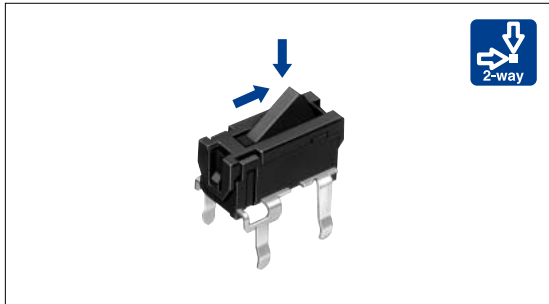


Detector Switch Two-way Operation Type

SPVF Series



Compact and user friendly, detectable from both horizontal and vertical direction.



Typical Specifications

Items		Specifications
Rating (max.) (min.) (Resistive load)		1mA 5V DC/50 μ A 3V DC
Contact resistance (Initial /After operating life)		500m Ω max./1 Ω max.
Operating force		0.3N max.
Operating life	Without load	100,000cycles
	With load	100,000cycles (1mA 5V DC)

Product Line

Poles	Positions	Terminal type	Terminal pitch (mm)	Minimum order unit(pcs)	Product No.	Drawing No.
1	1	Snap-in	5.2	10,000	SPVF110100	1
					SPVF120100	2
					SPVF130100	3
					SPVF140100	4
			SPVF210200		5	
			SPVF220200		6	
			SPVF230200		7	
			SPVF240200		8	
2			—	5,000	SPVF350100	9

Note

Please place purchase orders per minimum order unit (integer).

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line
Package Type

TACT Switch™

Custom-
Products

Dimensions

Unit:mm

- Detector
- Push
- Slide
- Rotary
- Encoders
- Power
- Dual-in-line Package Type
- TACT Switch™
- Custom-Products

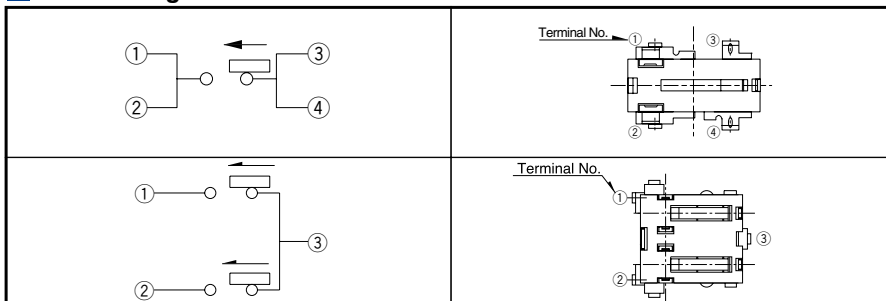
No.	Photo	Style	PC board mounting hole dimensions
1		<p>Total travel position ON starting position</p>	
2		<p>Total travel position ON starting position</p>	
3		<p>Total travel position ON starting position</p>	
4		<p>ON starting position Total travel position</p>	
5		<p>Total travel position ON starting position</p>	

Dimensions

Unit:mm

No.	Photo	Style	PC board mounting hole dimensions
6			
7			
8			
9			

Circuit Diagram



Detector

Push

Slide

Rotary

Encoders

















Power

Dual-in-line
Package Type

TACT Switch™

Custom-
Products

List of Varieties (General-purpose Type)

Series	General-purpose Type								
	SPPB	SPVE	SPPW8	SPVM	SPVR	SPVF	SSCU	SSCT	
Photo									
Operation type									
Operating temperature range	-40°C to +85°C		-10°C to +60°C		-40°C to +85°C		-40°C to +85°C		
Rating (max.) (Resistive load)	0.1A 30V DC			1mA 5V DC			0.1A 12V DC		
Rating (min.) (Resistive load)	50μA 3V DC		100μA 3V DC	50μA 3V DC	100μA 3V DC	50μA 3V DC			
Electrical performance	Initial contact resistance	1Ω max.	500mΩ max.	1Ω max.	2Ω max.	3Ω max.	500mΩ max.	70mΩ max.	20mΩ max.
	Insulation resistance	100MΩ min. 100V DC						100MΩ min. 250V DC	
	Voltage proof	100V AC for 1 minute						250V AC for 1 minute	
Mechanical performance	Terminal strength	3N for 1 minute	0.5N for 1 minute	3N for 1 minute	1N for 1 minute	0.5N for 1 minute	3N for 30s	3N for 1 minute	
	Actuator strength	10N	5N	10N	5N	2N	1N	5N	10N
Durability	Operating life without Load	50,000cycles 2Ω max.	50,000cycles 1Ω max.	100,000cycles 2Ω max.	50,000cycles 5Ω max.		100,000cycles 1Ω max.	10,000cycles 100mΩ max.	10,000cycles 40mΩ max.
	Operating life with Load	(0.1A 30V DC) 50,000cycles 2Ω max.	(0.1A 30V DC) 50,000cycles 1Ω max.	(0.1A 30V DC) 100,000cycles 2Ω max.	(1mA 5V DC) 50,000cycles 5Ω max.		(1mA 5V DC) 100,000cycles 1Ω max.	(0.1A 12V DC) 10,000cycles 150mΩ max.	(0.1A 12V DC) 10,000cycles 60mΩ max.
Environmental performance	Cold	-20±2°C for 96h					-40±2°C for 96h	-20±2°C for 96h	
	Dry heat	85±2°C for 96h							
	Damp heat	40±2°C, 90 to 95%RH for 96h							
Dimensions (mm)	W	6.3	3.4	5	2.8	3.6	9	11	12.5
	D	3			3.5	4.2	3.5	5.8	5
	H	4.9	2.3	4	1.5	1.2	4.5	7	11.5
Soldering	Manual soldering	300±5°C, 5s max.	350±5°C, 3s max.				300±10°C, 3±1s	350±5°C, 3s max.	
	Dip soldering	260±5°C, 5±1s	—	255±5°C, 5±1s	—	245±5°C, 5±1s	—	260±5°C, 5±1s	
	Reflow soldering	Please see P.79					—		
Number of poles	1					1.2	1		
Operation force	0.35N max.	0.3N max.		0.4N max.	0.35N max.	0.3N max.	0.5N max.	0.7±0.3N	
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Detector

Push

Slide

Rotary

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Power

Dual-in-line
Package Type

TACT Switch™

Custom-
Products

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