

Miniature GPS Antenna

Features

- Miniature GPS Patch Antenna
- Centre freq 1.575.42MHz
- 20mm x 20mm x 8mm
- VSWR <1.5:1
- Gain (Zenith) 2dB
- Polarisation RHCP
- LNA Gain 28dB (+/-2)
- Noise Figure 1.5dB
- 2.5m RG174 Connecting Lead
- Alternative Connectors: FME / TNC / SMA / MMCX
- 50 Ohm Impedance
- Max Power 50W



Applications

- GPS Systems
- Embedded positioning

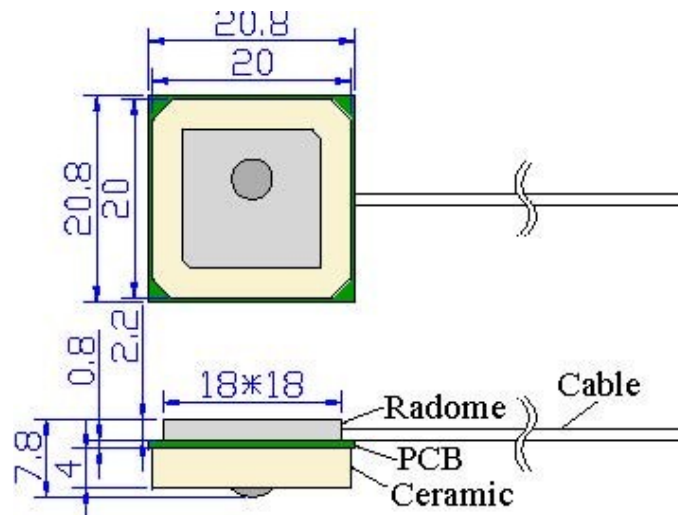
Description

A compact GPS Antenna for embedded positioning applications where high performance is required.

Ordering Information

Part Number	Dimensions (mm)	Cable	Connector
ANT-GPS-P20SMA	20mm sq	RG174	SMA (M)

Mechanical Detail



Reliability Data

The module has been tested to operate within the following Environmental Conditions;

Condition: Temperature range $25 \pm 3^{\circ}\text{C}$

Relative Humidity range 55~75%RH

Operating Temperature range $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

Storage Temperature range $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$

Moisture Resilience

The device satisfies the stated electrical characteristics specified after being exposed to the temperature $40 \pm 2^{\circ}\text{C}$ and the relative humidity 90~95% RH for 96 hours and 1~2 hours recovery time under normal condition.

Vibration Resistance

The device satisfies the electrical characteristics specified after being vibrated from 10 to 55Hz with amplitude of 1.5mm for 2 hours each in X , Y and Z directions.

Drop Shock

The device satisfies the electrical characteristics specified after being dropped onto a hard wooden board from a height of 30cm 3 times on each face of the 3 dimensions of the device.

High / Low Temperature Endurance

The device satisfies the electrical characteristics specified after being exposed to temperature $80 \pm 5^{\circ}\text{C}$ for 24 ± 2 hours and being given 1~2 hours recovery time under normal temperature. And after being exposed to the temperature $-40^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 24 ± 2 hours and being given 1 to 2 hours recovery time under normal temperature.

Temperature Cycle Test

The device satisfies the electrical characteristics specified after being exposed to -25°C and $+85^{\circ}\text{C}$ for 30 ± 2 min each by 5 cycles and being given 1 to 2 hours recovery time under normal temperature.

Radiation Data

