



## Water-proof Type (Surface Mount) SPVQC Series

Part number	<b>SPVQC10100</b>	
Poles	2	
Positions	2	
Changeover timing	Non shorting	
Operation part shape	Push	
Terminal type	For PC board (Reflow)	
Operating force	1±0.5N	
Operating temperature range	-40°C to +85°C	
Rating (max.)/(min.) (Resistive load)	50mA 18V DC/50μA 5V DC	
Electrical performance	Contact resistance (Initial/After operating life)	75mΩ max./200mΩ max.
	Insulation resistance	100MΩ min. 500V DC
	Voltage proof	250V AC for 1 minute
Mechanical performance	Terminal strength	3N for 1 minute
	Actuator strength	20N
Durability	Operating life without load	300,000 cycles 200mΩ max.
	Operating life with load Rating (max.) (Resistive load)	300,000 cycles 200mΩ max.
Environmental performance	Cold	-40°C 500h
	Dry heat	85°C 500h
	Damp heat	60°C, 90 to 95%RH 500h

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Minimum order unit (pcs.)	Japan	300
	Export	2,400

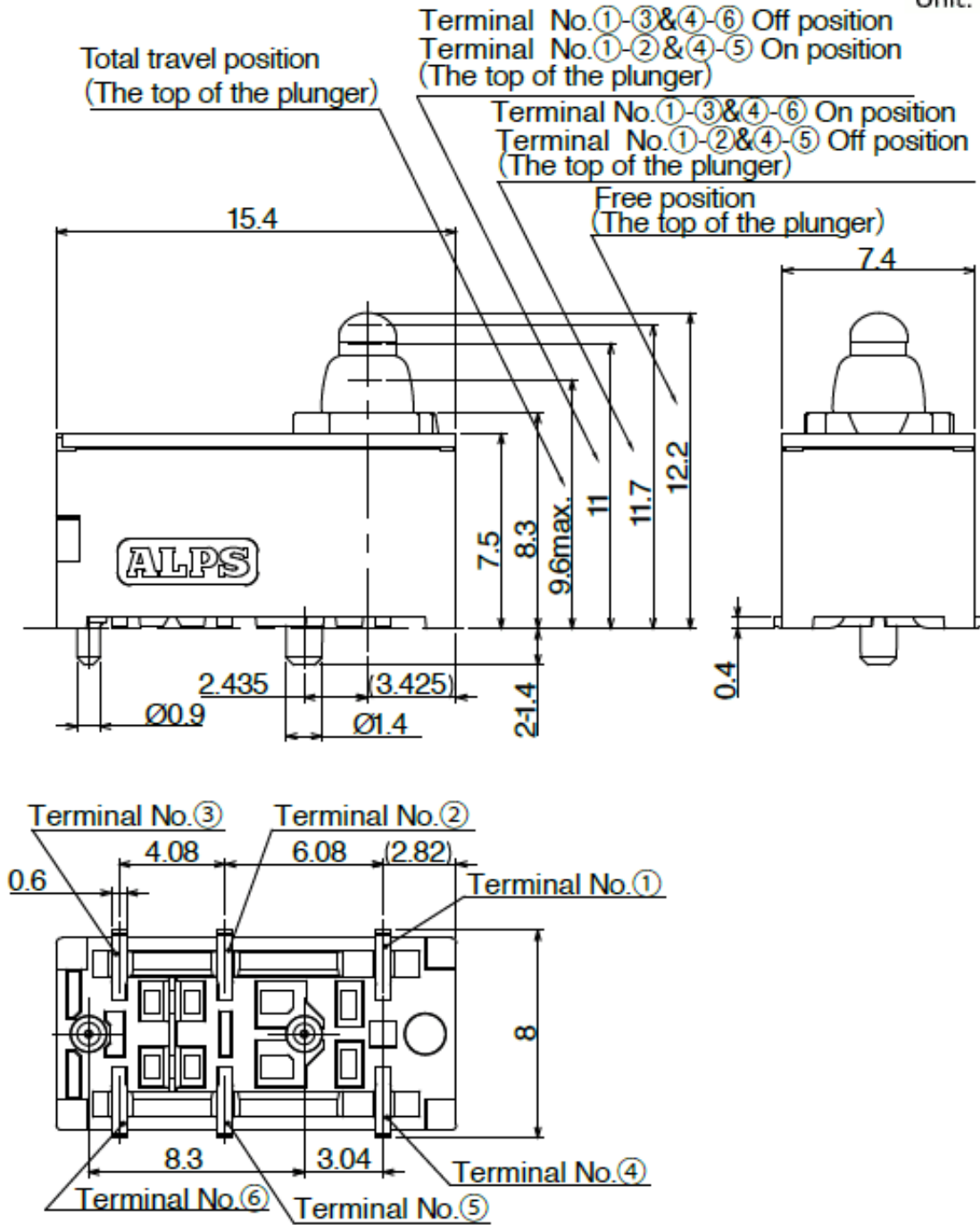
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## Photo

