

## 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



## I. Introduction

This miniaturized ceramic GPS patch antenna is based on smart *XtremeGain*<sup>™</sup> 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

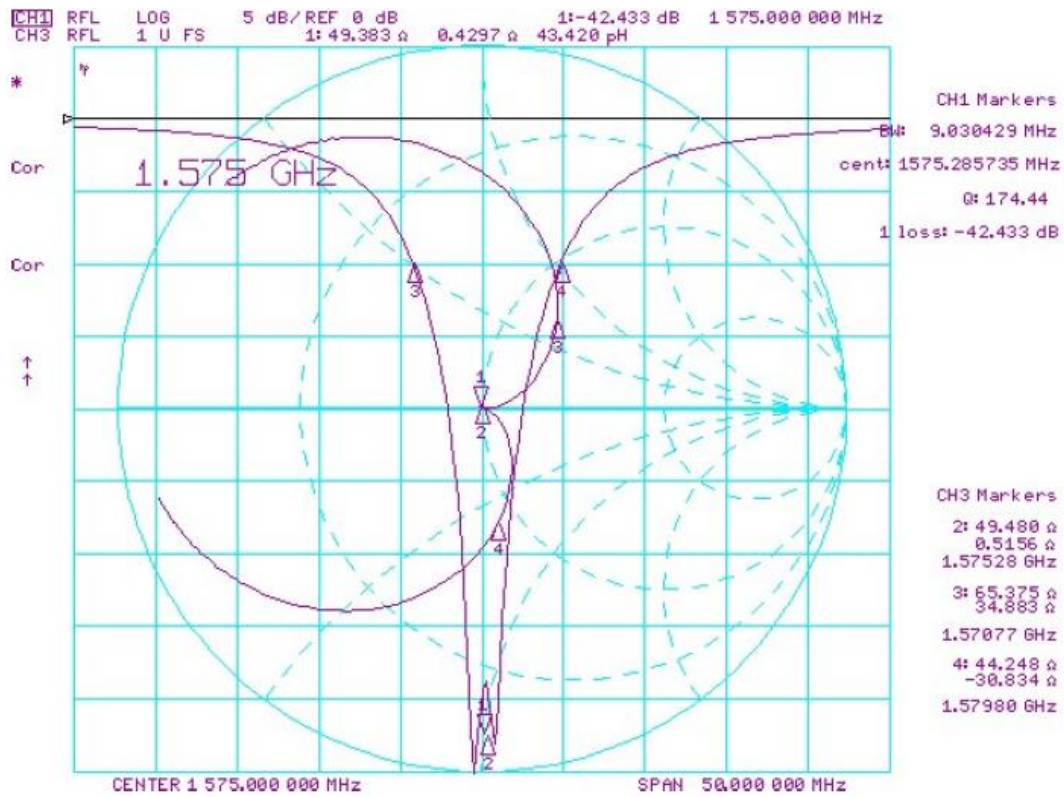
- The metal pattern on ceramic patch is silver electrode
- Please do not use corrosion gas (sulfur gas, chlorine gas) in the atmosphere.
- Please do not direct solder anything onto the silver electrode of the patch

## II. Specification

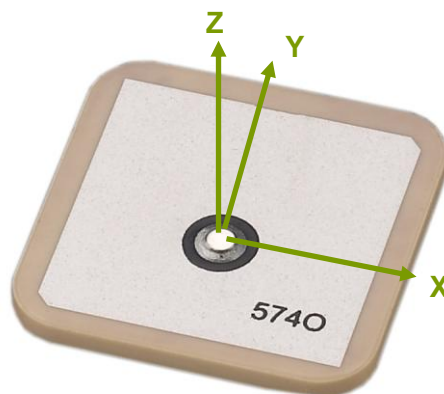
Parameter	Specification
Range of Receiving Frequency	1575.42MHz ± 2MHz
Bandwidth	5 MHz (10dB Return Loss)
VSWR	1.5 max
Gain at Zenith	+2.0 dBic typ.
Gain at 10° elevation	-4.0 dBic typ.
Axial Ratio	3.0 dB max
Polarization	Right Hand Circular Polarization
Operating Temperature	-40°C to +85°C
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\*All electrical properties were tested with the antenna mounted on 35 x 35mm ground plane

