

SPECIFICATION

- Part No. : **GP.1575.25.2.A.02**
- Product Name : 2mm GPS/Galileo Patch Antenna
- Features : 25mm x 25mm x 2mm
RoHS Compliant



1. Introduction

This miniaturized ceramic GPS/GALILEO 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

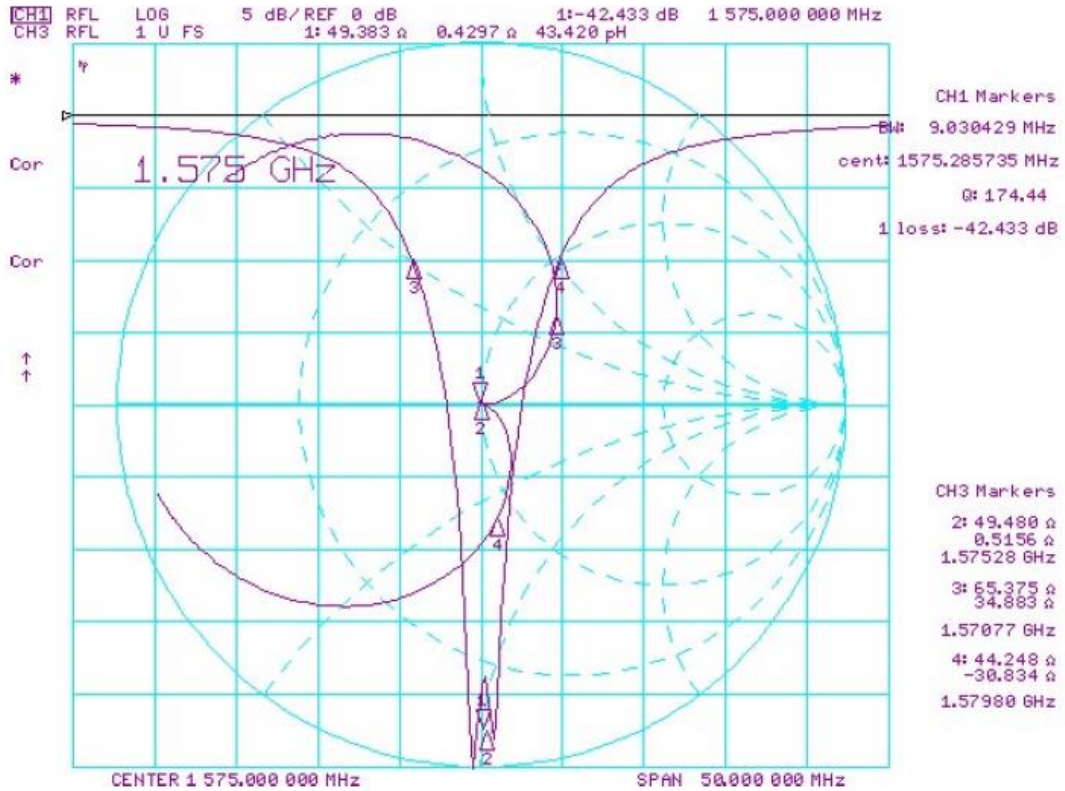
- The metal pattern on ceramic patch is silver electrode
- Please do not use corrosion gas (sulfur gas, chlorine gas) in the atmosphere.
- Please do not direct solder anything onto the silver electrode of the patch

2. Specification

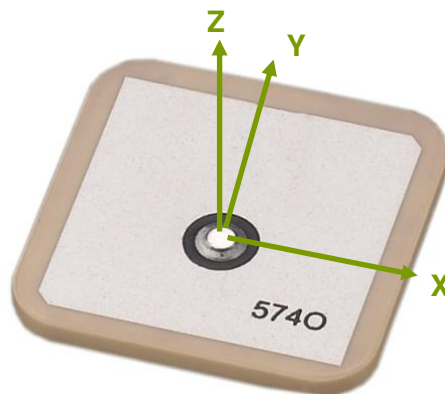
| Parameter | Specification |
|------------------------------|----------------------------------|
| Range of Receiving Frequency | 1575.42MHz ± 2MHz |
| Bandwidth | 5 MHz (10dB Return Loss) |
| VSWR | 1.5 max |
| Gain at Zenith | +2.0 dBic typ. |
| Gain at 10° elevation | -4.0 dBic typ. |
| Axial Ratio | 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

