

Two-way Detection Type





Detection from both left and right directions contributes to improved and flexible design of the set mechanism.

Detector

Slide

Push

Rotary

Encoders

Power

Dual-in-line Package Type

TACT $Switch^{TM}$

2-direction

■ Typical Specifications

Items		Specifications		
Rating (max.) / (min.) (Resistive load)		0.1A 12V DC / 50μA 3V DC		
Contact resistar (Initial / After op		100m Ω max. / 300m Ω max.		
Operating force		0.7N max.		
O a small and life	Without load	50,000cycles		
Operating life	With load	50,000cycles (0.1A 12V DC)		

Product Line

Poles Position		itions Changeover timing	Terminal	Mounting	Minimum ord	ler unit (pcs)	Product No.	Drawing
roles rositions	type method		Japan	Export	Froduct No.	No.		
			PC board	PC board			SSCF110100	1
	Non shorting	FOI FC DOGIU	Screw	600	2.000	SSCF210100	2	
'	1 2	Fo	For Lead	PC board with hook	800	3,000	SSCF210300	3
			For PC board				SSCF310100	4

Note

Other varieties are also available. Please inquire.

Packing Specifications

Bulk

	Number of pa	ickages (pcs.)	Export package measurements (mm)	
1 0	ase / Japan	1 case / export packing		
	600	3,000	400 × 270 × 290	

Dimensions Unit:mm

No.	Photo	Style		PC board mounting hole dimensions
1	For PC board	Travel Momentary OFF 36* 18* (27) (7) (2) (2) (2) (2) (2) PC board mounting face Terminal No.1) 2.5	5.8 3.9 2 0.35 0.83	P2.5 5-ø0.9 holes

Two-way Detection Type

SSCF

Detector

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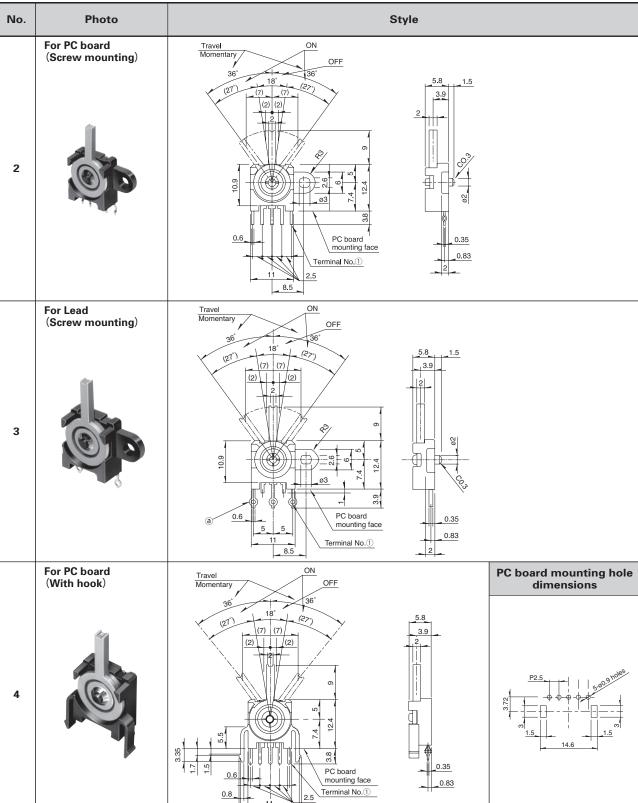
Encoders

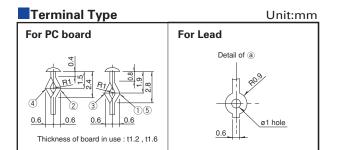
Power

Dual-in-line Package Type

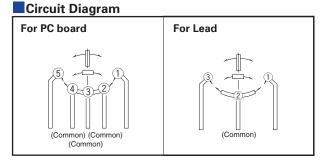
TACT Switch™

Dimensions Unit:mm No. Photo Style





0.45



0.45

14.6

■ List of Varieties (General-purpose Type)

		General-purpose Type							
5	Geries	SSCT	SSCF	SSCW	SPVQ5	SSCL			
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 range			- 40°C to + 85°C					
Autor	notive use	•	•	•	•	•			
Life cycle	e (availability)	* 3	X 3	*3	* 3	*3			
Poles	/ Positions	1.	/ 2	1/1	17	/ 2			
Ratin (Resi	ng(max.) stive load)			0.1A 12V DC					
Ratir (Resi	ng(min.) stive load)	50μA 3V DC		100μA 3V DC	DC 50μA 5V DC				
	Operating life without Load	10,000cycles 500mΩ 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
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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

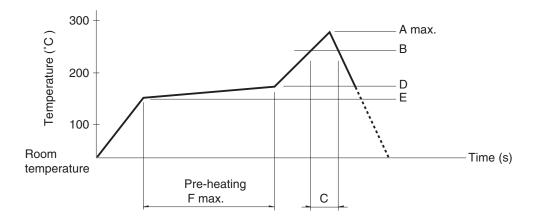
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Series (Reflow type)	A (℃) 3s max.	B (℃)	C (s)	D (℃)	E (°C)	F (s)
SPPB	250	230	40			120
SPPW8	250		35			
SPVE			40			
SPVL				180	150	
SPVM						
SPVN						
SPVP	260					
SPVR						
SPVS						
SPVT						
SSCM						
SSCQ						
SPVQC	250					

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)

/							
	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			