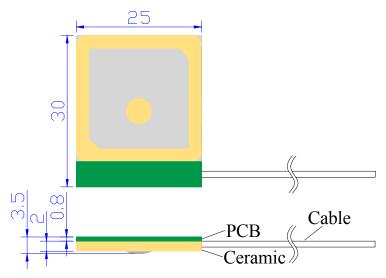


GPS Internal Passive Antenna

Part Number: VTGPSIP-10



1. Dimension (Unit: mm)



2. Electrical Characteristics

2.1 Dielectric Antenna

Form 1

No.	Item	Specifications	Post Environmental Tolerance
1	Center Frequency (MHz)	1575.42 MHz	±3 MHz
2	Band Width (MHz)	±5 MHz	±1 MHz
3	V.S.W.R(in BW)	1.5 : 1	_
4	Gain (Zenith)	0 dB	±0.5 dB
5	Polarization	RHCP	_

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6	Impedance	50 Ω	_
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2.2Mechanical

Form 2

No.	Item	Specification	
1	Cable	RF1.13 or others	
2	Connector	IPEX or others	
3	Mounting	Internal	

3 Reliability

Condition: Temperature: 40±5°C

Load: DC=5V±0.5 V Quantity: 2000pcs Sustained Time: 480h

4 Environmental Specifications

Post Environmental Tolerance (Refer to the form 1~2)

Condition: Temperature range 25±3℃

Relative Humidity range 55~75%RH

Operating Temperature range -40 $^{\circ}$ C~+85 $^{\circ}$ C Storage Temperature range -40 $^{\circ}$ C~+100 $^{\circ}$ C

4.1 Moisture Proof

The device should satisfy the electrical characteristics specified in form $1\sim2$ after exposed to the temperature $40\pm2^{\circ}$ C and the relative humidity $90\sim95\%$ RH for 96 hours and $1\sim2$ hours recovery time under normal condition.

4.2 Vibration Resist

The device should satisfy the electrical characteristics specified in form $1\sim2$ after applied to the vibration of 10 to 55Hz with amplitude of 1.5mm for 2 hours each in X , Y and Z directions.

4.3 Drop Shock

The device should satisfy the electrical characteristics specified in form 1~2 after dropping onto the hard wooden board from the height of 30cm for 3 times each facet of the 3 dimensions of the device.

4.4 High Temperature Endurance

The device should satisfy the electrical characteristics specified in form $1\sim2$ after exposed to temperature $80\pm5\%$ for 24 ± 2 hours and $1\sim2$ hours recovery time under normal temperature.

4.5 Low Temperature Endurance

The device should also satisfy the electrical characteristics specified in form $1\sim2$ after exposed to the temperature -40°C±5°C for 24±2 hours and to 2 hours recovery time under normal temperature.

4.6 Temperature Cycle Test

The device should also satisfy the electrical characteristics specified in form $1\sim2$ after exposed to the low temperature -25°C and high temperature +85°C for 30±2 min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.