

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



Detector

Slide

Push

Rotary

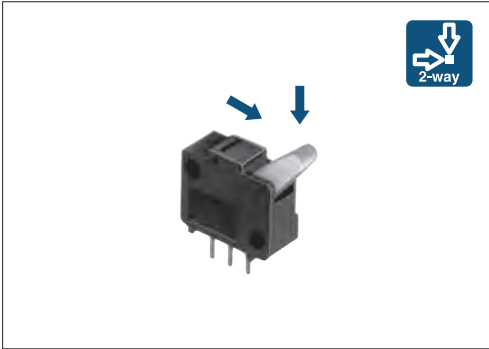
Power

Dual-in-line
Package Type

General-
purpose Type

Water-proof
Type

Fast Switching
Type



Typical Specifications

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

Product Line

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

Packing Specifications

Bulk

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

Dimensions

Unit:mm

Style	PC board mounting hole dimensions (Viewed from direction A)
Lever 	
	Contact changeover timing <p style="text-align: center;">Travel position (X)</p> <p>● Push direction only</p>

Note

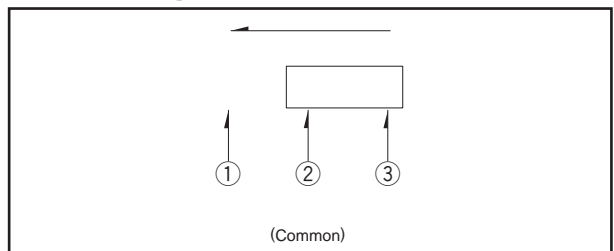
Dimensions drawing is for PC board terminal type.


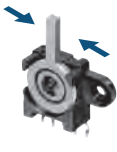
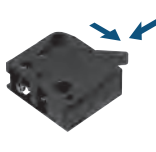





Terminal Type

Unit:mm

For PC board	For Lead

Circuit Diagram (Viewed from Direction A)



Series		General-purpose Type			
		SSCT	SSCF	SSCW	SSCL
Photo					
Operation type		Two-way			
Dimensions (mm)	W	12.5	11	13.1	11
	D	5	5.8	11.35	16.1
	H	11.5	12.4	5.3	
Operating temperature range		-40°C to +85°C			
Automotive use		●	●	●	●
Life cycle (availability)					
Poles / Positions		1/2		1/1	1/2
Rating (max.) (Resistive load)		0.1A 12V DC			
Rating (min.) (Resistive load)		50μA 3V DC		100μA 3V DC	50μA 5V DC
Durability	Operating life without load	10,000cycles 500mΩ max.	50,000cycles 300mΩ max.	100,000cycles 1Ω max.	50,000cycles 1Ω max.
	Operating life with load Rating (max.) (Resistive load)	10,000cycles 500mΩ max.	50,000cycles 300mΩ max.	100,000cycles 1Ω max.	50,000cycles 1Ω max.
Electrical performance	Initial contact resistance	200mΩ max.	100mΩ max.	500mΩ max.	
	Insulation resistance	100MΩ min. 250V DC	100MΩ min. 100V DC	100MΩ min. 250V DC	100MΩ min. 100V DC
	Voltage proof	250V AC for 1minute	100V AC for 1 minute	250V AC for 1minute	100V AC for 1minute
Mechanical performance	Terminal strength	3N for 1minute	5N for 1minute	—	
	Actuator strength	20N	10N	20N	10N
Environmental performance	Cold	-40°C 500h			
	Dry heat	85°C 500h			
	Damp heat	60°C, 90 to 95%RH 500h			
Operation force		0.7±0.3N	0.7N max.	1N max.	0.7N max.
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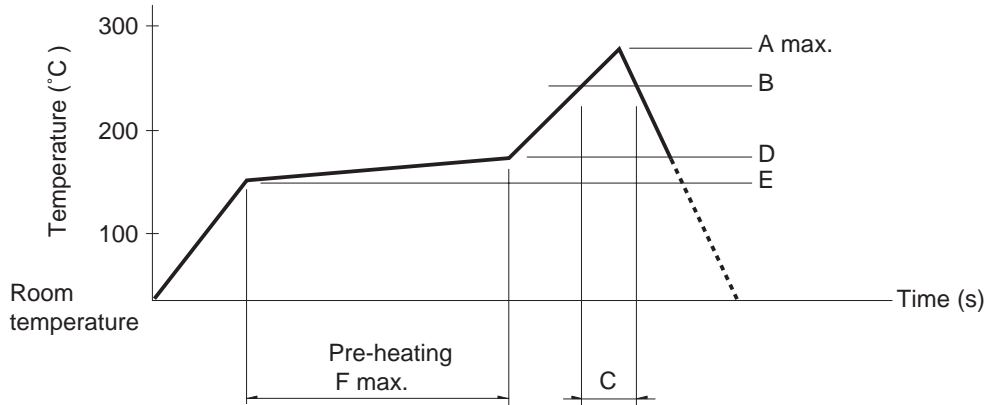
Note

● Indicates applicability to all products in the series.

Detector Switches / Soldering Conditions

Example of Reflow Soldering Condition

1. Heating method: Double heating method with infrared heater.
2. Temperature measurement: Thermocouple $\phi 0.1$ to 0.2 CA (K) or CC (T) at soldering portion (copper foil surface).
A heat resisting tape should be used for fixed measurement.
3. Temperature profile



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

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, SPVT, SPVM, SPVR, SPVE, SSCQ, SSCM, SPVL, SSCT, SPVQC	350±5°C	3s max.
SPVQ3, SPVQ6, SPVQ7, SPVQ8, SPVQ9, SSCN, SPVQA	300±10°C	3 + 1 / 0s
SPPB (Reflow)	300±5°C	5s max.
SSCF, SPPB (For Lead, Dip)	350±10°C	3 + 1 / 0s

Reference for Dip Soldering

(For PC board terminal types)

Series	Items		Dip soldering	
	Preheating temperature	Preheating time	Soldering temperature	Duration of immersion
SSCT, SPVQ3, SPVQ6, SPVQ7, SPVQ8, SPVQ9, SPVQA	100±10°C	60s max.	260±5°C	5±1s
SPPW8, SPPB	100°C max.	60s max.	255±5°C	5±1s
SSCF	—		260±5°C	5±1s