

SPECIFICATION

Part No. : GP.1575.18.2.A.02

Product Name : 2mm thick GPS/Galileo Patch Antenna,
1575MHz

Features : 18mm*18mm*2mm
Halogen Free
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.

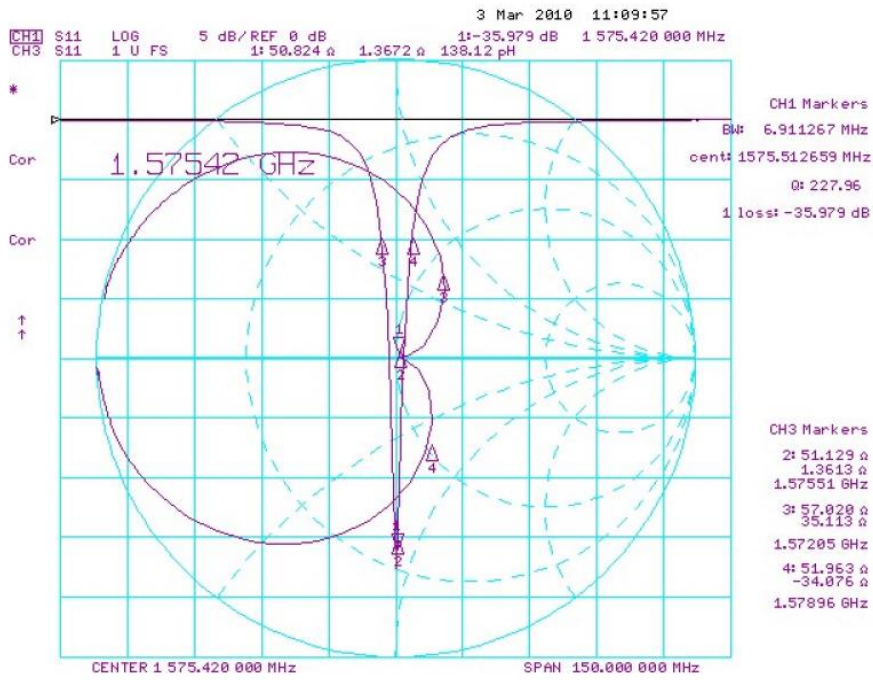
2. Specification Table

Original Patch Specification tested on 50*50mm ground plane

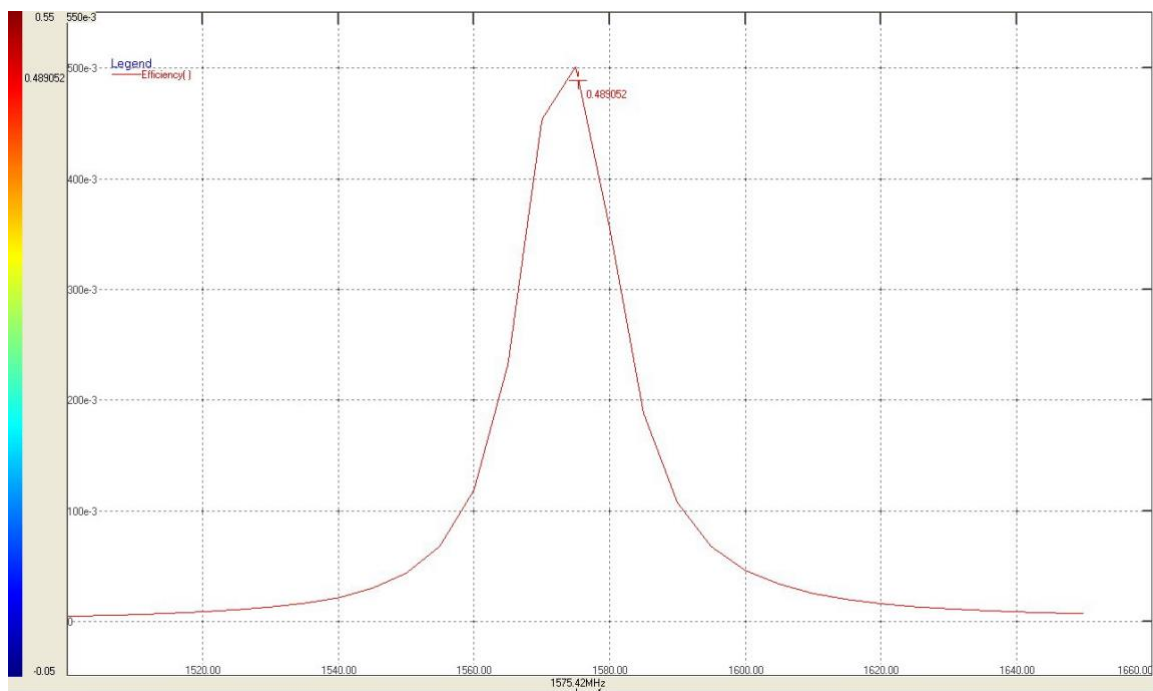
No	Parameter	Specification
1	Center Frequency	1575MHz +/- 3MHz
2	Impedance	50Ω
3	Bandwidth	5 MHz min Return Loss <-10dB
4	VSWR	1.5 max
5	Gain toward Zenith	-0.5 dBic typ.
6	Gain at 10°Elevation	-----
7	Axial Ratio	3dB Max.
8	Polarization	Right Hand Circular Polarization
9	Frequency Temperature Coefficient (τf)	0 ± 20ppm/°C
10	Operating Temperature	-40°C to +85°C

