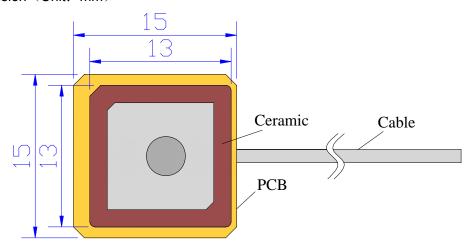


GPS Internal Passive Antenna

Part Number: VTGPSIP-3



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 | |
|---|-----------|------|--|
|---|-----------|------|--|

2.2Mechanical

Form 2

| No. | Item | Specification | |
|-----|-----------|-------------------|--|
| 1 | Cable | RF 1.13 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

Condition:

Post Environmental Tolerance (Refer to the form 1)

Temperature range 25±3°C

Relative Humidity range 55~75%RH

Operating Temperature range -40 °C ~+85 °C

Storage Temperature range -40 °C ~+100 °C

4.1 Moisture Proof

The device should satisfy the electrical characteristics specified in form 1 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 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 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 after exposed to temperature 80 ± 5 °C 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 after exposed to the temperature -40 $^{\circ}$ C±5 $^{\circ}$ 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 after exposed to the low temperature -25 $^{\circ}$ C and high temperature +85 $^{\circ}$ C for 30±2 min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.

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