



Detector Switch > SPVT Series > SPVT210104

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

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



Part number

**SPVT210104**

(SPVT210101)

The part number in ( ) is the old part number.

NET SHOP

3D CAD

RoHS

Print

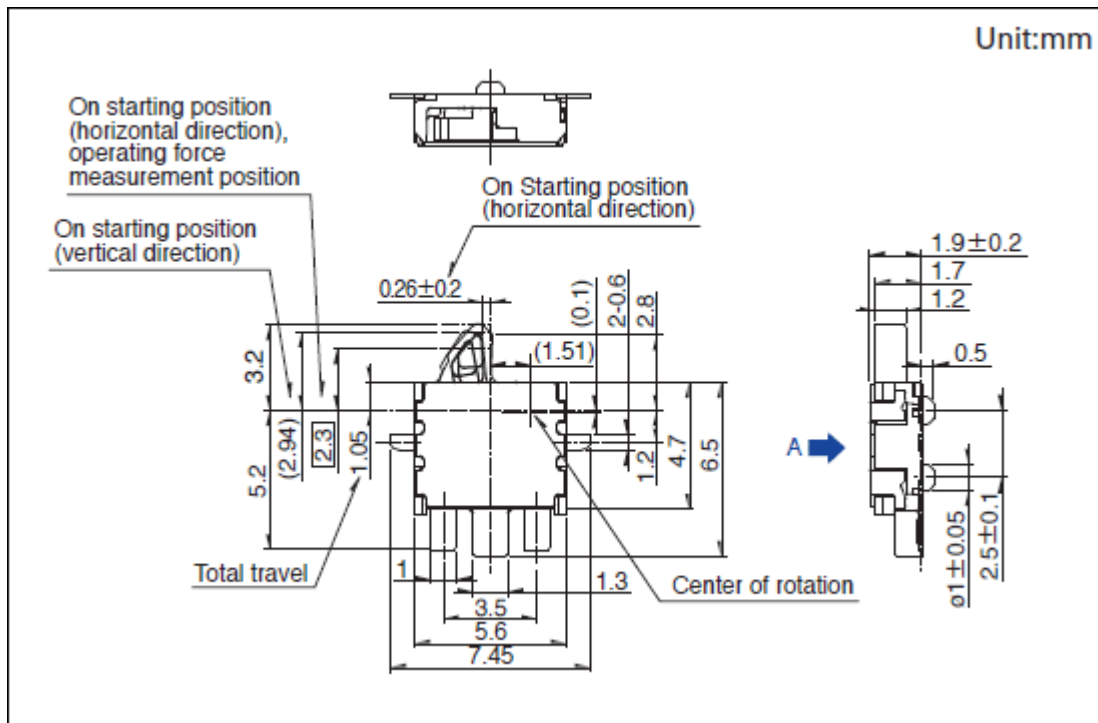
Inquiry

|                                       |   |                                    |
|---------------------------------------|---|------------------------------------|
| Poles                                 |   | 1                                  |
| Positions                             |   | 1                                  |
| Terminal type                         |   | For PC board (Reflow)              |
| Operating force                       |   | 0.4N max.                          |
| Operating direction                   |   | Left                               |
| 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 $\mu$ A 3V DC      |
| Electrical performance                | Contact resistance (Initial/After operating life) | 500m $\Omega$ max./1 $\Omega$ max. |
|                                       | Insulation resistance                             | 100M $\Omega$ min. 100V DC         |
|                                       | Voltage proof                                     | 100V AC for 1 minute               |
| Mechanical performance                | Terminal strength                                 | 0.5N for 1 minute                  |
|                                       | Actuator strength                                 | 10N                                |
| Durability                            | Operating life without load                       | 100,000 cycles 1 $\Omega$ max.     |

