

**ALPSALPINE****ALPSALPINE**

X CLOSE

Detector Switch &gt; SPVT Series &gt; SPVT110102

## 1.9mm-thick Two-way Operation Type SPVT Series

| [Dimensions](#) | [Backside](#) | [Land Dimensions](#) | [Terminal Layout](#) | [Circuit Diagram](#) |  
 | [Packing Specifications](#) | [Soldering Conditions](#) |

Part number [Series Common Info](#)**SPVT110102**
 NET SHOP

 3D CAD

 RoHS

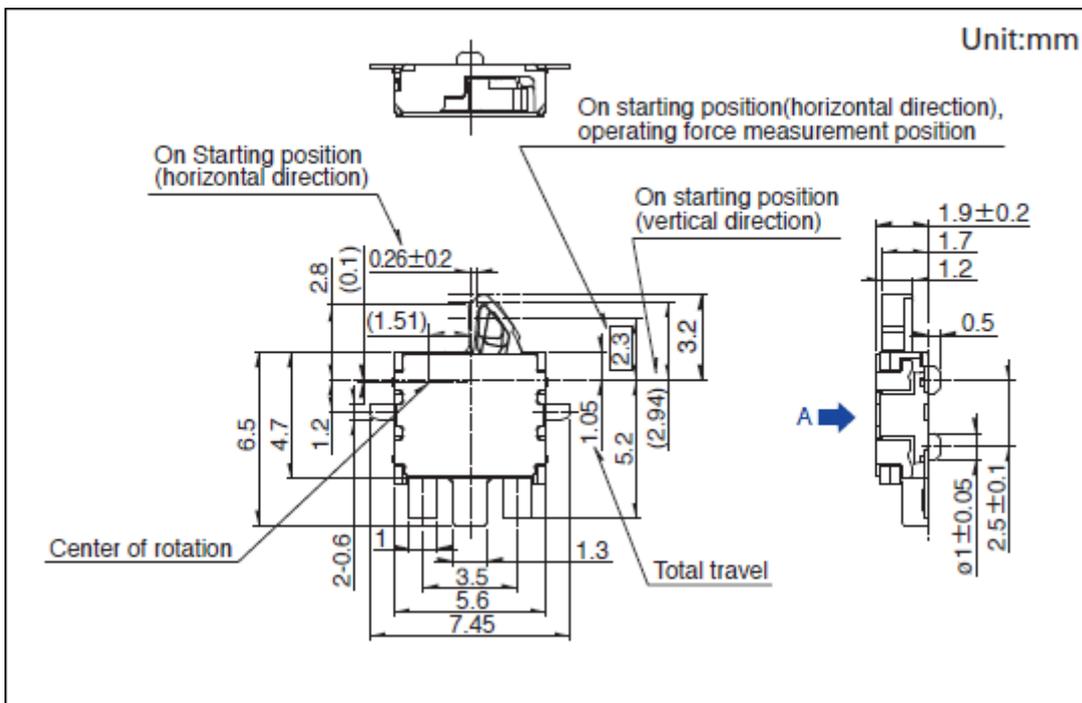
 Print

 Inquiry

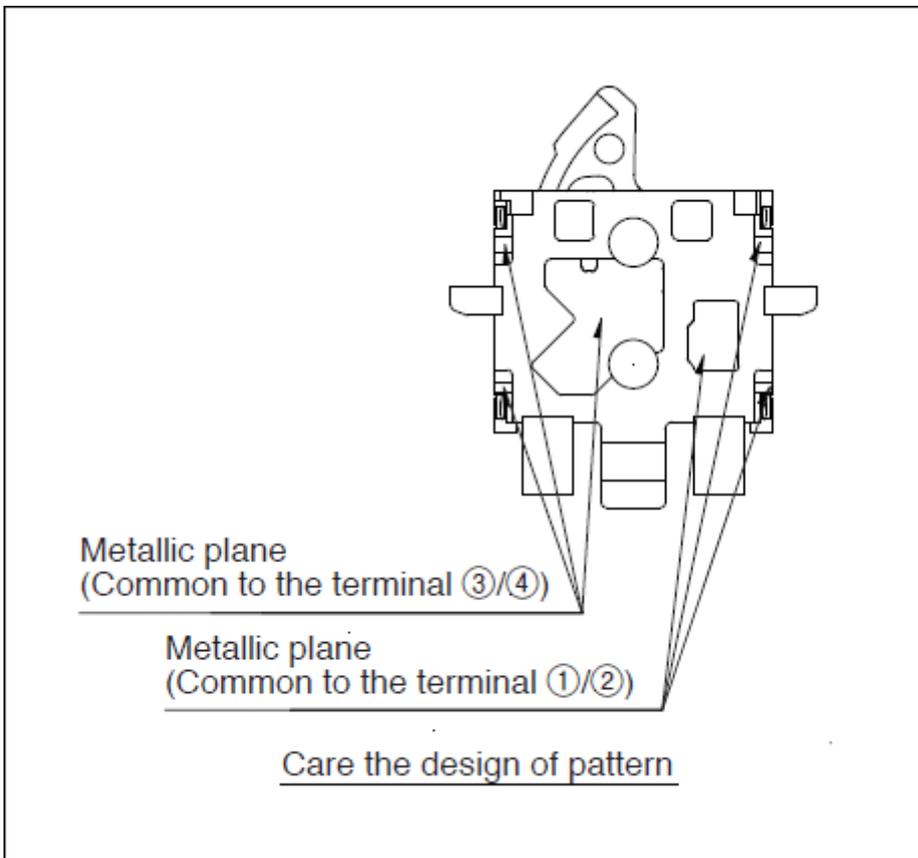
Poles	1	
Positions	1	
Terminal type	For PC board (Reflow)	
Operating force	0.4N max.	
Operating direction	Right	
Location lug	With	
Side terminal	With both sides.	
Operating temperature range		-40°C to +85°C
Rating (max.)/(min.) (Resistive load)		50mA 20V DC/100 μA 3V DC

