# 4.5mm Square Low-profile (Surface Mount Type)

# Compact, low-profile type with a height of 0.4mm





# ■ Typical Specifications

Items	Specifications
Rating (max.)	50mA 12V DC
Rating (min.)	10 µA 1V DC
Initial contact resistance	100mΩ max.

# ■ Product Line

Product No.	Operating force	Operating direction	Travel (mm)	Operating life	Minimum order unit (pcs.)	
T TOUGGE TVO.	Operating force	Operating direction		(5mA 5V DC)	Japan	Export
SKRMAAE010	1.57N	Top push	0.15	500,000 cycles	- 10,000	10,000
SKRMABE010	2.55N	τορ ραδιτ	0.2	100,000 cycles		

# ■ Packing Specifications

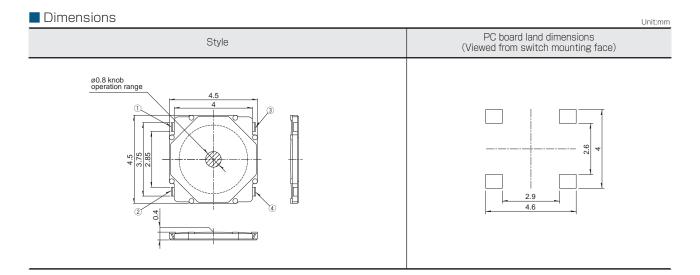
# Taping

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

# Unit:mm Reel size

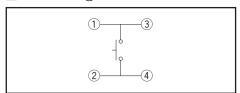
### Note

For reels of 330mm diameter, please inquire.



**ALPS/ILPINE** 

# ■ Circuit Diagram



	Type			-	Sharp Feeling Typ	 De		
	Туре				Surface Mount			
	Series	SKSH	SKRW	SKRM	SKRB	SKRR	SKQG	SKTC
	Photo		<b>(</b>				-	
	Features		Low-	profile		Low-profile and long life	Low-profile	Double action
	Water-proof	_	_	_	_	_	_	•
	Dustproof	_	_	_	_	_	_	•
	IP standard	_	_	_	_	_	_	67 equivalent
Operatir	Top push	•	•	•	•	•	•	•
directio		_	_	_	_	_	_	_
	W	3.3			□4.0	7.5		3.4
Dimensio (mm)	ons D	2.9	- □3.7	□4.5	□4.8	7	- □5.2	2.2
()	Н	0	.35	0.4	0.55	0.6	1.5	0.62
Operation force coverage	2N to 3N	1	1	1	Ĵ	<b>\$</b>		See the relevant pages for respective product descriptions
	Travel (mm)	0	.15	0.15	5/0.2	0.	25	See the relevant pages for respective product descriptions
Gi	round terminal	_	_	_	_	_	_	_
Operatin	g temperature range	-30℃	to +85℃		-40℃ to +85℃		-40℃ to +90℃	−30°C to +85°C
Aı	utomotive use	_	_	_	•	_	•	_
	Life Cycle	<b>*</b> 2	*3	<b>*</b> 2	<b>*</b> 2	<b>*</b> 2	*3	<b>*</b> 2
	Rating (max.) (Resistive load)				50mA 12V DC			
Electrical	Rating (min.) (Resistive load)		10μA 1V DC					
performance	Insulation resistance	100MΩ min. 100V DC 1min.						
	Voltage proof	100V AC 1min. 250V AC 1min. 100V AC 1				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						
Durability	Lifetime	Shall be in accordance with individual specifications.						
	Cold	-40°C 96h						
Environmental performance	Dry heat	90°C 96h						
	Damp heat	60℃, 90 to 95%RH 96h						
	Page	188	189	190	191	192	193	194

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

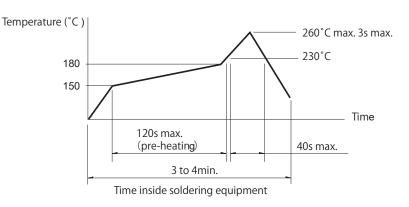
H: Height. The minimum dimension if there are variances.

- 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.

## 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.)