# Soldering of the frame realizes higher solder strength



# Typical Specifications

Items	Specifications
Rating (max.)	50mA 12V DC
Rating (min.)	10μA 1V DC
Initial contact resistance	500mΩ max.
Travel (mm)	0.15
Protective structure *	IP67 equivalent

# ■ Product Line

Product No. Operating force		Operating direction	Operating life	Minimum order unit (pcs.)		
T TOUGGE TWO.	Operating force	Operating direction	(5mA 5V DC)	Japan	Export	
SKTDLDE010	1.6N	Side push	200,000 cycles	4,500	4,500	

# Packing Specifications

# Taping

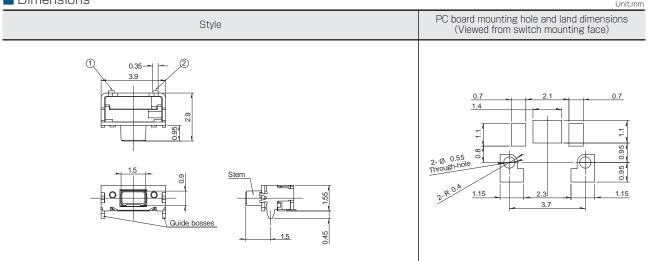
Number of packages (pcs.)			Tape width	Export package	
1 reel		1 case / Japan	1 case / export packing	(mm)	measurements (mm)
4,500	)	45,000	45,000	12	395×395×205

# Reel size

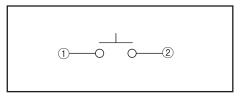
# Note

For reels of 330mm diameter, please inquire.

# ■ Dimensions



# ■ 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-level dust and water resistance is guaranteed for the switch alone and performance may not be guaranteed depending on the mounting conditions and usage.

Series		Type Sharp Feeling Type								
Photo	1 9 00		Surface Mount							
Features		Series	SKST	SKRA	SKHM	SKHU	SKTD	SKSN	SKTG	SKSL
Dustroof   −		Photo		Y	R.					6
Dustproof   -		Features	Middle	e travel	_	_	Low-profile	Mid-mount	Half-r	nount
P standard		Water-proof	_	0	_	0	•	_	•	_
Top push   Greating direction   Greating directio		Dustproof	_	0	_	0	•	_	•	_
Dimensions   D		IP standard	_	67 equivalent	_	_	67 equivalent	_	67 equivalent	_
Dimensions	Oneratir	Top push	•	•	•	•	_	_	_	_
Dimensions (mm)		on T	_	_	_	_	•	•	•	•
Differentiability   Diff		W			6.2	6.2	3.9	6.2	5.2	4.5
H   3.95   3.5/5.2   3.1   2.5/3.1   1.55   3.5   1.55   2.2			□8.5	□6.2	6.5	6.3	2.9	3	3.5	2.6
1	(11111)		3.95	3.5/5.2	3.1	2.5/3.1	1.55	3.5	1.55	2.2
Ground terminal	force	2N to 3N 3N to 4N	4N to 10N		Ţ	1	<b>‡</b>		<b>\$</b>	1
Operating temperature range	Travel (mm)		0.9	See the relevant pages for respective product description	0.25		0.15	0.2	0.15	
Automotive use	G	round terminal	_	_	•	•	•	•	•	•
Rating (max.) (Resistive load)   50mA 16V   50mA 12V DC     Rating (min.) (Resistive load)   10μA 1V 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   Lifetime   Shall be in accordance with individual specifications.     Cold   -40°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 96h   60°C, 90 to 95%RH 96h   1,000h   60°C, 90 to 95%RH 96h   60°C, 90 to 95%RH 96h   1,000h   100°C 100°C     Damp heat   60°C, 90 to 95%RH 96h   1,000h   100°C 100°C   1,000h   1,0	Operatin	perating 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						
Rating (max.) (Resistive load)   50mA 16V   DC     50mA 12V DC	А	utomotive use	•	0	_	•	_	0	_	0
Cold		Life Cycle	*3	*3	*3	*3	<b>*</b> 2	<b>*</b> 2	<b>*</b> 2	<b>*</b> 2
Carbon										
Insulation resistance   100MΩ min. 100V DC 1min.   100V AC	Electrical					10μΑ	1V DC			
Voltage proof 250V AC ITMIN. 100V AC ITMIN. 250V AC ITMIN. 1min.  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.  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	performance	Insulation resistance	100MΩ min. 100V DC 1min.							
Durability   Lifetime   Shall be in accordance with individual specifications.		Voltage proof	250V AC 1min. 100V AC 1min. 250V AC 1min.							
Cold	Durahility	Vibration								
Dry heat   90°C 1,000h   90°C 96h   85°C 96h   90°C 96h   85°C 96h   90°C 9	Durability	Lifetime	Shall be in accordance with individual specifications.							
Damp heat 60°C, 90 to 95%RH 1,000h 60°C, 90 to 95%RH 96h		Cold	-40°C 1,000h -40°C 96h							
1,000h 60C, 90 to 95%nn 9611	Environmental performance	Dry heat	90℃	1,000h	90°C 96h 85°C 96h 90°C 96h 85°C 96h			85℃ 96h	90℃ 96h	
Page 216 217 218 219 221 222 223 224		Damp heat					60℃, 90 to	95%RH 96h		
		Page	216	217	218	219	221	222	223	224

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

## Notes

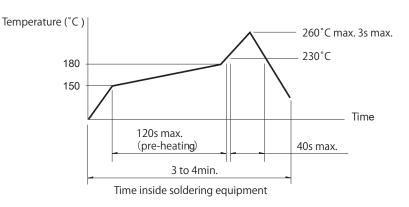
 $<sup>\</sup>mathsf{D}:\mathsf{Depth}.$  The most outer dimension excluding terminal portion. H: Height. The minimum dimension if there are variances.

<sup>1.</sup> The automotive operating temperature range to be individually discussed upon request.

<sup>2.</sup> Indicates applicability to all products in the series, while O indicates applicability to some 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.

# 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℃ 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°C 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℃ 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 $^{TM}$ .
- 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.)