

Micro Switch Type





A micro switch type applicable to printed circuit and lead wiring. Can be screwed on panel.



Typical Specifications

Items		Specifications		
Rating (max.) / (min.) (Resistive load)		0.1A 12V DC / 50μA 3V DC		
Contact resistance (Initial /After operating life)		200m Ω max. / 500m Ω max.		
Operating force		0.7 ± 0.3N		
Operating life	Without load	10,000cycles		
	With load	10,000cycles (0.1A 12V DC)		

Detector

Slide

Push

Rotary

Encoders

Power

Dual-in-line

Package Type

TACT Switch™

Product Line

Poles Positions	Docitions	Changeover	Operation	Terminal type	Minimum order unit (pcs.)		Product No.
	timing	part shape	тегина туре	Japan	Export		
1 2	Non shorting	Lever	For PC board	1,000	5,000	SSCTL10600	
			For Lead			SSCTL10400	

Packing Specifications

Bulk

Number of pa	Export package measurements		
1 case / Japan	1 case / export packing	(mm)	
1,000	5,000	400 × 270 × 290	

Style

PC board mounting hole dimensions (Viewed from direction A)

Lever

Travel position

Contact changeover timing

Contact changeover timing

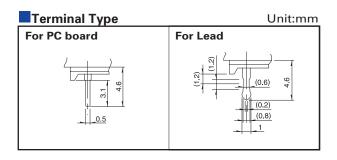
PC board mounting hole dimensions (Viewed from direction A)

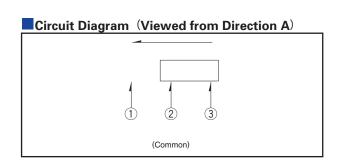
Contact changeover timing

Push direction only

Note

Dimensions drawing is for PC board terminal type.





■ List of Varieties (General-purpose Type)

Series		General-purpose Type							
	eries	SSCT	SSCT SSCF SSCW SPVQ5						
Photo									
Operation type		Two-way			One-way	Two-way			
	W	12.5	11	13.1	10.0	11			
Dimension (mm)		5	5.8	11.35	13.8	16.1			
	Н	11.5	12.4	5.3	5.8	5.3			
	g temperature ange	- 40°C to + 85°C							
Autor	notive use	•	•	•	•	•			
Life cycle	e (availability)	★3	X 3	* 3	*3				
Poles	/ Positions	1 /	/ 2	1/1 1/2					
Ratin (Resi	ig(max.) stive load)			0.1A 12V DC					
Ratir (Resi	ng(min.) stive load)	50µA 3V DC		100μA 3V DC	DC 50 \(\mu \) 50 \(\mu \) 50 \(\mu \) 50				
	Operating life without Load	$10,000$ cycles 500 m Ω max.	50,000cycles 300mΩ max.	100,000cycles 1Ω max.	300,000cycles 1 Ω max.	50,000cycles 1Ω max.			
Durability	Operating life with Load Rating (max.) (Resistive load)	10,000cycles 500 m Ω max.	50,000cycles 300mΩ max.	100,000cycles 1Ω max.	300,000cycles 1Ω max.	50,000cycles 1Ω max.			
	Initial contact resistance	200m Ω max.	100m Ω max.	500m Ω max.					
Electrical erformance	Insulation resistance	100M Ω min. 250V DC	100MΩ min. 100V DC	100M Ωmin. 250V DC	100MΩ min. 500V DC	100MΩ min. 100V DC			
	Voltage proof	250V AC for 1minute	100V AC for 1 minute	250V AC for 1minute	500V AC for 1minute	100V AC for 1minute			
Mechanical	Terminal strength	3N for 1minute	5N for 1minute						
erformance	Actuator strength	20N	10N	20N		10N			
	Cold	- 40 ± 2°C for 500h							
nvironmental performance	Dry heat	85 ± 2℃ for 500h							
	Damp heat	$60\pm2^\circ\!\!\mathrm{C}$, 90 to 95%RH for 500h							
Opera	ation force	0.7 ± 0.3N	0.7N max.	1N max.	2N max.	0.7N max.			
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Detector Switches Soldering Conditions
Detector Switches Cautions
Conditions
Conditions</l

Note

indicates applicability to all products in the series.

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Detector Switches Soldering Conditions

Example of Reflow Soldering Condition

1. Heating method: Double heating method with infrared heater.

2. Temperature measurement: Thermocouple 0.1 to 0.2ϕ CA(K) or CC(T) at soldering portion (copper foil surface).

A heat resisting tape should be used for fixed measurement.

3. Temperature profile

Detector

Slide

Push

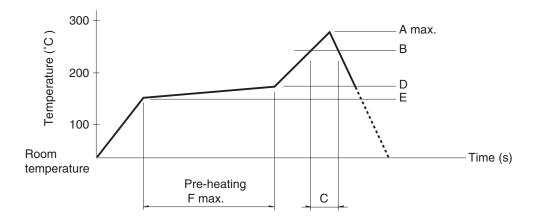
Rotary

Encoders

Power

Dual-in-line Package Type

TACT Switch™



Series (Reflow type)	A (℃) 3s max.	B (℃)	C (s)	D (℃)	E (°C)	F(s)
SPPB		230	40	180	150	120
SPPW8	250		35			
SPVE			40			
SPVL						
SPVM						
SPVN	260					
SPVP						
SPVR						
SPVS						
SPVT						
SSCM						
SSCQ						
SPVQC	250					

Notes

- 1. The condition mentioned above is the temperature on the mounting surface of a PC board. There are cases where the PC board's temperature greatly differs from that of the switch, surface depending on the PC board's material, size, thickness, etc. 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.

Reference for Hand Soldering

Series	Soldering temperature	Soldering time	
SPVS, SPVN, SPVP, SPVT, SPVM, SPVR, SPVE, SPPW8,SSCQ, SSCM, SPVL, SSCT, SPVQC	350 ± 5℃	3s max.	
SPVQ1, SPVQ3, SPVQ6, SPVQ7, SPVQ8, SPVQ9, SSCN, SPVQA	300 ± 10℃	3 +1 / 0s	
SPPB	350 ± 5℃	5s max.	
SSCF	350 ± 10℃	3 +1 / 0s	

Reference for Dip Soldering

(For PC board terminal types)

<u> </u>						
	Ite	ms	Dip soldering			
Series	Preheating temperature	Preheating time	Soldering temperature	Duration of immersion		
SSCT, SPVQ1, SPVQ3, SPVQ6, SPVQ7, SPVQ8, SPVQ9, SPVQA	100 ± 10℃	60s max.	260 ± 5°C	5 ± 1s		
SPPW8, SPPB	100 °C max.	60s max.	255 ± 5℃	5 ± 1s		
SSCF	_		260 ± 5°C	5 ± 1s		