Electrical performance	Contact resistance (Initial/After operating life)	500mΩ max./1Ω max.
	Insulation resistance	100MΩ min. 100V DC
	Voltage proof	100V AC for 1 minute
Mechanical performance	Terminal strength	0.5N for 1 minute
	Actuator strength	10N
	Operating life without load	100,000 cycles 1Ω max.
Durability	Operating life with load Rating (max.) (Resistive load)	100,000 cycles 1Ω max.
	Cold	-40°C 96h
Environmental performance	Dry heat	85°C 96h
	Damp heat	40°C, 90 to 95%RH 96h
	Minimum order unit (pcs.)	Japan 2,500 Export 10,000

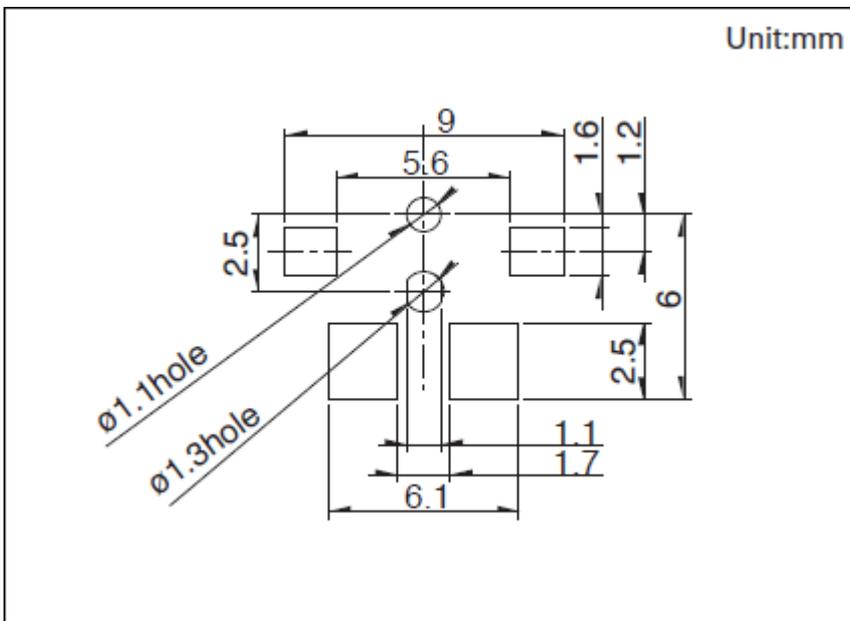
## Dimensions



## Backside

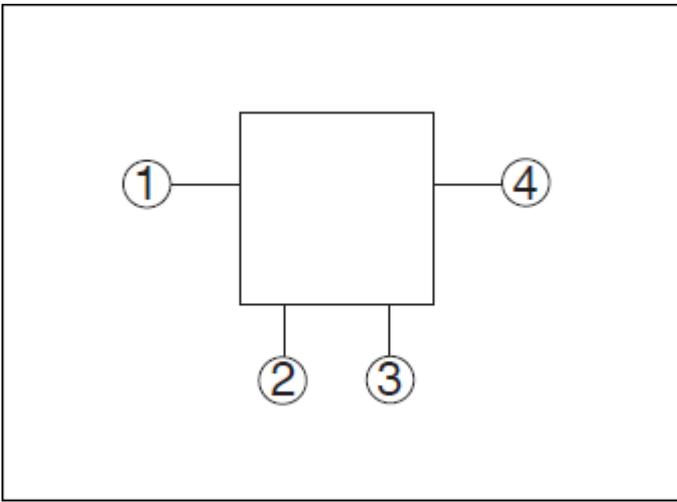


## Land Dimensions

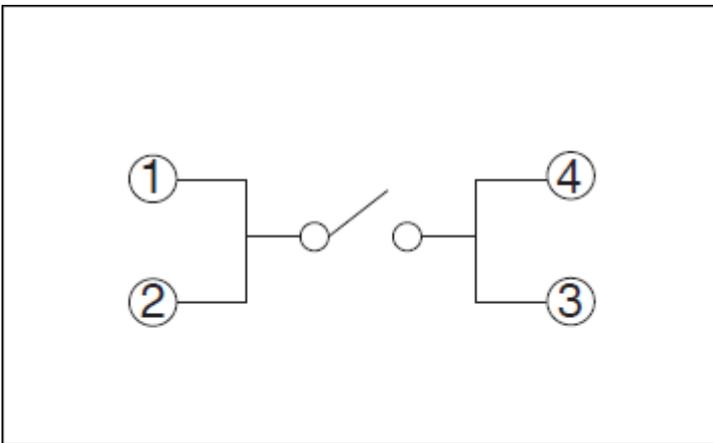


Viewed from direction A in the dimensions.

## Terminal Layout

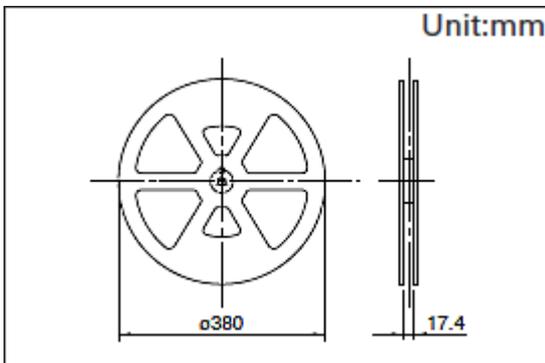


