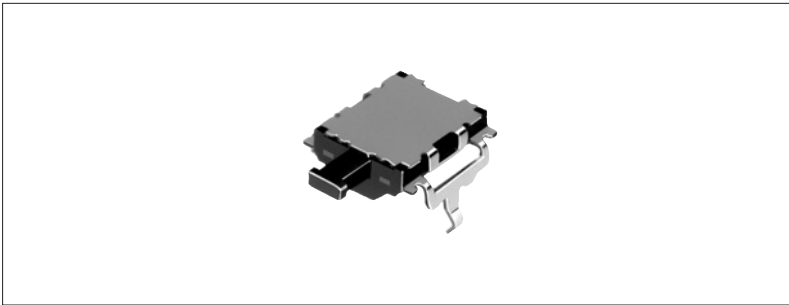


Low-profile Type Detector Switch

SPVC1 Series

2.8mm thick low-profile type suitable for normal ON/OFF.

- Power
- Push
- Slide
- Rotary
- Encoders
- Jog Shuttle
- Telephone-hook
- Detector**
- Vibration Sensors
- Dual-in-line Package Type
- Multi Control Devices
- TACT



Car Use

Features

- This is a low-profile unit with a 2.8mm height from the mounting surface of a PC board.
- Two types of circuit configuration : push ON and push OFF.
- Permits snap-in temporary mounting on PC board (t1).

Applications

- For detection mechanisms in car navigation systems and car audio systems

Typical Specifications

Items		Specifications
Rating (max.) (Resistive load)		10mA 16V DC
Contact resistance (Initial performance / After lifetime)		1Ω max. / 2Ω max.
Operating force		0.85N max.
Operating life	Without load	25,000 cycles
	With load	25,000 cycles (10mA 16V DC)

Products Line

Poles	Positions	Terminal style	Circuit arrangement	Minimum packing unit (pcs.)	Products No.
1	1	Snap-in	Push ON	100	SPVC110300
			Push OFF		SPVC110100

For other detailed specifications, see P.301

Dimensions

Unit : mm

Style	PC board mounting hole dimensions (Viewed from direction A)

Circuit Diagram

<p>Push on</p>	<p>Push off</p>
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Products Specifications

Series		SPVC1	SPVN	SPVG	SPVL	SSCM	SSCF	SPVQ	SREF	
Items										
Operating temperature range		-10°C to +60°C						-40°C to +85°C	-10°C to +60°C	
Rating (max.) (Resistive load)		10mA 16V DC	1mA 5V DC	50mA 20V DC	1mA 5V DC		0.1A 12V DC		1mA 5V DC	
Electrical performance	Initial contact resistance	1Ω max.	2Ω max.	500mΩ max.	2Ω max.		100mΩ max.	500mΩ max.	1Ω max.	
	Insulation resistance	100MΩ min. 100V DC						100MΩ min. 500V DC	100MΩ min. 100V DC	
	Voltage proof	100V AC for 1 min.						500V AC for 1 min.	100V AC for 1 min.	
Mechanical performance	Robustness of terminal	3N for 1 min.	0.5N for 1 min.		1N for 1 min.	0.5N for 1 min.	5N for 1 min.	3N for 1 min.	—	
	Robustness of actuator	10N	5N	10N	5N	0.5N	10N	20N	5N	
	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								
	Solderability	230±5°C, 3±0.5s								—
	Resistance to soldering heat	Manual soldering	350±10°C, 3 ⁺¹ ₋₀ s	350±5°C, 3s max.			350±10°C, 3 ⁺¹ ₋₀ s	300±10°C, 3 ⁺¹ ₋₀ s	—	
		Dip soldering	260±5°C, 3s max.	—				260±5°C, 5±1s		—
Reflow soldering		—	Please see P.302				—			
Durability	Operating life without load	25,000 cycles 2Ω max.	50,000 cycles 5Ω max.	100,000 cycles 1Ω max.	50,000 cycles 5Ω max.		50,000 cycles 200mΩ max.	300,000 cycles 1Ω max.	150,000 cycles 2Ω max.	
	Operating life with load	(10mA 16V DC) 25,000 cycles 2Ω max.	(1mA 5V DC) 50,000 cycles 5Ω max.	(50mA 20V DC) 100,000 cycles 1Ω max.	(1mA 5V DC) 50,000 cycles 5Ω max.		(0.1A 12V DC) 50,000 cycles 300mΩ max.	(0.1A 12V DC) 300,000 cycles 1Ω max.	(0.1A 5V DC) 150,000 cycles 2Ω max.	
Environmental performance	Cold	-20±2°C for 96h		-40±2°C for 96h	-20±2°C for 96h			-40±2°C for 500h	-20±2°C for 96h	
	Dry heat	85±2°C for 96h						85±2°C for 500h	85±2°C for 96h	
	Damp heat	40±2°C, 90 to 95%RH for 96h						60±2°C, 90 to 95%RH for 500h	40±2°C, 90 to 95%RH for 96h	

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