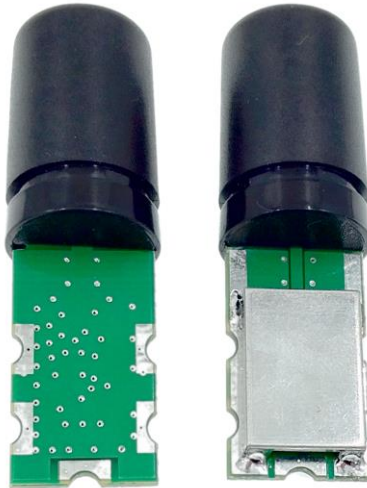


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# GPS Antenna Specification

Model NO.: RY-GPS-88-01



## ( I ) Product Overview

### ( i ) Applications

- \* PDA/Mobile Phone/Smart Phone
- \* Automotive Industry
- \* Navigation System
- \* Aeroplane Servicing
- \* Satellite
- \* Positioning Device

### ( ii ) Features

- \* GPS Active Antenna
- \* Ideal for tight integration
- \* Comparable Sarantel Active Antenna Dimensions
- \* SMT compatible
- \* Small size
- \* Internal and external mounting
- \* Low voltage / Low current
- \* High gain (28dB) typical

### ( iii ) Antenna Element

Center Frequency (MHz): 1575.42

Bandwidth (MHz): 90

Gain: 1 dBi Typical

VSWR: 2 Max

Return Loss: -10 dBi Max

Polarization: Linear

Pattern: Omni-Directional

Impedance ( $\Omega$ ): 50

(iv) LNA/Filter

LNA Gain (Without cable): 28 dBi Typical

Noise Figure (dB): 1.5

Filter Out Band Attenuation ( $f_0=1575.42$  MHz)

7dB Min  $f_0\pm 20$ MHz ;

20dB Min  $f_0\pm 50$ MHz;

30dB Min  $f_0\pm 100$ MHz

VSWR <2.0

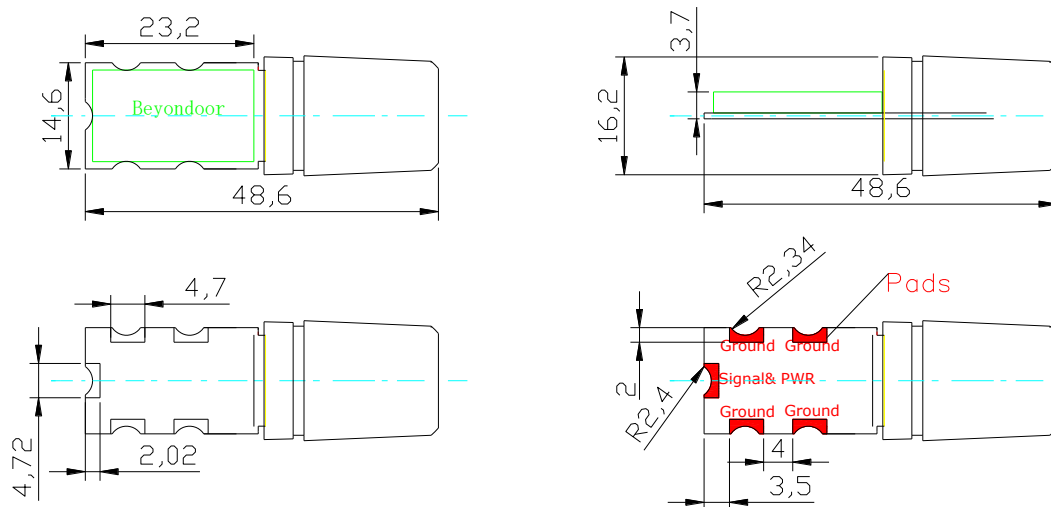
DC Voltage (V): 2.7/3.0/3.3/5.0/3.0 to 5.0 etc.