## Circuit Diagram



## Packing Specifications

### Taping



Number of	1 reel	2,500
packages (pcs.)	1 case / Japan	5,000
	1 case / export	10,000

packing

Tape width (mm) 16

Export package measurements (mm) 417 × 409 × 139

## Soldering Conditions

### Example of Reflow Soldering Condition

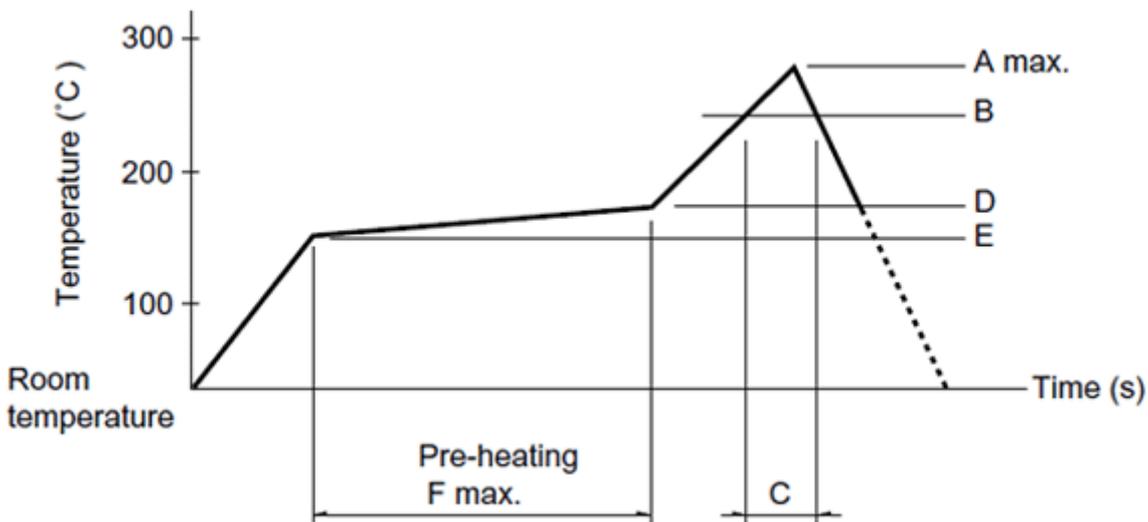
1. Heating method

Double heating method with infrared heater.

2. Temperature measurement

Thermocouple 0.1 to 0.2VCA (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) 260  
 B(°C) 230  
 C(s) 40  
 D(°C) 180  
 E(°C) 150  
 F(s) 120  
 3s max.

(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  $350 \pm 5^{\circ}\text{C}$

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.
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.

## Inquiries about Products

[Inquiry](#)

COPYRIGHT© 2020 ALPS ALPINE CO., LTD