3. Electrical Specification

Smith Chart

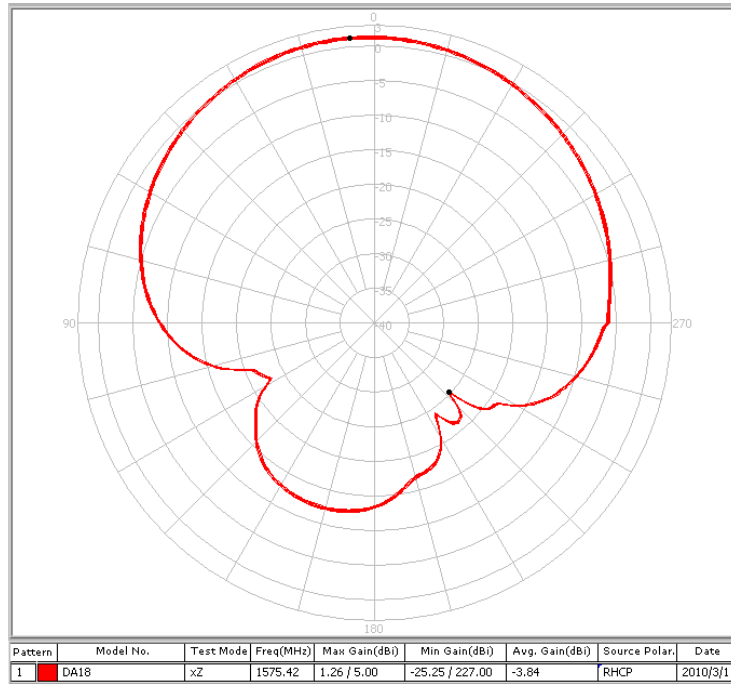


Efficiency

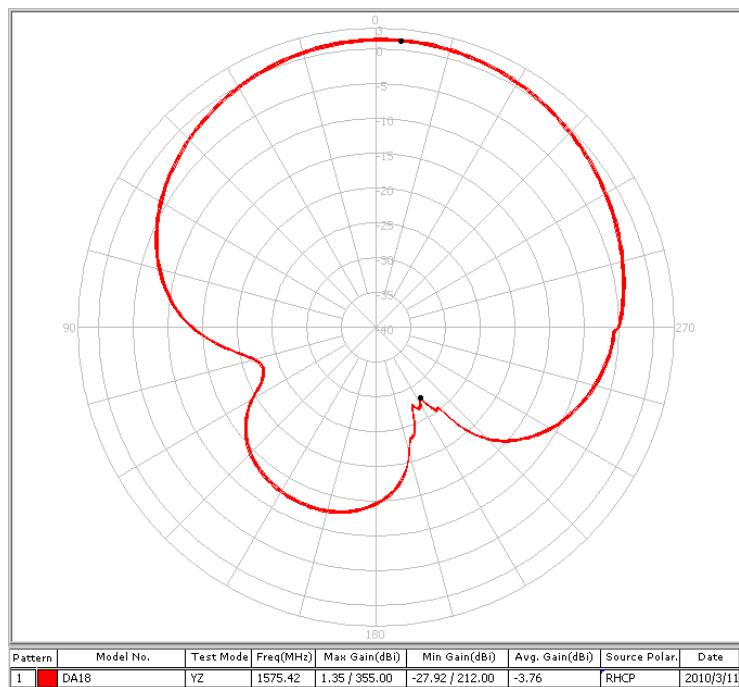


4. 2D Radiation Patterns

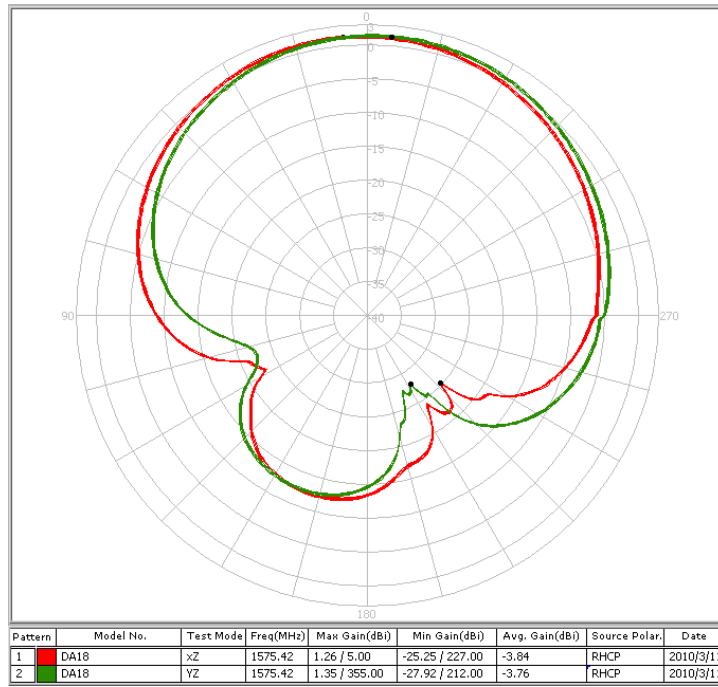
XZ Plane Radiation