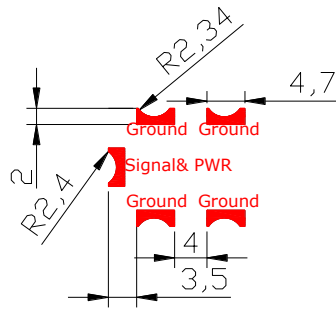
DC Current (mA): 11 Max

(v) Mechanical

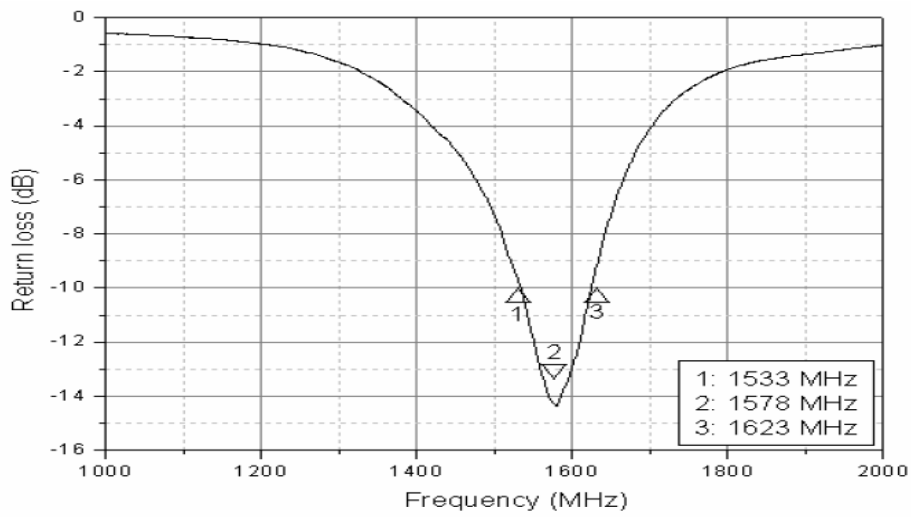
Size (mm): 14.6x 48.6 x3.7

## ( II ) Mechanical



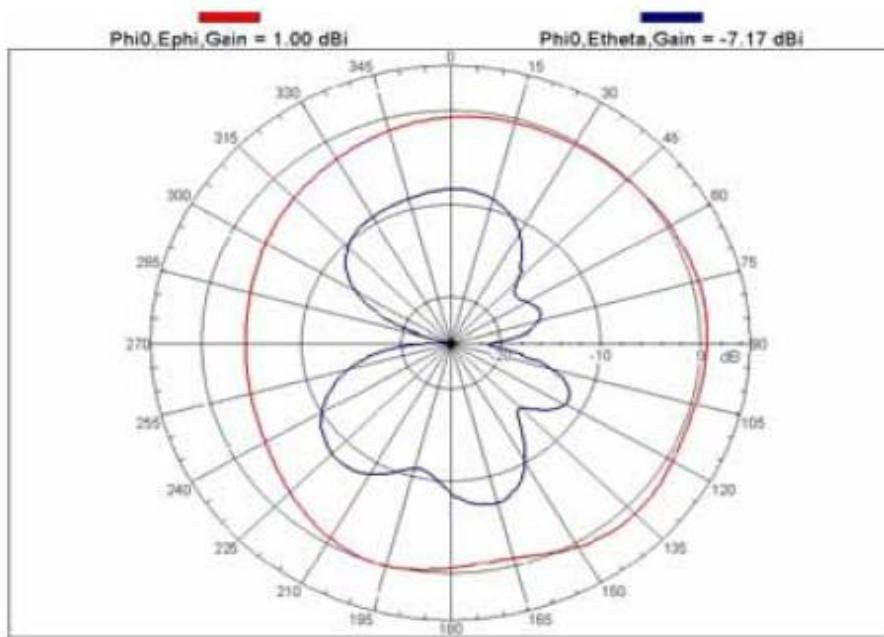


