

Detector Switch Water-proof Type

SPVQA Series



Fork terminals allow connection without solder.



Typical Specifications

Items		Specifications
Rating (max.) / (min.) (Resistive load)		0.1A 12V DC/50μ A 5V DC
Contact resistance (Initial/After operating life)		500mΩ/1Ω max.
Operating force		1±0.5N
Operating life	Without load	300,000cycles
	With load	300,000cycles (0.1A 12V DC)

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line
Package Type

TACT Switch™

Custom-
Products

Product Line

Poles	Positions	Change over timing	Operating part shape	Terminal type	Main body form	Minimum order unit (pcs)	Product No.	Drawing No.
1	1	Non shorting	Push	Press fit	Without boss L type	4,800	SPVQA10101	1
	1				Without boss R type		SPVQA10201	2
					Without boss L type		SPVQA10300	3
	2				Without boss R type		SPVQA10400	4
					Without boss L type		SPVQA10500	5
	1			Without boss R type	SPVQA10600	6		
		For PC board	Without boss	SPVQA20101	7			

Packing Specifications

Bulk

Number of packages (pcs.)		Export package measurements (mm)
1 case /Japan	1 case /export packing	
1,200	4,800	540 × 360 × 270

Notes

1. This unit cannot be used in water.
2. Please place purchase orders per minimum order unit N (integer).

Dimensions

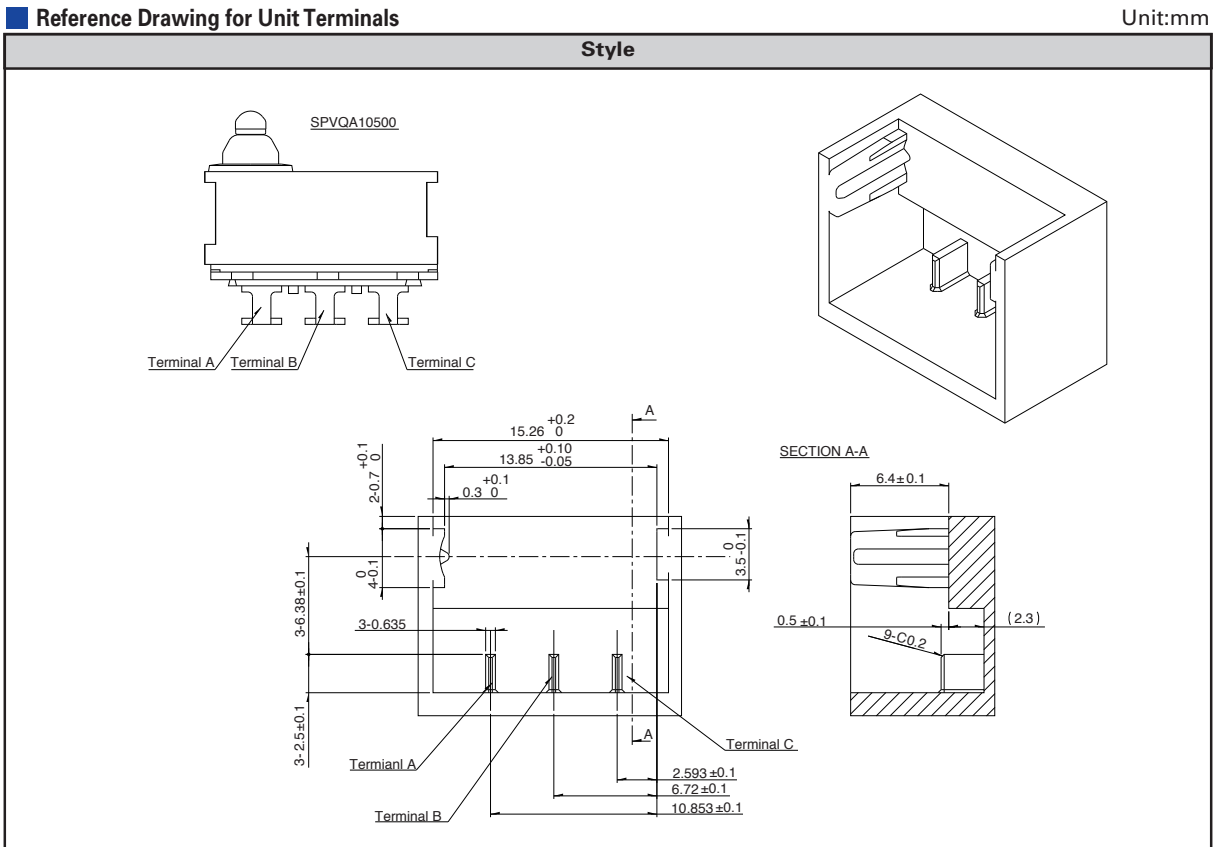
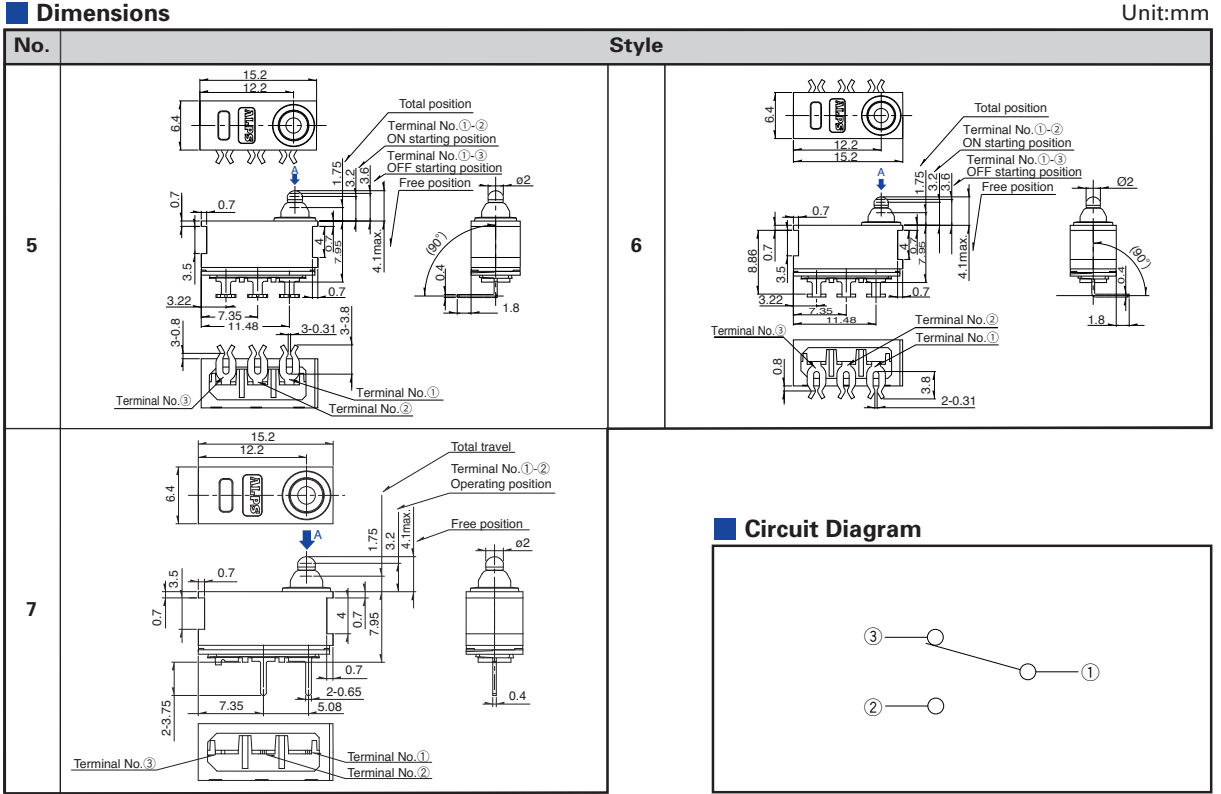
Unit:mm

