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





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)	Sterii Coloi	i leigi it	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				
SKHHARA010	2.55N			Red	h=5mm		1,000	
SKHHCQA010	3.53N		200,000 cycles	Orange				
SKHHCRA010	5.10N			Yellow				
SKHHBVA010	0.98N	T	1,000,000 cycles	Black		1.000		1
SKHHBWA010	1.57N	Top push	500,000 cycles	Dark gray	h=7mm	1,000	1,000	
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-10mm			
SKHHDUA010	1.57N		E00,000 augle -	Dark gray	h=13mm			
SKHHDHA010	0.98N	1	500,000 cycles	Black	h_17nene	1		
SKHHDJA010	1.57N		300,000 cycles	Dark gray	h=17mm			

### Joint stem type

Product No.	Operating force	Operating direction	Operating life (5mA 5V DC)	Stem color	Height	Minimum orde Japan	er unit (pcs.) Export	Drawing 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				

## ■ Product Line

SKHH

With ground terminal type

Product No.	Operating	Operating	Operating life	Stem color	Height	Minimum ord	er unit (pcs.)	Drawing
T TOUGET NO.	force	direction	(5mA 5V DC)	O (GITI COIO)	1 ICIBITE	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				3
SKHHPMA010	1.57N		500,000 cycles	Dark gray	h=5mm	- 1,000	1,000	
SKHHPRA010	2.55N	Top push	200,000 cycles	Red				
SKHHQVA010	0.98N	Top pasii	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
Troddet No.	force	direction	(5mA 5V DC)	Sterri Color	Otelli leligili	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				4
SKHHLRA010	1.57N		500,000 cycles	Dark gray	ℓ=8.35mm	1.000	1,000	
SKHHLSA010	2.55N	Side push	200,000 cycles	Red				
SKHHLUA010	0.98N	Side pusiti	1,000,000 cycles	Black		1,000		4
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

Suik								
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					



■ Di	mensions			Unit:mm
No.	Photo		Style	PC board mounting hole dimensions (Viewed from switch mounting face)
1	Top push type	3 A 4 4 4 5 6 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6	h A  4.3 3.5  5 3.5  7 3.3  9.5 3  13 3  17 3	4-ø1 hole 6.5
2	Joint stem type	3 3 6.5	0.7 0.7	4-ø1 hole 6.5
3	With ground terminal type	3 A O O O O O O O O O O O O O O O O O O	h A 4.3 3.5 5 3.5 7 3.3 9.5 3	6.5  6.5  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	## A   3.85   3.5   5.85   3.3   8.35   3   15.85   3   3   15.85   3   3   15.85   3   3   15.85   3   3   15.85	(Viewed from switch mounting face)  2-ø1.3 hole  10  11  12  2-ø1 hole

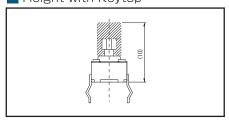
## Note

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



## ■ Kevtop Lineup

Reytop Lineup					Unit:mm
Applicable model	Variety				
Applicable model	L	Dimensions			Model
<b>SKHH</b> Applicable to joint stem type		2.88		Red Blue Ivory Black Yellow	SK2AA00410 SK2AA00420 SK2AA00430 SK2AA00440 SK2AA00450

## Note

Keytops are not attached to switches on delivery.