### III. S11 Electrical Property

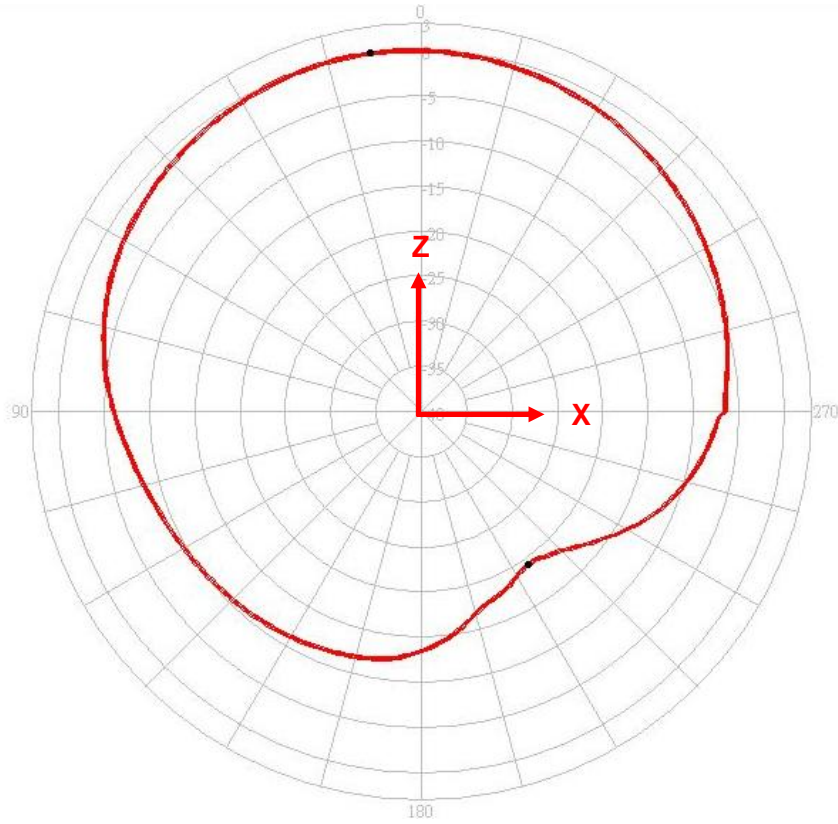


### IV. Radiation Pattern

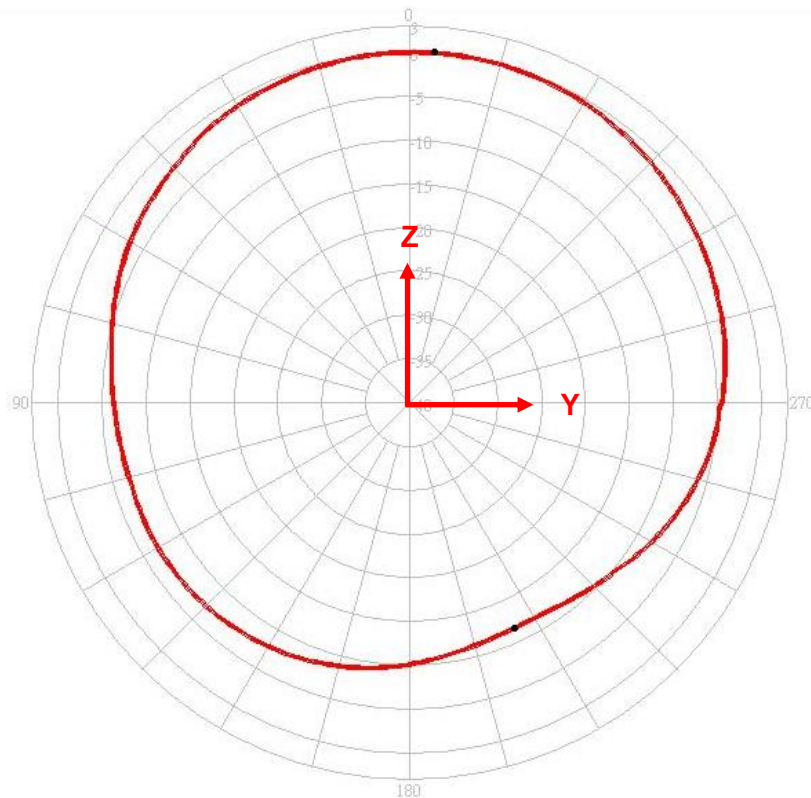


Test Plane	Frequency	Peak Gain	Min. Gain	Average Gain
XZ	1575.42MHz	0.0dBi @ 356°	-11.7dBi @ 205°	-3.8dBi
YZ	1575.42MHz	0.0dBi @ 8°	-19.4dBi @ 215°	-4.4dBi