No.	Style
1	
2	
3	
4	


















Automotive Use

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



List of Varieties (Water-proof Type / Telephone-hook Type)

Series	Water-proof Type						Telephone-hook Type								
	SPVQ6	SPVQ7	SPVQ8	SPVQ9	SPVQA	SSCN	SPPY5								
Photo															
Operation type	 1-way  2-way	 2-way	 2-way	 2-way	 2-way	 2-direction	 1-way								
Operating temperature range	-40°C to +85°C						-10°C to +60°C								
Automotive use	●	●	●	●	●	●	—								
Rating (max.) (Resistive load)	0.1A 12V DC			50mA 26V DC		0.1A 12V DC		50mA 48V DC max.							
Rating (min.) (Resistive load)	50μA 5V DC					100μA 5V DC		100μA 3V DC							
Electrical performance	Initial contact resistance		500mΩ max.		75mΩ		500mΩ max.		100mΩ max.						
	Insulation resistance		100MΩ min. 500V DC												
	Voltage proof		500V AC for 1 minute												
Mechanical performance	Terminal strength		3N for 1 minute				5N for 1 minute								
	Actuator strength		20N			10N		5N							
Durability	Operating life without Load		300,000cycles 1Ω max.		300,000cycles 200mΩ max.		300,000cycles 1Ω max.		300,000cycles 1Ω max.						
	Operating life with Load		(0.1A 12V DC) 300,000cycles 1Ω max.		(50mA 26V DC) 300,000cycles 200mΩ max.		(0.1A 12V DC) 300,000cycles 1Ω max.		(0.1A 12V DC) 100,000cycles 1Ω max. (50mA 48V DC) 100,000cycles (100BA 3V DC) 300,000cycles						
Environmental performance	Cold		-40±2°C for 500h				-20±2°C for 96h								
	Dry heat		85±2°C for 500h				85±2°C for 96h								
	Damp heat		60±2°C, 90 to 95%RH for 500h				40±2°C, 90 to 95%RH for 96h								
Dimensions (mm)	W	13.3	14.7	8.3	15.4	15.2	13	14.4							
	D	5.3	5.4	5.3	8.4	6.4	5	28.6							
	H	7	6.7	6.5	7.5	7.95	25	7.15							
Soldering	Manual soldering		300±10°C, 3 ⁺¹ / ₀ s			—		300±10°C, 3 ⁺¹ / ₀ s		350±5°C, 3s max.					
	Dip soldering		260±5°C, 5±1s			—		—		—					
	Reflow soldering		—			—		—		Please see P.97					
Number of poles		1		2		1		2							
Operation force		1±0.5N 3N max.		1±0.5N			2N max.		0.8N max.						
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Note

● marks in "Available for automotive use" indicate that all of the series products can work at the operating temperature range from -40°C to +85°C.