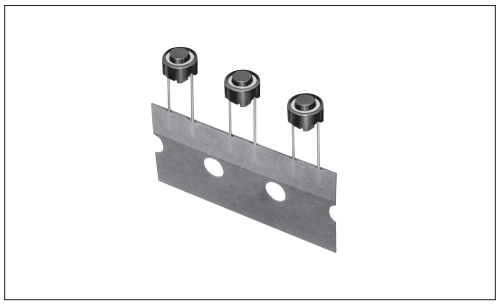
SKRG

6.2mm Diameter Round Terminal (Radial Type)

Round terminal vertical type with excellent PC board mounting performance.



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

Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Stem color	Stem height	Minimum order unit (pcs.)	
						Japan	Export
SKRGAAD010	1.27N	Toppush	500,000cycles	Black	h=4.3mm	2,000	2,000
SKRGABD010	1.57N			White			
SKRGACD010	2.55N		200,000cycles	Gray			
SKRGADD010	1.27N		500,000cycles	Black	h=5mm		
SKRGAED010	1.57N			White			
SKRGAFD010	2.55N		200,000cycles	Gray			
SKRGALD010	1.27N		500,000cycles	Black	h=7mm		
SKRGAMD010	1.57N			White			
SKRGAND010	2.55N		200,000cycles	Gray			
SKRGAQD010	1.27N		500,000cycles	Black	h=9.5mm		
SKRGARD010	1.57N			White			
SKRGASD010	2.55N		200,000cycles	Gray			

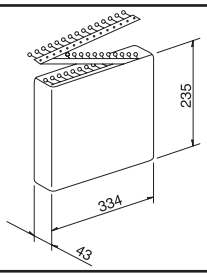
Packing Specifications

Radial Taping

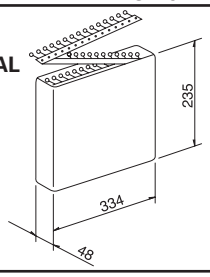
Unit:mm

Box size

SKRGAA to AF



SKRGAL to AS

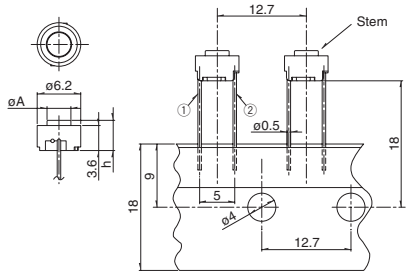


Number of packages (pcs.)			Export package measurements (mm)
1 box	1 case / Japan	1 case / export packing	
2,000	20,000	20,000	SKRGAA to AF 353 × 506 × 244
			SKRGAL to AS 353 × 506 × 269

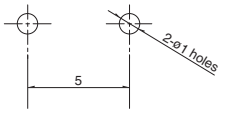
Dimensions

Unit:mm

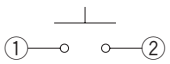
Style	PC board mounting hole dimensions (Viewed from switch mounting face)



h	A
4.3	3.4
5	3.4
7	3.2
9.5	2.9



Circuit Diagram



Note

Please use 1.6mm thick PC boards.

Refer to **P.288** for soldering conditions.