	Туре				Sharp Feeling Typ	е			
	туре				Snap-in			į.	
	Series	SKHL	SKHH	SKHW	SKQJ	SKQB	SKQE	SKHC	
	Photo								
	Features	_	_	_	_	_	Long-life	_	
	Water-proof	_	_	_	_	•	_	_	
	Dustproof	_	_	•	•	•	•	_	
	IP standard	_	_	_	_	_	_	_	
Operati	Top push	•	•	•	•	•	•	•	
direction		_	_	_	_	_	_	_	
	W	6							
Dimensi (mm)		3.5		6	□6.6	□10		]12	
(11111)	Н	4.3/5	See the relevant pages for respective product descriptions	4.3/5	5	5/13/23.2	See the rele	evant pages for duct descriptions	
	1N max.	1		<b>***</b>	1		<b>A</b>		
Operati force	UII	······		······	<del>-</del>	<u> </u>	Ţ	<u> </u>	
coverag	L						<del>-</del>		
	4N to 5N		+						
	Travel (mm)	C	1.25	0.3	0.25		0.3		
G	Ground terminal	_	0	_	_	_	_	_	
Operatir	ng temperature range		-40℃ to +90℃		-20℃ to +70℃	-40℃ t	o +90°C	-40℃ to +85℃	
А	automotive use	•	•	_	_	•	_	_	
	Life Cycle	<b>*</b> 2	*3	<b>*</b> 2	<b>2</b>	<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.				
Durability Lifetime			10 to 55 t	to 10Hz/min., tl the 3 direction	he amplitude is 1.5 of X, Y and Z for 2	mm for all the free	equencies, ely		
					rdance with individ				
	Cold		-40°C 96h		-30°C 96h		-40°C 96h		
Environmental performance	Dry heat		90°C 96h		80°C 96h		90℃ 96h		
, 22	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	
						o most outer dim			

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

#### Notes

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

D : Depth. The most outer dimension excluding terminal portion.

H: Height. The minimum dimension if there are variances.

	Typo	Sharp Feeling Type							
	Type		Sı	nap-in		Radial			
	Series	SKHL	SKHH	SKQJ	SKQB	SKRC			
Photo						888			
	Features	_	_	_	_	Round terminal type			
	Water-proof	_	_	_	•	•			
	Dustproof	_	_	•	•	•			
	IP standard	_	_	_	_	_			
Operatin	Top push	_	_	_	_	•			
direction		•	•	•	•	_			
	W	7.3	7.5	7.5	11.5				
Dimensio (mm)	ons D	7.22	7.85	7.85	11.9	<b>φ</b> 9			
	Н	4.3	7.4	7.3	11.3	13			
Operation force coverage	2N to 3N			1	<b>\$</b>	<b>1</b>			
	4N to 5N								
	Travel (mm)		0.25		0.3	0.25			
Gr	round terminal	•	•	_	_	_			
Operatin	g temperature range	-40℃ t	o +90℃	-20°C to +70°C	-40℃ to +95℃	-30℃ to +85℃			
Αι	utomotive use	•	•	_	•	_			
	Life Cycle	<b>*</b> 2	<b>*</b> 3	*2	*2	2			
	Rating (max.) (Resistive load)			50mA 12V DC					
Electrical	Rating (min.) (Resistive load)			10μΑ 1V DC					
performance	Insulation resistance		1	100MΩ min. 100V DC 1m	in.				
	Voltage proof			250V AC 1min.					
Vibration			10 to 55 to 10Hz/mir in the 3 direct	n., the amplitude is 1.5mm ion of X, Y and Z for 2 ho	n for all the frequencies, urs respectively				
Durability Lifetime			Shall be in ac	ccordance with individual	specifications.				
	Cold	-40℃ 96h		-30°C 96h	-40°	0 96h			
Environmental performance	Dry heat	90°C	96h	80℃ 96h	90°C	96h			
	Damp heat	6	60°C, 90 to 95%RH 9	16h	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.

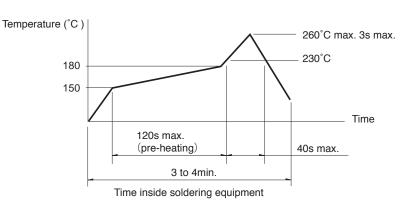
 $\mathsf{D}$  : Depth. The most outer dimension excluding terminal portion. H : Height. The minimum dimension if there are variances.

#### 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.
- 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℃ max.
Duration of immersion	5s max.
Number of soldering	2times max.

## ■ Manual Soldering

	Items	Condition
So	oldering temperature	350℃ max.
	Ouration of soldering	3s max.
Cap	pacity 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, 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.)