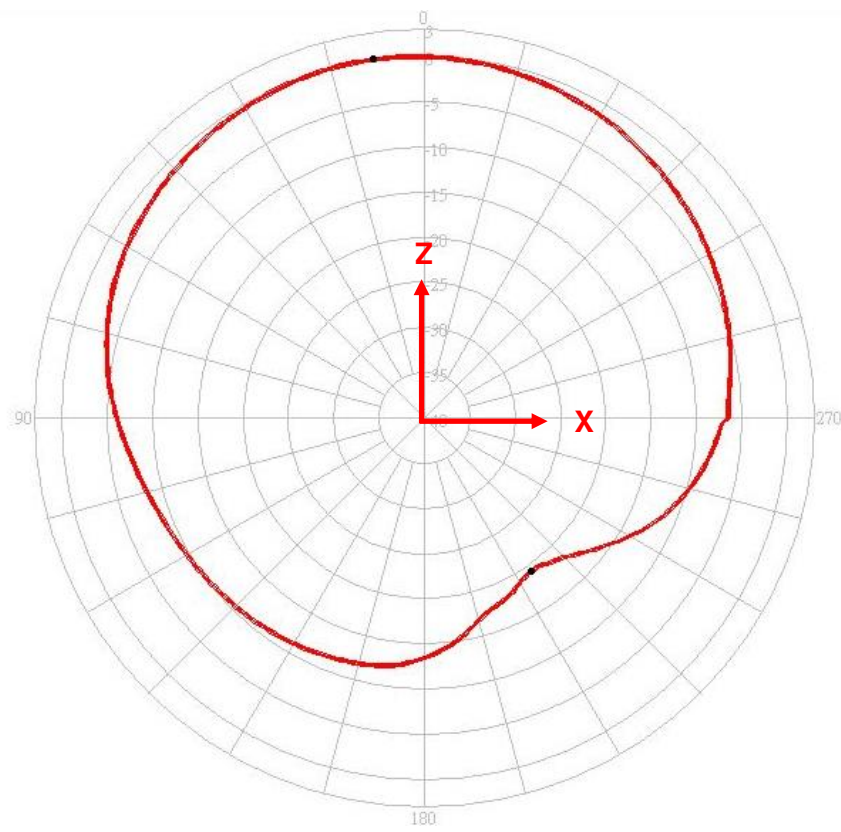


4. Radiation Pattern

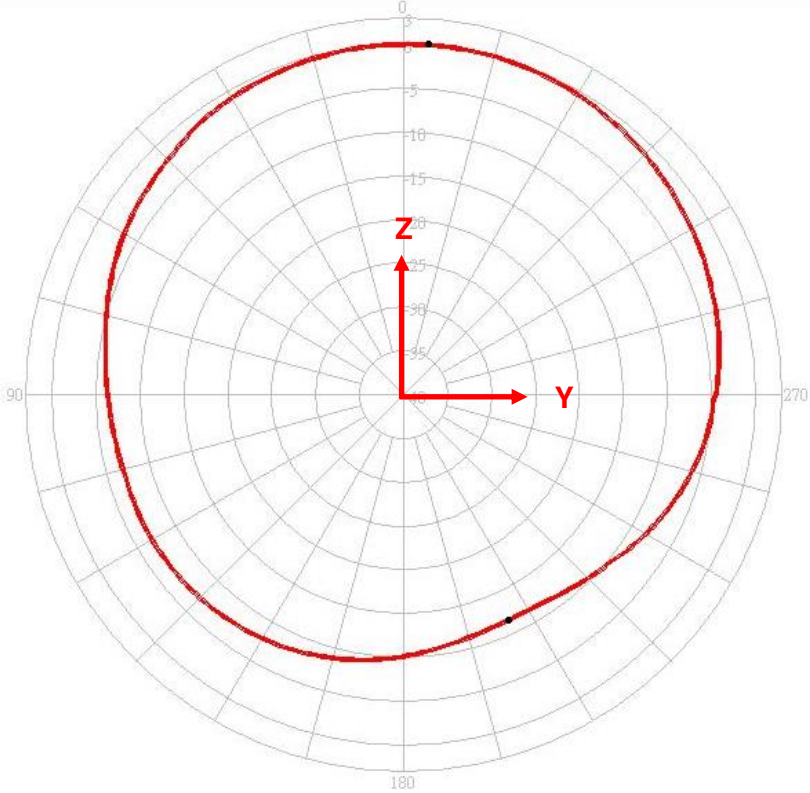


| Test Plane | Frequency | Peak Gain | Min. Gain | Average Gain |
|------------|------------|---------------|----------------|--------------|
| XZ | 1575.42MHz | 0.0dBi @ 356° | -11.7dBi @ 205 | -3.8dBi |
| YZ | 1575.42MHz | 0.0dBi @ 8° | -19.4dBi @ 215 | -4.4dBi |