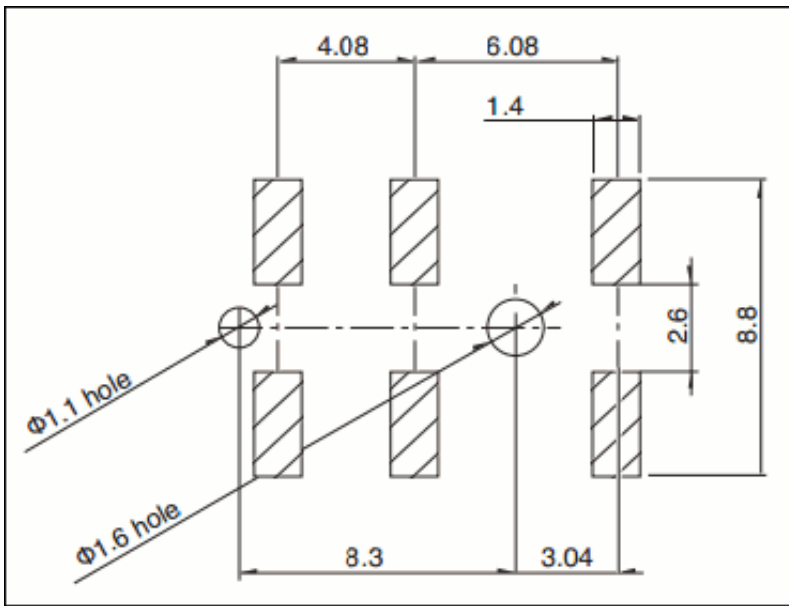


## Dimensions

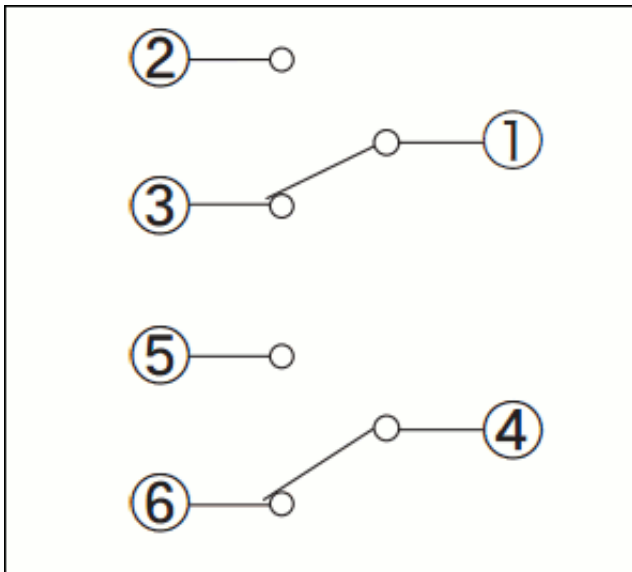
Unit: mm



Land Dimensions

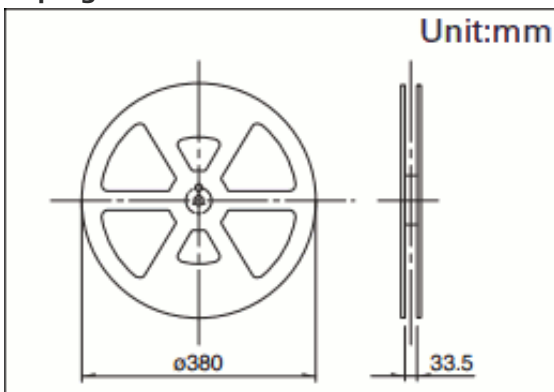


Circuit Diagram



Packing Specifications

Taping



Number of packages 1 reel (pcs.)	300
1 case / Japan	1,200

1 case / export  
packing 2,400

Tape width (mm) 32

Export package measurements (mm) 403×403×360

## Soldering Conditions

### Example of Reflow Soldering Condition

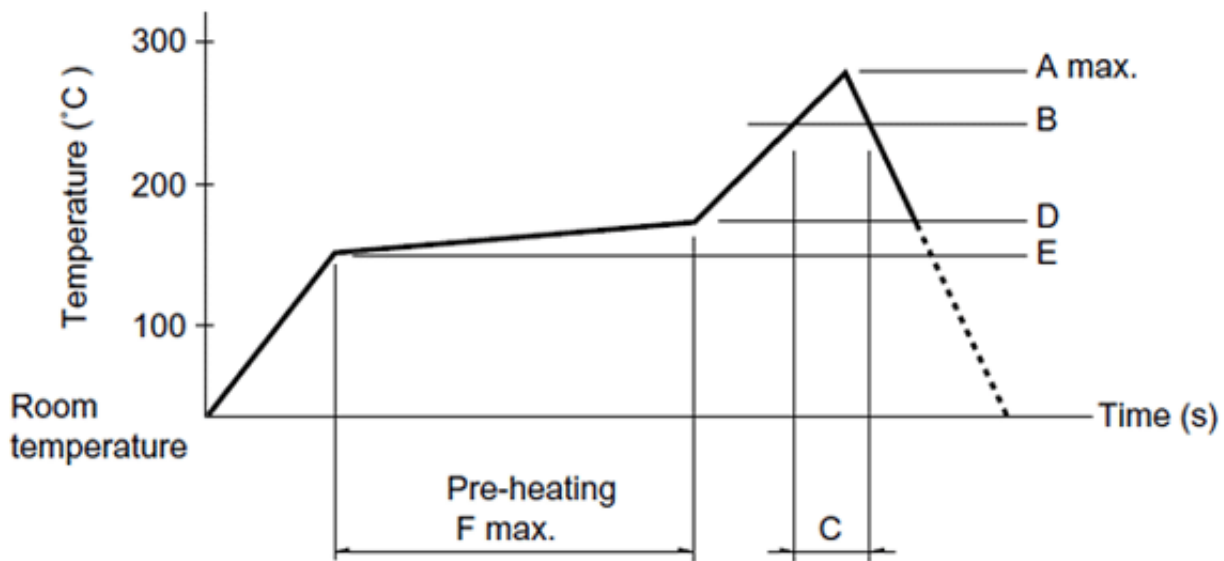
1. Heating method :

Double heating method with infrared heater.

2. Temperature measurement :

Thermocouple 0.1 to 0.2 Φ CA (K) or CC (T) at soldering portion (copper foil surface). A heat resisting tape should be used for fixed measurement.

3. Temperature profile



A(°C)	B(°C)	C(s)	D(°C)	E(°C)	F(s)
250	230	40	180	150	120

(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

Soldering temperature	350±5°C
Soldering time	3s max.

## Notes are common to this series/models.

1. This site catalog shows only outline specifications. When using the products, please obtain formal specifications for supply.
2. This unit cannot be used in water (IP67 rating, except for terminal).
3. Please place purchase orders per minimum order unit (integer).
4. This products can be used in vehicles.  
Although these products are designed to perform over a wide operating temperature range, please ensure that you receive and read the formal delivery specifications before use.