type, SKQJ 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°C max.
Preheating time	45s max.
Soldering temperature	255°C max.
Duration of immersion	5s max.
Number of soldering	2times 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.)

Manual Soldering

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

SKHH, SKHW Series

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

SKTD, SKTG, SKQJ Series

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