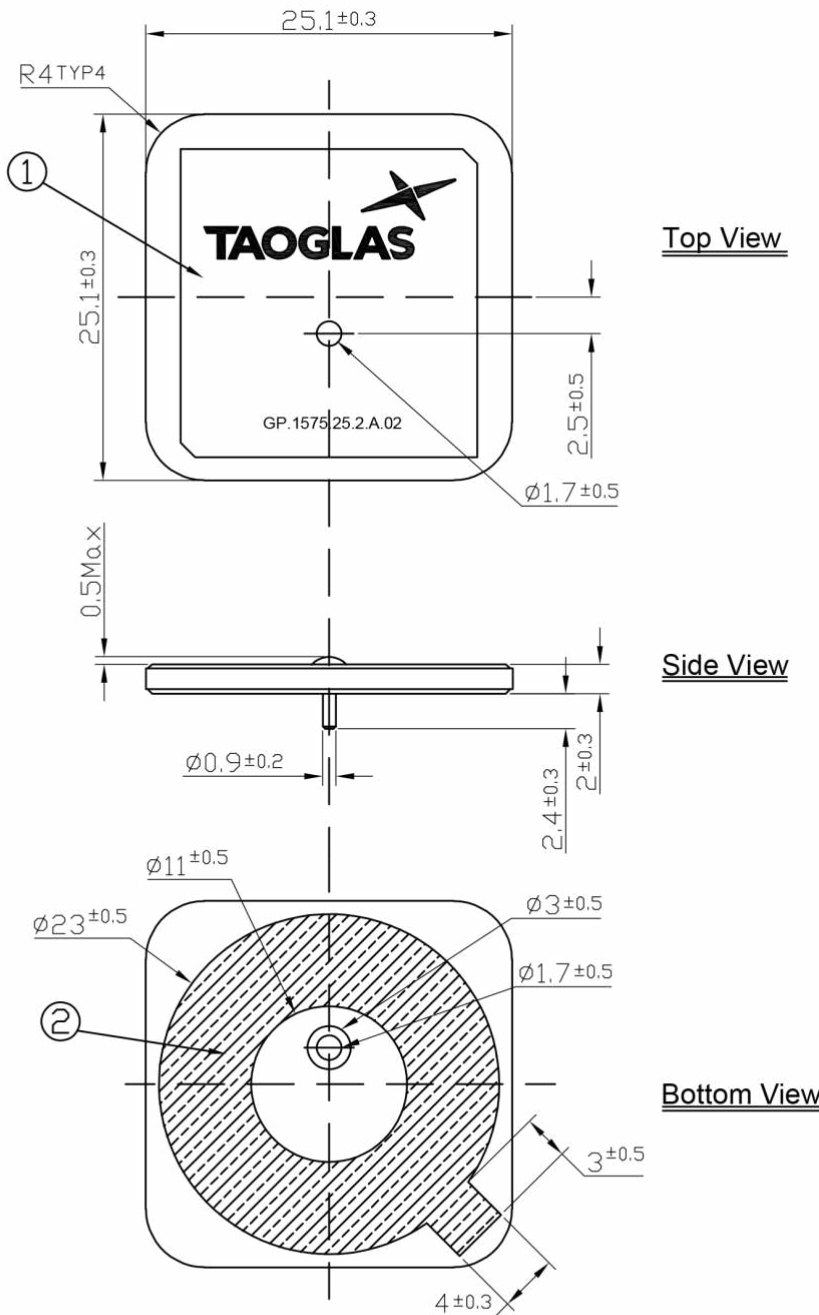
4.1.XZ Radiation Pattern



4.2.YZ Radiation pattern



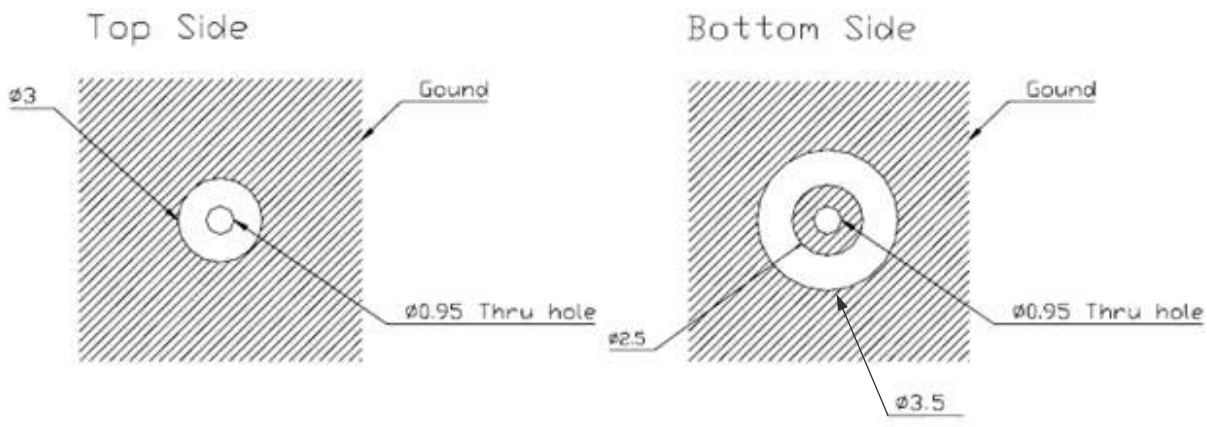
5. Mechanical Drawing