### (III) Return loss and Bandwidth

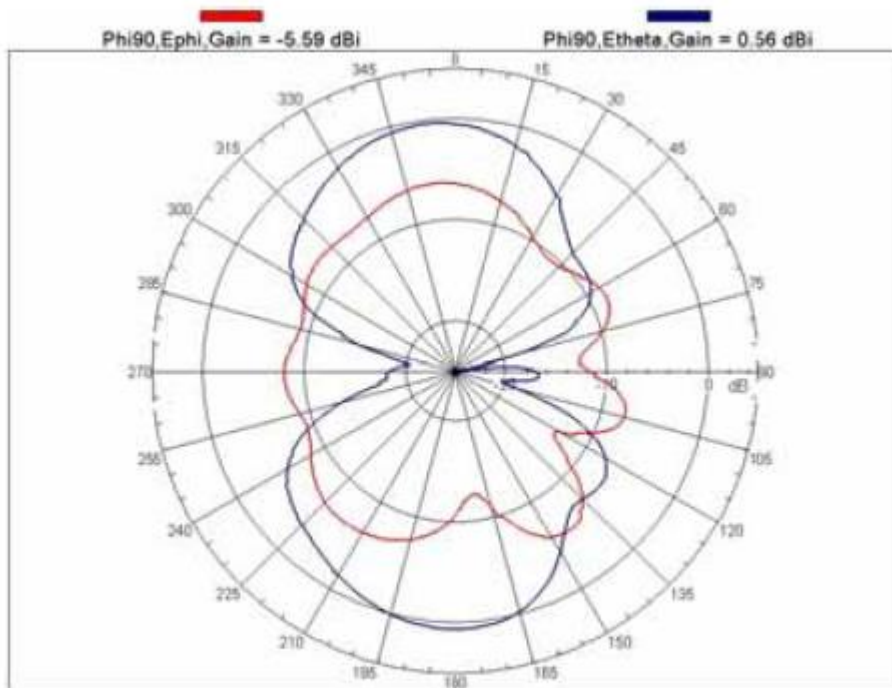


### (vii) Radiation Pattern

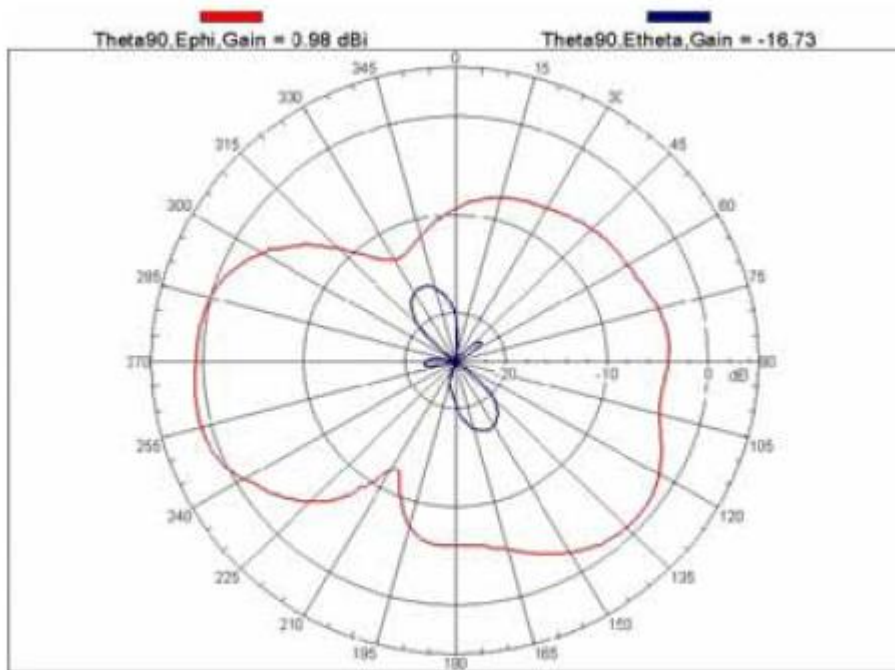
(unit:dBi)



Phi=0° for 1.575 GHz



Phi=90° for 1.575 GHz



Theta=90• for 1.575 GHz