## User friendly 6.0×6.0mm type, available in a wide variety



## ■ 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	Operating	Operating life	Stem color	Height	Minimum ord	er unit (pcs.)	Drawing
Floudet No.	force	direction	(5mA 5V DC)	Sterri COIOI	Height	Japan	Export	No.
SKHHAJA010	0.98N		1,000,000 cycles	Black				
SKHHALA010	1.57N		500,000 cycles	Dark gray	h=4.3mm			
SKHHAQA010	2.55N		200,000 cycles	Red				
SKHHAKA010	0.98N		1,000,000 cycles	Black				
SKHHAMA010	1.57N		500,000 cycles	Dark gray	h=5mm			
SKHHARA010	2.55N			Red			1,000	
SKHHCQA010	3.53N		200,000 cycles	Orange		1,000 h=7mm		
SKHHCRA010	5.10N			Yellow				
SKHHBVA010	0.98N	Tananah	1,000,000 cycles	Black	h=7mm			1
SKHHBWA010	1.57N	Top push	500,000 cycles	Dark gray				
SKHHBYA010	2.55N		200,000 cycles	Red				
SKHHANA010	0.98N		1,000,000 cycles	Black				
SKHHAPA010	1.57N		500,000 cycles	Dark gray	h=9.5mm			
SKHHBSA010	2.55N		200,000 cycles	Red				
SKHHDTA010	0.98N		1,000,000 cycles	Black	h 10			
SKHHDUA010	1.57N		500,000 avala	Dark gray	h=13mm			
SKHHDHA010	0.98N		500,000 cycles	Black	h_17mm			
SKHHDJA010	1.57N		300,000 cycles	Dark gray	h=17mm			

## Joint stem type

Conit Ctorr type								
Product No.	Operating	Operating	Operating life	Stem color	Height	Minimum order unit (pcs.)		Drawing
Floudet No.	force	direction	(5mA 5V DC)	Sterri Color	rieigitt	Japan	Export	No.
SKHHCWA010	0.98N		1,000,000 cycles	Black				
SKHHDAA010	1.57N	Top push	500,000 cycles	Dark gray	h=7.3mm	1,000	1,000	2
SKHHDGA010	2.55N		200,000 cycles	Red				

SKHH/6mm Square (Shab-in Tyroe)

# ■ Product Line With ground terminal type

Product No.	Operating	Operating	Operating life	Stem color	Height	Minimum ord	er unit (pcs.)	Drawing
Froduct No.	force	direction	(5mA 5V DC)	Sterri Color	i leigitt	Japan	Export	No.
SKHHPJA010	0.98N		1,000,000 cycles	Black				
SKHHPLA010	1.57N		500,000 cycles	Dark gray	h=4.3mm			
SKHHPQA010	2.55N		200,000 cycles	Red				
SKHHPKA010	0.98N		1,000,000 cycles	Black	h=5mm			3
SKHHPMA010	1.57N		500,000 cycles	Dark gray		- 1,000	1,000	
SKHHPRA010	2.55N	Top push	200,000 cycles	Red				
SKHHQVA010	0.98N	TOP PUSIT	1,000,000 cycles	Black				
SKHHQWA010	1.57N		500,000 cycles	Dark gray	h=7mm			
SKHHQYA010	2.55N		200,000 cycles	Red				
SKHHPNA010	0.98N		1,000,000 cycles	Black				
SKHHPPA010	1.57N		500,000 cycles	Dark gray	h=9.5mm			
SKHHQNA010	2.55N		200,000 cycles	Red				

## Side push type

Product No.	Operating	Operating	Operating life	Stem color	Stem length	Minimum ord	er unit (pcs.)	Drawing
Floddot No.	force	direction	(5mA 5V DC)	Sterri Color	Otelli leligtii	Japan	Export	No.
SKHHLMA010	0.98N		1,000,000 cycles	Black				
SKHHLNA010	1.57N		500,000 cycles	Dark gray	ℓ=3.85mm			
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		1,000	1,000	4
SKHHLSA010	2.55N	Side push	200,000 cycles	Red				
SKHHLUA010	0.98N	Side pusit	1,000,000 cycles	Black				
SKHHLVA010	1.57N		500,000 cycles	Dark gray	ℓ=5.85mm			
SKHHLWA010	2.55N		200,000 cycles	Red				
SKHHNHA010	0.98N		500,000 cycles	Black				
SKHHNJA010	1.57N		300,000 cycles	Dark gray	ℓ=15.85mm			
SKHHNKA010	2.55N		200,000 cycles	Red				