NOTES: 1. Double sided adhesive area 

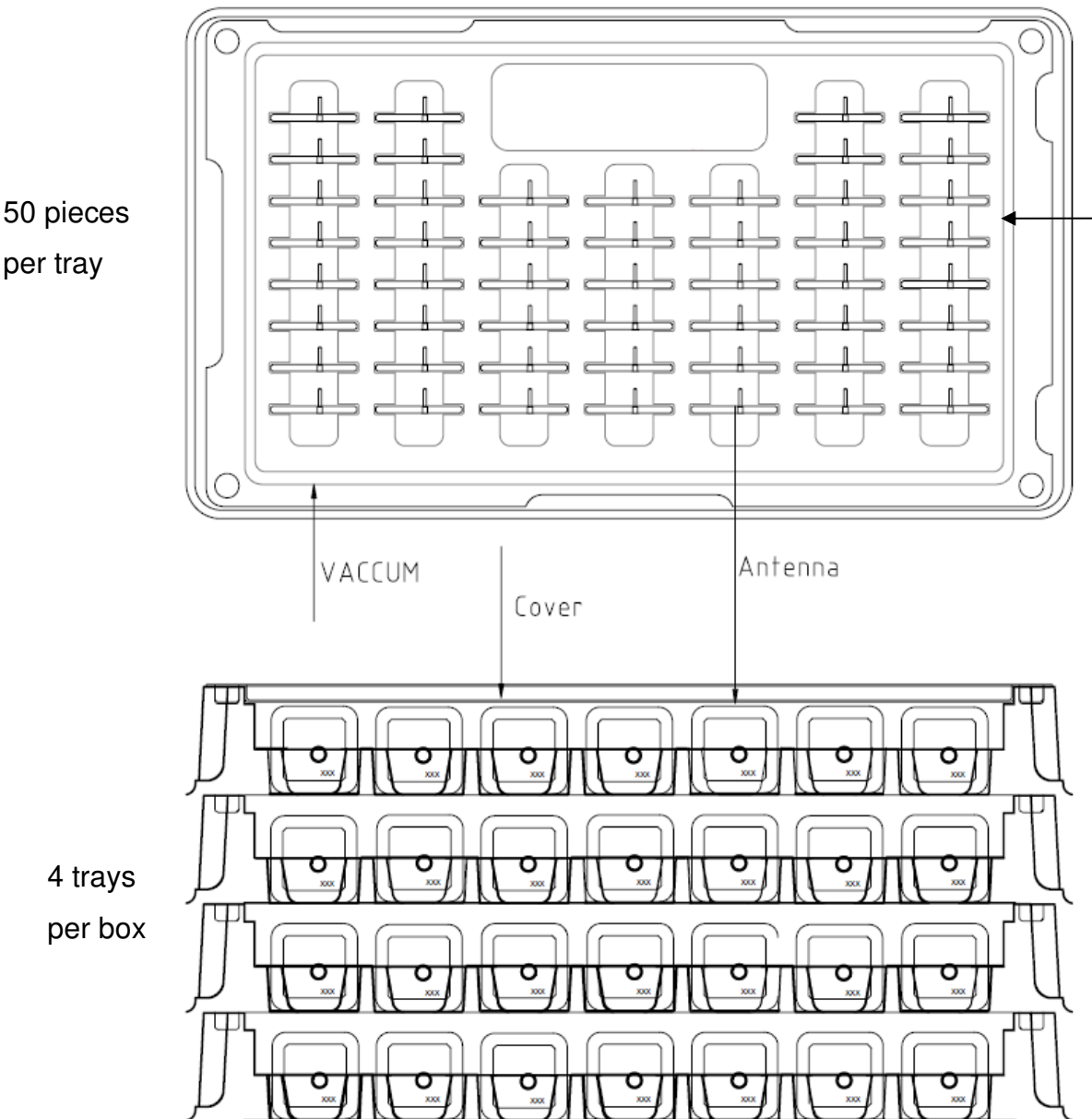
| | Name | P/N | Material | Finish | QTY |
|---|-----------------------|----------------|------------|--------------|-----|
| 1 | Patch 25x25x2 | 001013C070007A | Ceramic | Clear | 1 |
| 2 | Double sided Adhesive | 001012L060007A | NITTO 5015 | White Linter | 1 |