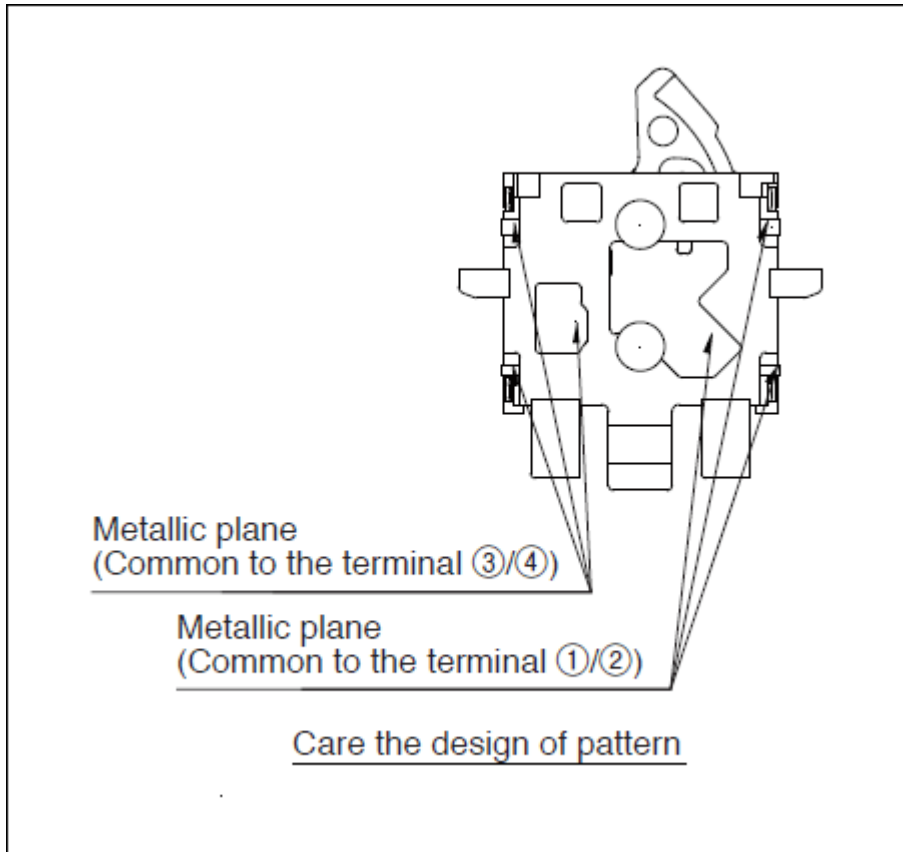
Operating life with load 100,000 cycles 1Ω max.  
 Rating (max.)  
 (Resistive load)

|                           |           |                       |
|---------------------------|-----------|-----------------------|
| Environmental performance | Cold      | -40°C 96h             |
|                           | Dry heat  | 85°C 96h              |
|                           | Damp heat | 40°C, 90 to 95%RH 96h |
| Minimum order unit (pcs.) | Japan     | 2,500                 |
|                           | Export    | 10,000                |

