

SPECIFICATION

Part No. : **GP.1575.25.2.A.02**

Specification No : GP.25B

Product Name : 2mm GPS Patch Antenna

Features : 25mm x 25mm x 2mm ROHS Compliant





1. Introduction

This miniaturized ceramic GPS patch antenna is based on smart *XtremeGain*[™] technology. It is mounted via pin and double-sided adhesive and has been selected as optimal solution for the customer device environment.

Precaution for Use

- The metal pattern on ceramic patch is silver electrode
- Please do not use corrosion gas (sulfur gas, chlorine gas) in the atmosphere.
- Please do not direct solder anything onto the silver electrode of the patch

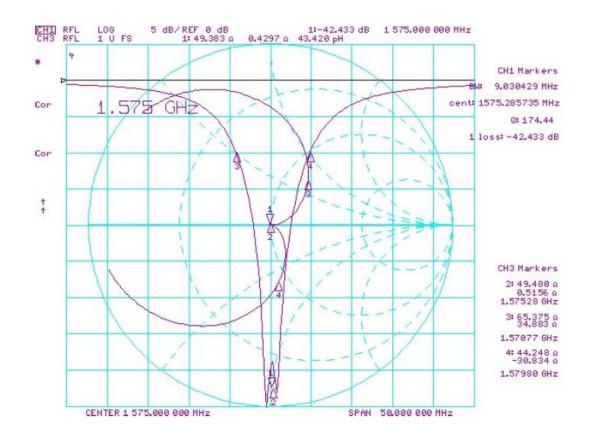
2. Specification

| Parameter | Specification | | | |
|------------------------------|----------------------------------|--|--|--|
| Range of Receiving Frequency | | | | |
| Bandwidth | 5 MHz (10dB Return Loss) | | | |
| VSWR | 1.5 max | | | |
| Gain at Zenith | +2.0 dBic typ. | | | |
| Gain at 10° elevation | -4.0 dBic typ. | | | |
| Axial Ratio | 3.0 dB max | | | |
| Polarization | Right Hand Circular Polarization | | | |
| Operating Temperature | -40°C to +85°C | | | |
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*All electrical properties were tested with the antenna mounted on 35 x 35mm ground

plane





3. S11 Electrical Property

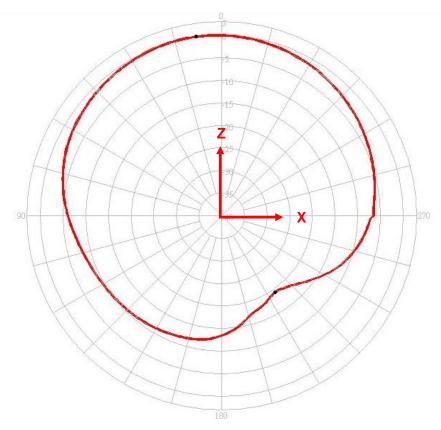


4. Radiation Pattern



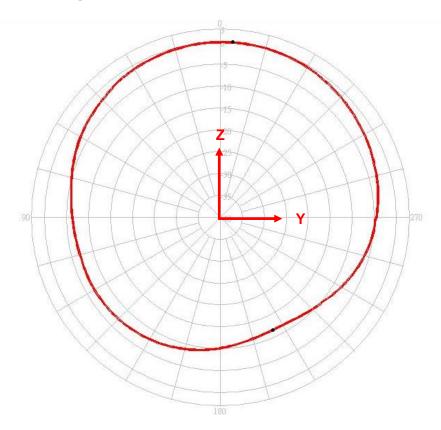
| Test Plane | Frequency | Peak Gain | Min. Gain | Average Gain | |
|------------|------------|---------------|----------------|--------------|--|
| XZ | 1575.42MHz | 0.0dBi @ 356° | -11.7dBi @ 205 | -3.8dBi | |
| YZ | 1575.42MHz | 0.0dBi @ 8° | -19.4dBi @ 215 | -4.4dBi | |

4.1.XZ Radiation Pattern



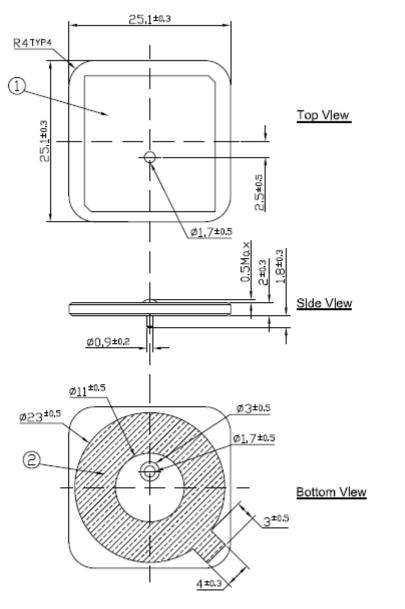


4.2.YZ Radiation pattern





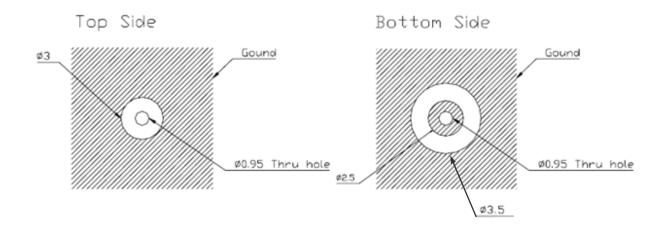
5. Mechanical Drawing



| | Name | Materia | Finish | QTY |
|---|-----------------------|------------|-------------|-----|
| 1 | Patch 25x25x2 | Ceramic | Clear | 1 |
| 2 | Double sided Adhesive | NITTO 5015 | White Liner | 1 |



6.PCB Footprint Recommendation





7. Packaging

- 50 pieces per tray.
- 4 trays per box = 200 pieces per box
- 4 box per carton = 800 piece per carton