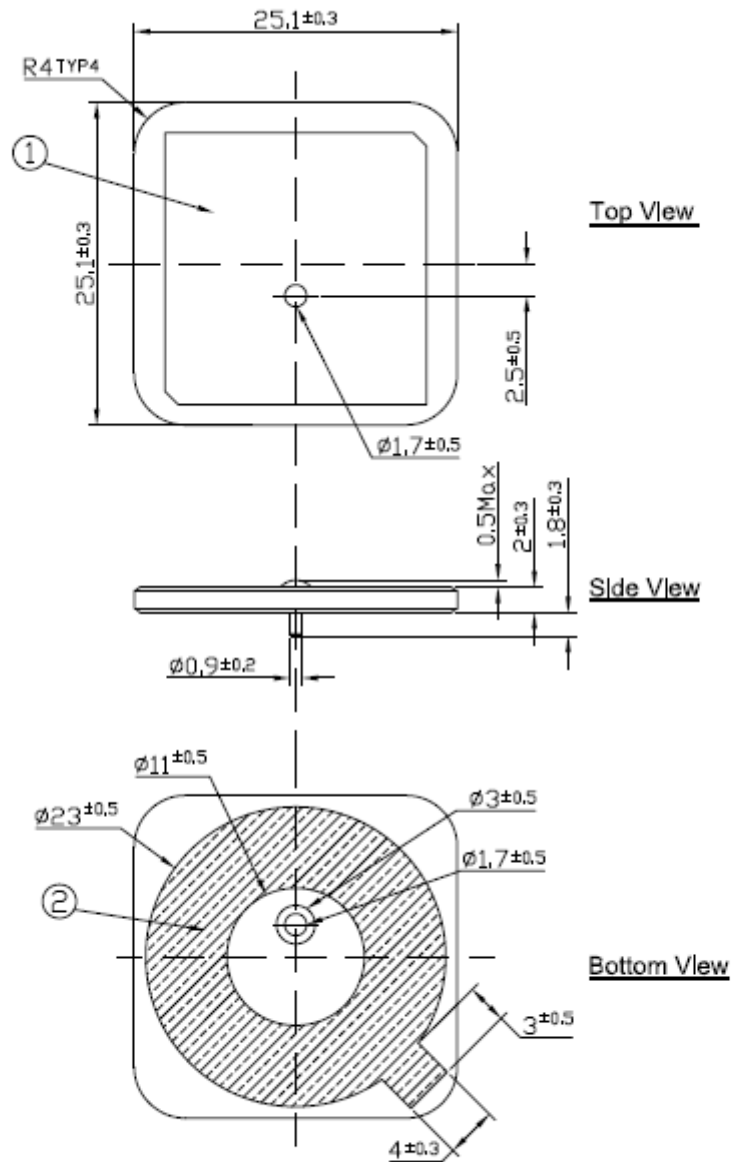
### IV.1. XZ Radiation Pattern



### IV.2. YZ Radiation pattern

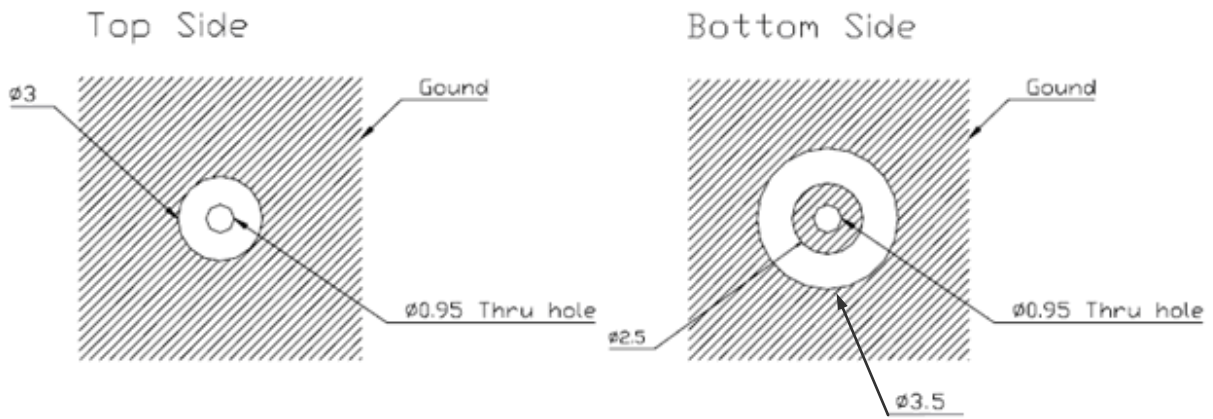