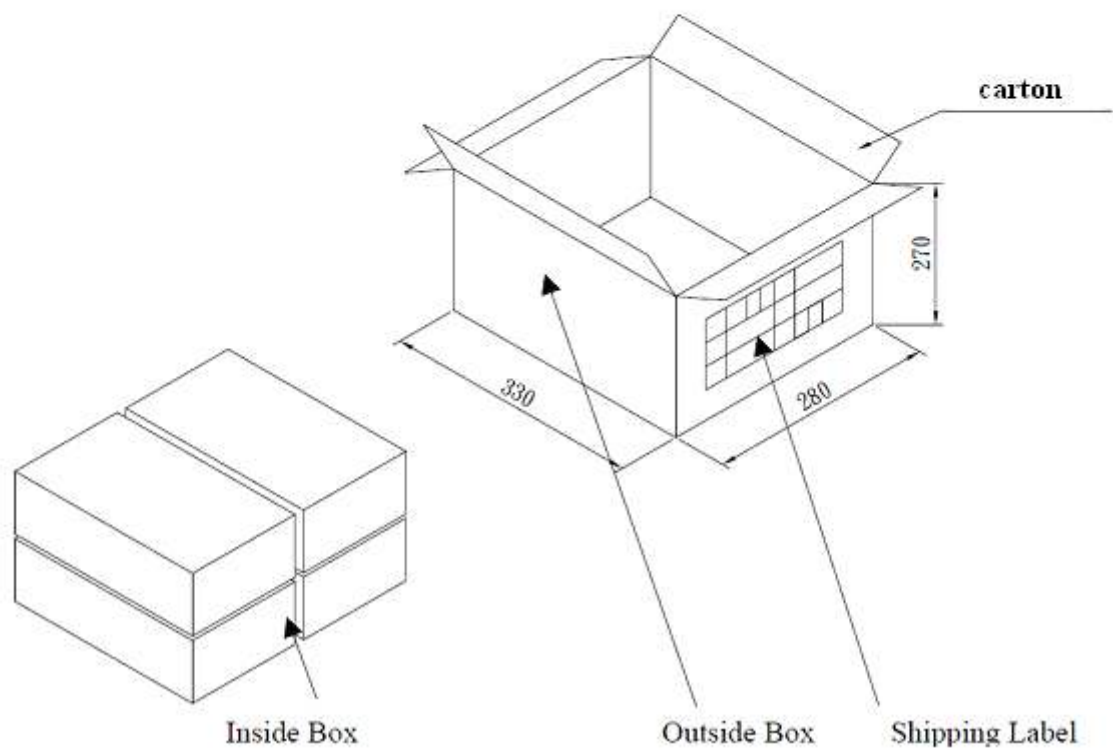
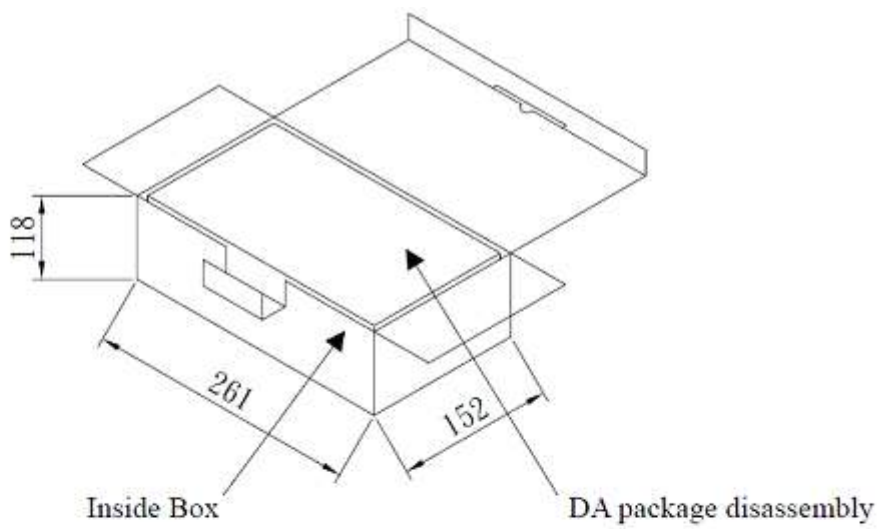
6. PCB Footprint Recommendation



7. Packaging

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





Unit : mm

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