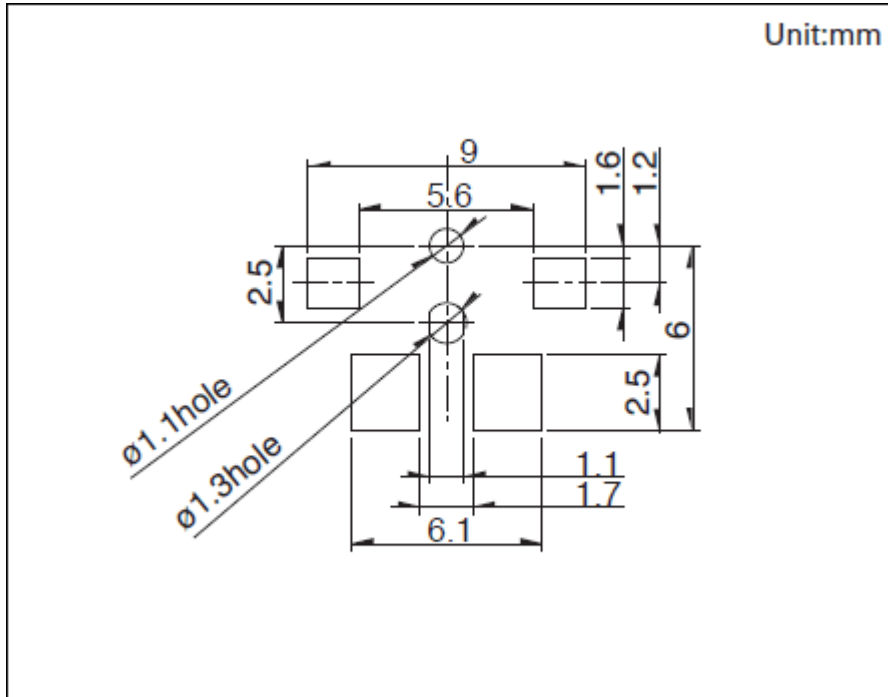
Dimensions



Backside

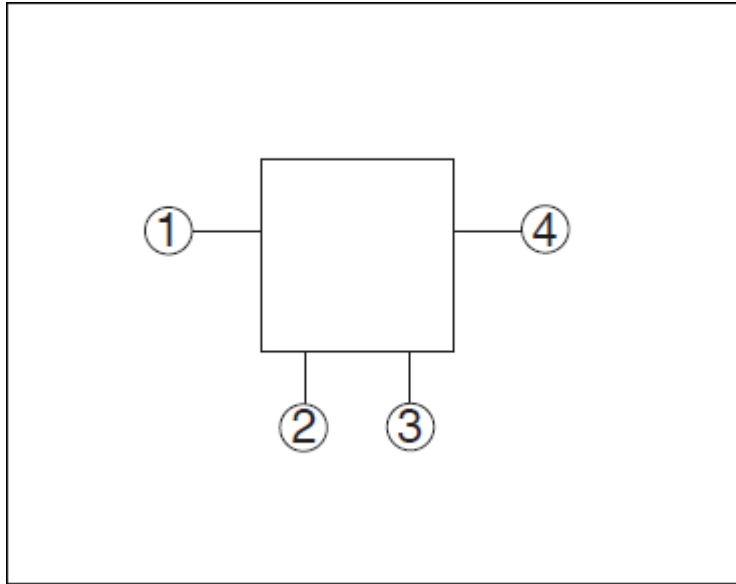


Land Dimensions

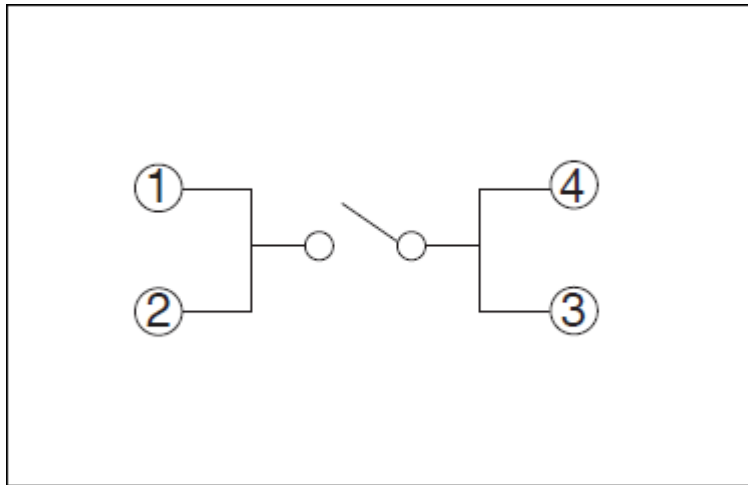


Viewed from direction A in the dimensions.

Terminal Layout

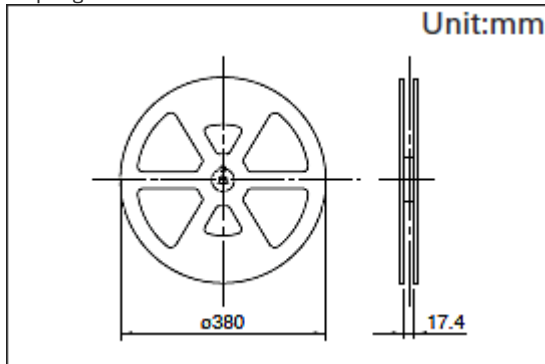


Circuit Diagram



Packing Specifications

Taping



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

---

|                                  |                 |
|----------------------------------|-----------------|
| Tape width (mm)                  | 16              |
| Export package measurements (mm) | 417 × 409 × 139 |

---

### Soldering Conditions

Example of Reflow Soldering Condition

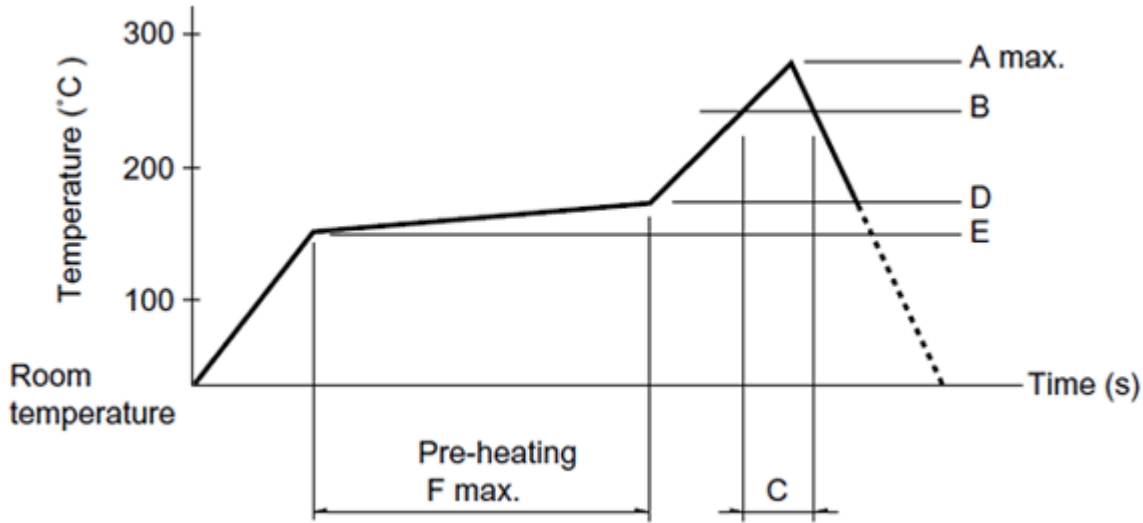
1. Heating method

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)<br>3s max. | B(°C) | C(s) | D(°C) | E(°C) | F(s) |
|------------------|-------|------|-------|-------|------|
| 260              | 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.
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