## V. Mechanical Drawing



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

## VI. PCB Footprint Recommendation

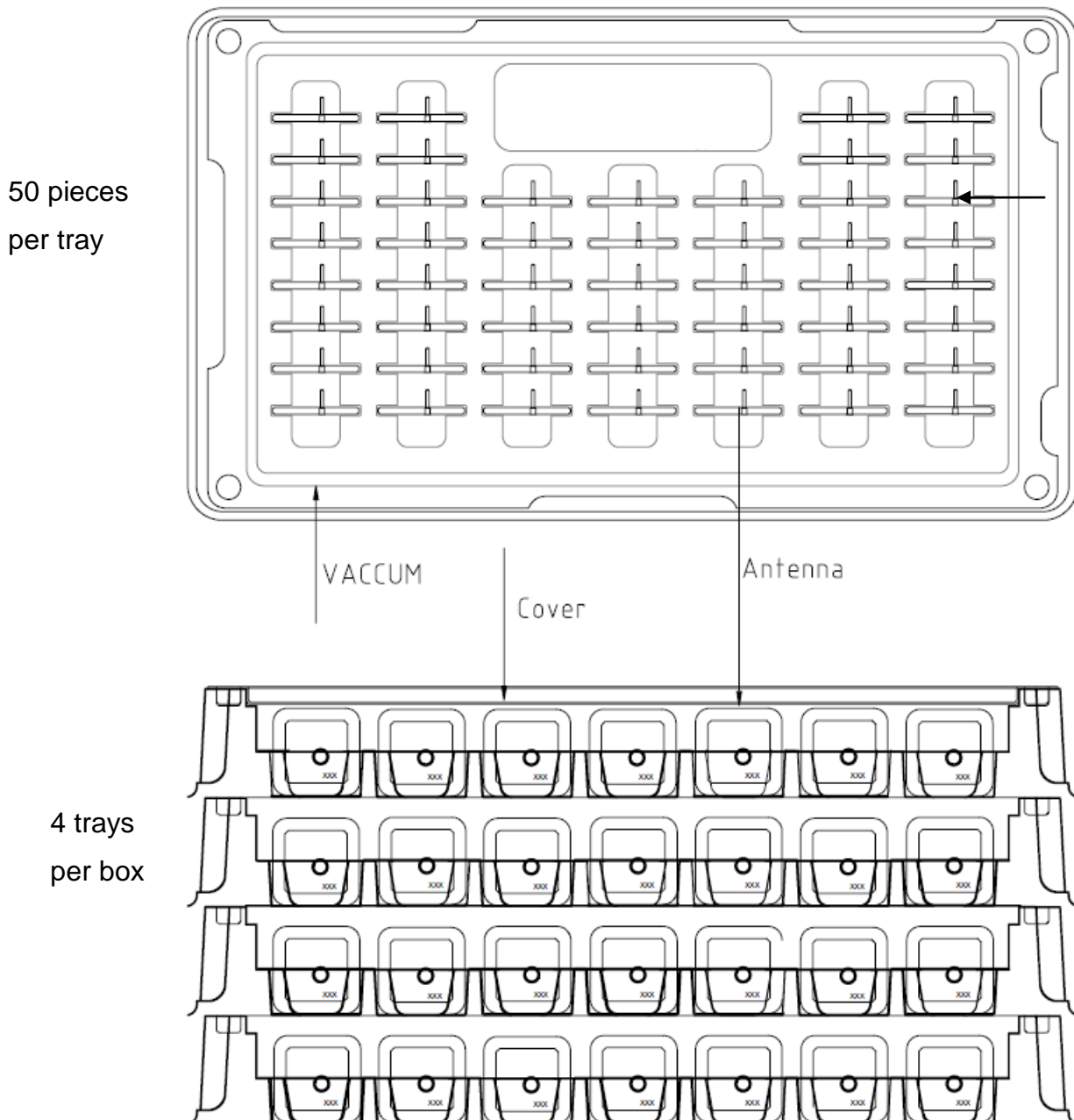


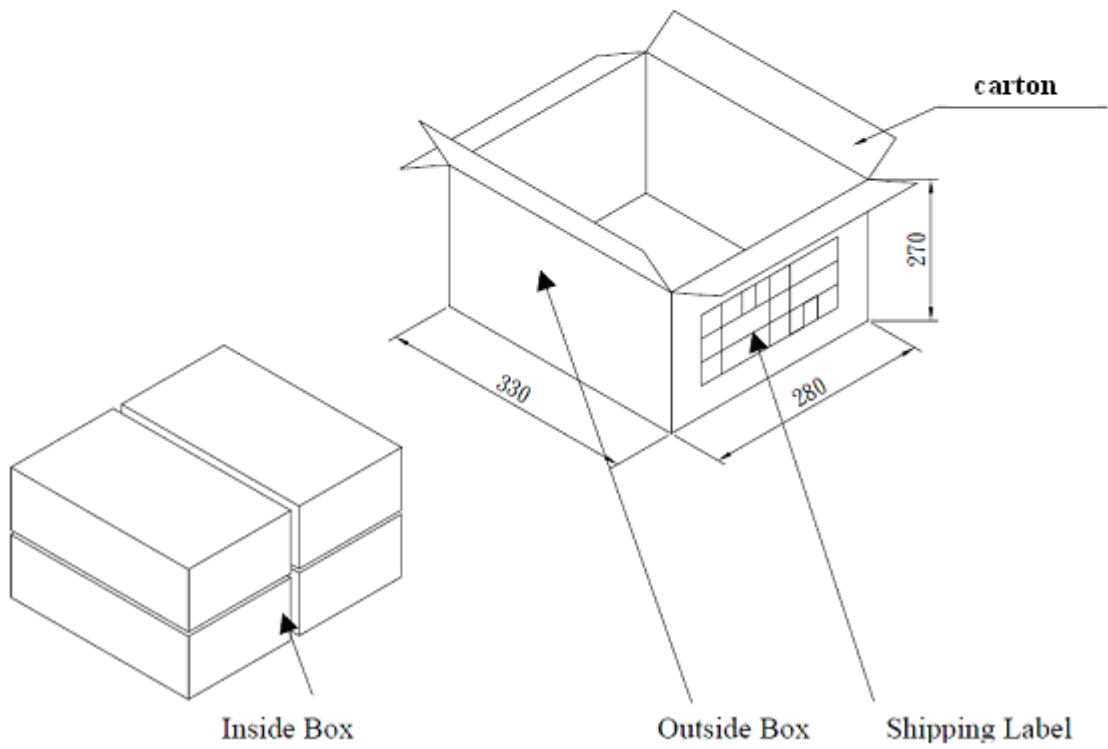