## ■ Packing Specifications

## Bulk

Baik									
Product No.	Number of pa	ckages (pcs.)	Export package						
Product No.	1 case /Japan	1 case /export packing	measurements (mm)						
Other	10,000	30,000							
SKHHDT, SKHHDU SKHHDH, SKHHDJ SKHHNH, SKHHNJ SKHHNK	5,000	15,000	309×476×347						

<u>Di</u>	mensions					Unit:mm
No.	Photo		Style			PC board mounting hole dimensions (Viewed from switch mounting face)
1	Top push type	3 eA e e e e e e e e e e e e e e e e e e	Stem 0.7	h 4.3 5 7 9.5 13	A 3.5 3.5 3.3 3 3 3 3	4-ø1 hole 6.5
	Joint stem type					
2		3.5.6.5	Stem			4-ø1 hole 6.5
3	With ground terminal type	3 OA 9 S S S S S S S S S S S S S S S S S S	Stem  0.7 0.7	h 4.3 5 7 9.5	A 3.5 3.5 3.3 3	6.5 6.5 Ground terminal hole

## Dimensions

Unit:mm

No.	Photo	Style			PC board mounting hole dimensions (Viewed from switch mounting face)
4	Side push type	0A 7.5 6.2 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 3.85 5.85 8.35 15.85	A 3.5 3.3 3 3	2-ø1.3 hole 0, 0, 1, 2-ø1 hole

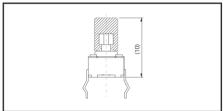
## Note

Please use 1.6mm thick PC boards.

## Circuit Diagram

Top push type / Joint stem type	With ground terminal type	Side push type
①	1) - 2 3 - 4 5 - 1	1)—————————————————————————————————————

## Height with Keytop



Keytop Lineup				Unit:mm
Applicable model	Г	)imensions		Variety
Applicable filodel		JITTICT ISTOLIS	Color	Model
<b>SKHH</b> Applicable to joint stem type		28 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8	Red Blue Ivory Black Yellow	SK2AA00410 SK2AA00420 SK2AA00430 SK2AA00440 SK2AA00450

Keytops are not attached to switches on delivery.

	_				Sharp Feeling Typ	e		
	Type				Snap-in			
	Series	SKHL	SKHH	SKHW	SKQJ	SKQB	SKQE	SKHC
	Photo							
Features		_	_	_	_	_	Long-life	_
Water-proof		_	_	_	_	•	_	_
	Dustproof	_	_	•	•	•	•	_
	IP standard	_	_	_	_	_	_	_
Operati	Top push	•	•	•	•	•	•	•
direction		_	_	_	_	_	_	_
	W	6						
Dimension (mm)		3.5		6	□6.6	□10		]12
(11117)	Н	4.3/5	See the relevant pages for respective product descriptions	4.3/5	5	5/13/23.2	See the rele respective pro	vant pages for duct descriptions
Operation force coverage	2N to 3N	Ţ		ţ	1	Ţ.	Ţ	Ţ
	Travel (mm)	0.25 0.0		0.3	0.25	0.3		
G	round terminal	_	0	_	_	_	_	_
Operatir	ng temperature range	-40℃ to +90℃			-20℃ to +70℃	-40°C to +90°C -		-40°C to +85°C
А	utomotive use	•	•	_	_	•	_	_
	Life Cycle	<b>*</b> 2	*3	<b>*</b> 2	<b>*</b> 2	<b>*</b> 2	<b>*</b> 2	<b>*</b> 2
	Rating (max.) (Resistive load)				50mA 12V DC			
Electrical	Rating (min.) (Resistive load)				10μA 1V DC			
performance	Insulation resistance			100	MΩ min. 100V DC	1min.		
	Voltage proof				250V AC 1min.			
D1-77	Vibration		10 to 55 t in t	o 10Hz/min., ti he 3 direction	he amplitude is 1.5 of X, Y and Z for 2	mm for all the fre hours respective	quencies, ely	
Durability	Lifetime		S	hall be in acco	rdance with individ	ual specifications		
	Cold		-40℃ 96h -30℃ 96h				-40℃ 96h	
Environmental performance	Dry heat		90°C 96h		80°C 96h		90°C 96h	
	Damp heat		60°C, 90 to 9	95%RH 96h		60°C, 90 to 95%RH 1,000h	60°C, 90 to	95%RH 96h
	Page	173	175	179	180	182	184	186

W: Width. The most outer dimension excluding terminal portion.