TACT Switch™

List of Varieties

Type		Sharp Feeling Type			Soft Feeling Type							
		Radial			Snap–in			Surface Mount			Radial	
Series		SKRG	SKGK	SKRC	SKEG	SKEG	SKPF	SKPM	SKPG	SKPR	SKPL	SKPD
Photo												
Features		Round terminal type	—	Round terminal type	—	—	High operation force and long travel	Low contact resistance	—	High operation force and Low contact resistance	Round terminal and low contact resistance	—
Water-proof		—	—	●	—	—	—	—	—	—	—	—
Dust-proof		—	—	●	—	—	—	—	—	—	—	—
Operating direction	Toppush	●	●	●	●	—	●	●	●	●	●	●
	Sidepush	—	—	—	—	●	—	—	—	—	—	—
Dimensions (mm)	W	φ6.2	□6.6	φ9	□6	7.5	8	5.9	6.6	7.5	φ6.45	□7.8
	D					9.9	9	6	6.3	7.8		
	H	4.3	5	13	7	7.3	10	5		6.5	5	
Contact		—	—	—	Carbon			Silver	Carbon	Silver	Carbon	
Operation force coverage	~1N	↕	↕	↕	↕	↕	↕	↕	↕	↕	↕	↕
	1N~2N											
	2N~3N											
	3N~4N											
	4N~5N									↕		
Travel (mm)		0.25			1		※1	1.3		1	1.3	※1
Ground terminal		—	—	—	—	—	—	—	—	—	—	—
Operating temperature range		-40℃ to +90℃	-20℃ to +70℃	-40℃ to +90℃	-20℃ to +70℃		-40℃ to +90℃					
Automotive use		●	—	—	—	—	●	●	●	●	●	●
Life Cycle		★2	★2	★2	★2	★2	★2	★3	★3	★3	★2	★2
Electrical performance	Rating (max.) (Resistive load)	50mA 12V DC			5mA 12V DC			50mA 16V DC	5mA 12V DC	50mA 16V DC		5mA 12V DC
	Rating (min.) (Resistive load)	10μA 1V DC			10μA 1V DC							
	Insulation resistance	100MΩ min. 100V DC for 1min.			100MΩ min. 100V DC for 1min.							
	Voltage proof	250V AC for 1min.			250V AC for 1min.							※2
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			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							※3
	Lifetime	Shall be in accordance with individual specifications.			Shall be in accordance with individual specifications.							
Environmental performance	Cold	-40±2℃ for 96h	-30±2℃ for 96h	-40±2℃ for 96h	-30±2℃ for 96h		-40±2℃ for 96h	-30±2℃ for 96h			-40±2℃ for 1000h	-40±2℃ for 96h
	Dry heat	90±2℃ for 96h	80±2℃ for 96h	90±2℃ for 96h	80±2℃ for 96h		90±2℃ for 96h	80±2℃ for 96h			90±2℃ for 1000h	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						60±2℃ 90 to 95%RH for 1000h	60±2℃ 90 to 95%RH for 96h
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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.

Notes

1. The automotive operating temperature range to be individually discussed upon request.
2. ● indicates applicability to all products in the series.
3. ※ 1 See the relevant pages for respective product descriptions
4. ※ 2 50MΩ min. 100V DC for 1min. SKPDAF:100MΩmin. 100V DC for 1min.
5. ※ 3 100V AC for 1min.SKPDAF:250V DC for 1min.

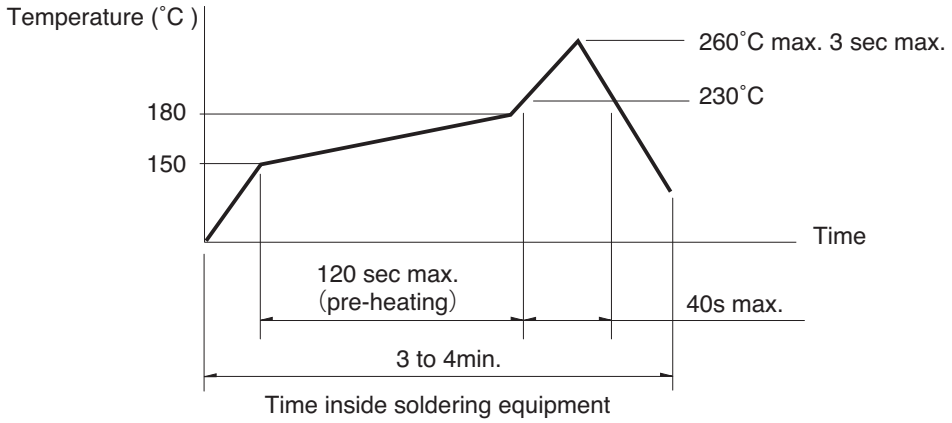
ALPS

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



Time inside soldering equipment

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℃ 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 fluk
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 fluk
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 (Except SKRT Series)

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.

SKQJ、SKQK、SKEG Series

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