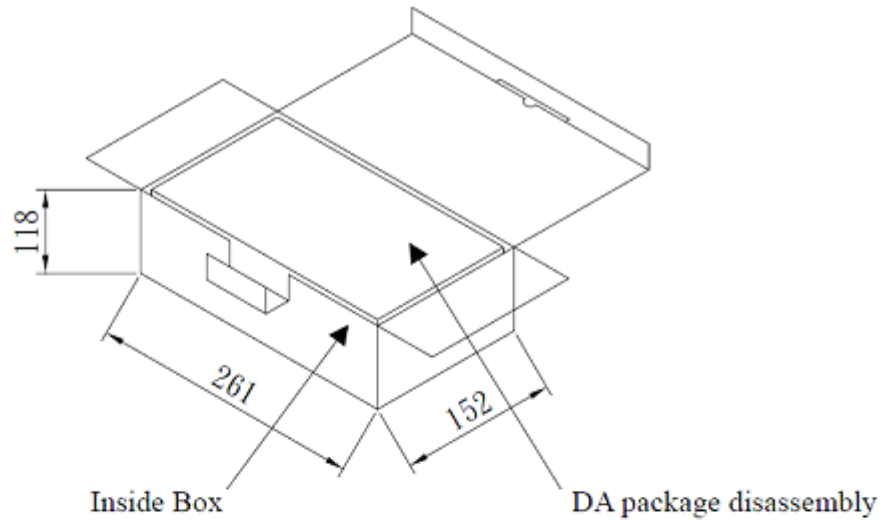
## VII. Packaging

50 pieces per tray.

4 trays per box = 200 pieces per box

4 box per carton = 800 piece per carton





Unit : mm