 $\ensuremath{\mathsf{D}}$  : Depth. The most outer dimension excluding terminal portion. H: Height. The minimum dimension if there are variances.

- $\hbox{1. The automotive operating temperature range to be individually discussed upon request.}\\$
- 2. Indicates applicability to all products in the series, while  $\bigcirc$  indicates applicability to some products in the series.

	Туре	Sharp Feeling Type									
	Туре		S	nap-in		Radial					
	Series	SKHL	SKHH	SKQJ	SKQB	SKRC					
	Photo			<b>1</b>		884					
Features		_	_	_	_	Round terminal type					
	Water-proof	_	_	_	•	•					
	Dustproof	_	_	•	•	•					
	IP standard	_	_	_	_	_					
Operatir	Top push	_	_	_	_	•					
directio	Side push	•	•	•	•	_					
	W	7.3	7.5	7.5	11.5						
Dimensio (mm)		7.22	7.85	7.85	11.9	φ9					
(11111)	Н	4.3	7.4	7.3	11.3	13					
Operation force coverage	2N to 3N ge 3N to 4N		Ţ	1	*	1					
	4N to 5N Travel (mm)		0.25		0.3	0.25					
	round terminal		0.25	0.3	0.25						
	ng temperature range	-40°C									
	utomotive use		•	−20°C to +70°C		_					
	Life Cycle	*2		*2		*2					
	Rating (max.) (Resistive load)	12	<b>★</b> 3	50mA 12V DC	<b>★</b> 2	12					
Electrical	Rating (min.) (Resistive load)			10μΑ 1V DC							
performance	Insulation resistance			100MΩ min. 100V DC 1r	nin.						
	Voltage proof			250V AC 1min.							
	Vibration		10 to 55 to 10Hz/min	n., the amplitude is 1.5mr ion of X, Y and Z for 2 ho	n for all the frequencies, ours respectively	,					
Durability	Lifetime			ccordance with individual							
	Cold	-40	-40°C 96h -30°C 96h			C 96h					
Environmental performance	Dry heat	90°0	C 96h	80°C 96h	90°C	96h					
	Damp heat		60°C, 90 to 95%RH 9	96h	60°C, 90 to 9	5%RH 1,000h					
	Page	173	175	180	182	228					

 $\ensuremath{\mathsf{W}}$  : Width. The most outer dimension excluding terminal portion.

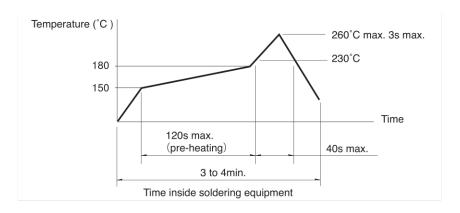
 $\mathsf{D}$  : Depth. The most outer dimension excluding terminal portion. H : Height. The minimum dimension if there are variances.

### Notes

- 1. The automotive operating temperature range to be individually discussed upon request.
- 2. Indicates applicability to all products in the series.

# TACT Switch™ / Soldering Conditions

# 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.

## SKHLTop 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℃ 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 Series

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

## SKTD, SKTG, SKQJ, SKSN Series

Items	Condition
Soldering temperature	350°C 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.)



# **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Alps Alpine:

```
SKHHQYA010 SKHHLWA010 SKHHPQA010 SKHHBVA010 SKHHBYA010 SKHHNKA010 SKHHDUA010
SKHHQYA010 SKHHAPA010 SKHHDTA010 SKHHLQA010 SKHHALA010 SKHHBWA010 SKHHBSA010
SKHHAQA010 SKHHLVA010 SKHHAMA010 SKHHPPA010 SKHHPNA010 SKHHLSA010 SKHHANA010
SKHHNJA010 SKHHDGA010 SKHHPMA010 SKHHCWA010 SKHHCQA010 SKHHARA010 SKHHDJA010
SKHHPJA010 SKHHLMA010 SKHHQNA010 SKHHQVA010 SKHHCRA010 SKHHDHA010 SKHHPLA010
SKHHLNA010 SKHHDAA010 SKHHAKA010 SKHHPKA010 SKHHNHA010 SKHHPRA010 SKHHLRA010
SKHHLPA010 SKHHAJA010 SKHHLUA010
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