Part number **SPVQF10201** **Water-proof Type (Surface Mount) SPVQF Series**

Automotive | Water-proof Type | Dust-proof Type

Standard

Basic information



+ ZOOM

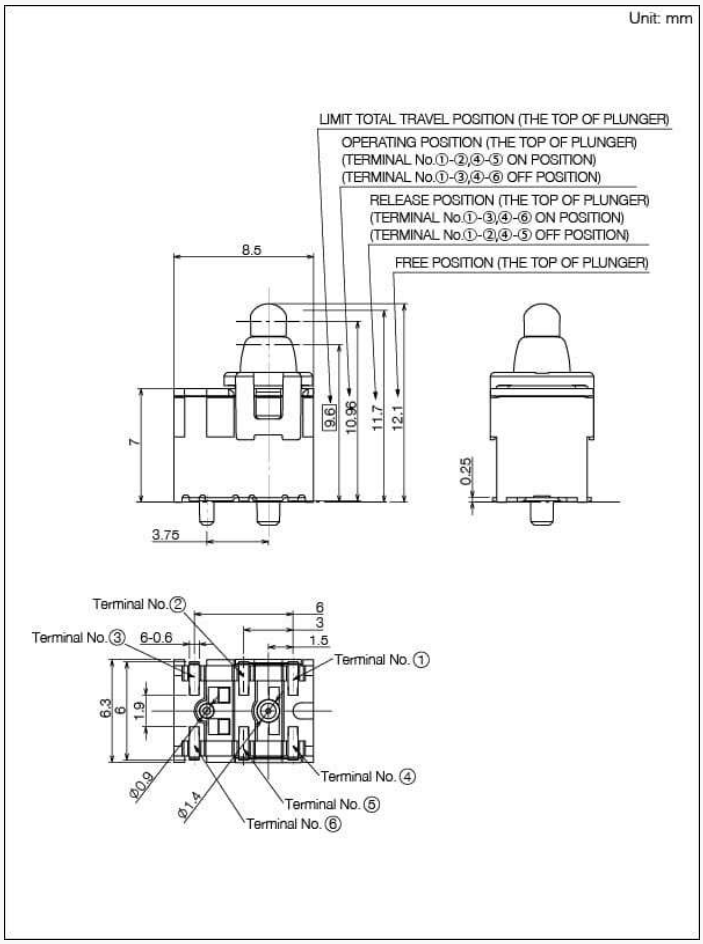
Changeover timing	Non shorting
Operation part shape	Push
Terminal type	For PC board(Reflow)
Operating force	1.8N max.
Dimensions (W×D×H)	6.3×8.5×7.0 mm

Specifications

Operating temperature range		-40°C to +90°C
Rating(max.)/(min.)(Resistive load)		50mA 18V DC/50μA 5V DC
Electrical performance	**Contact resistance(Initial/After operating life)**	75mΩ max./2Ω max.
	Insulation resistance	100MΩ min. 250V DC
	Voltage proof	250V AC for 1 minute
Mechanical performance	**Terminal strength**	5±1N for 10±1S
	Actuator strength	20N
Durability	**Operating life without load**	300,000 cycles 2Ω max.
	Operating life with load Rating(max.) (Resistive load)	300,000 cycles 2Ω max.
Environmental performance	**Cold**	-40°C 500h
	Dry heat	90°C 500h
	Damp heat	60°C, 90 to 95%RH 500h
Minimum order unit(pcs.)	**Japan**	400
	Export	1,600

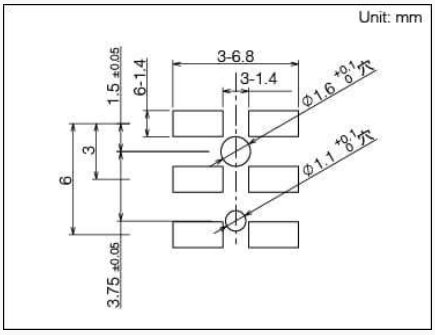


Dimensions



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Land Dimensions



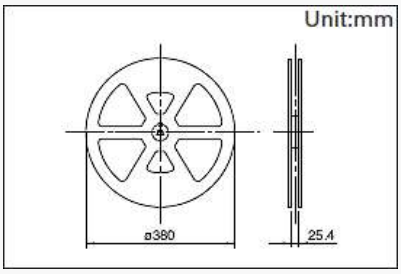
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Circuit Diagram

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Packing Specifications

Taping



Number of packages (pcs.)	
1 reel	400
1 case / Japan	800
1 case / export packing	1,600

Tape width (mm)

25.4

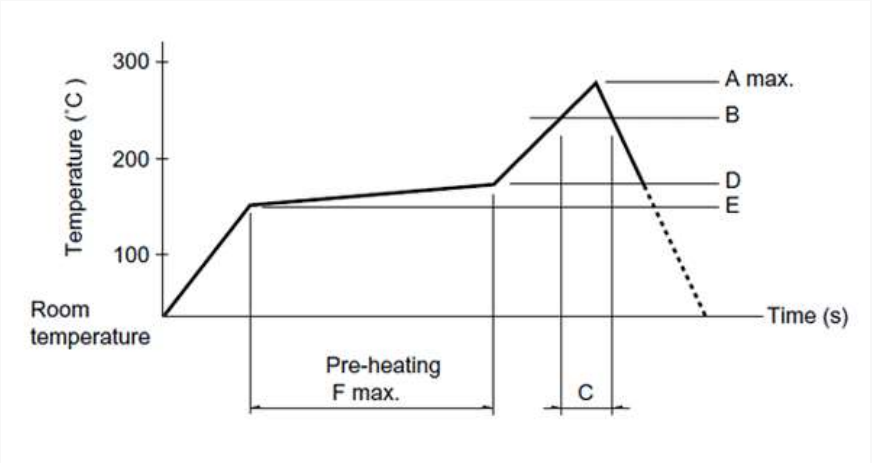
Export package measurements (mm)

428 x 413 x 172

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(℃) 3s max.	B(℃)	C(s)	D(℃)	E(℃)	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 cannnot be used in water (IP6K7 rating, except for terminal).
3. Please place purchase orders for taping products per minimum order unit (1 reel or a case).
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.