YZ Plane Radiation

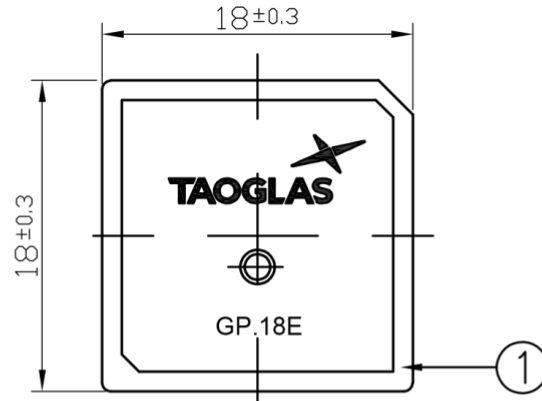


XZ Plane Radiation

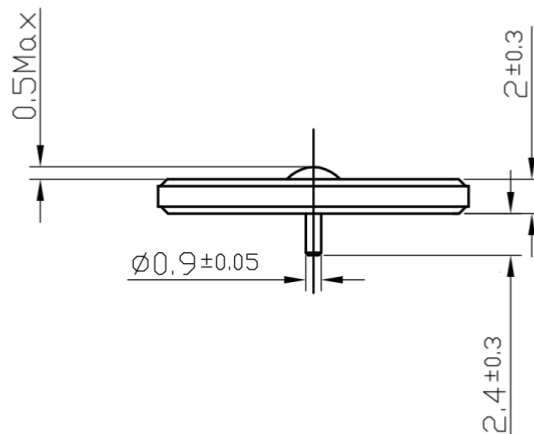


5. Mechanical Drawing (Unit: mm)

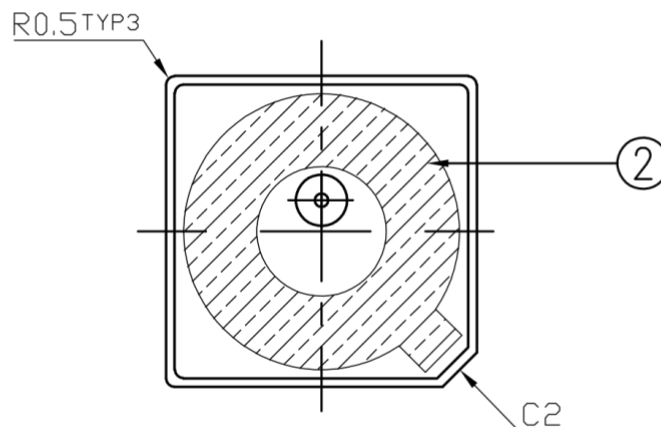
Top View



Side View



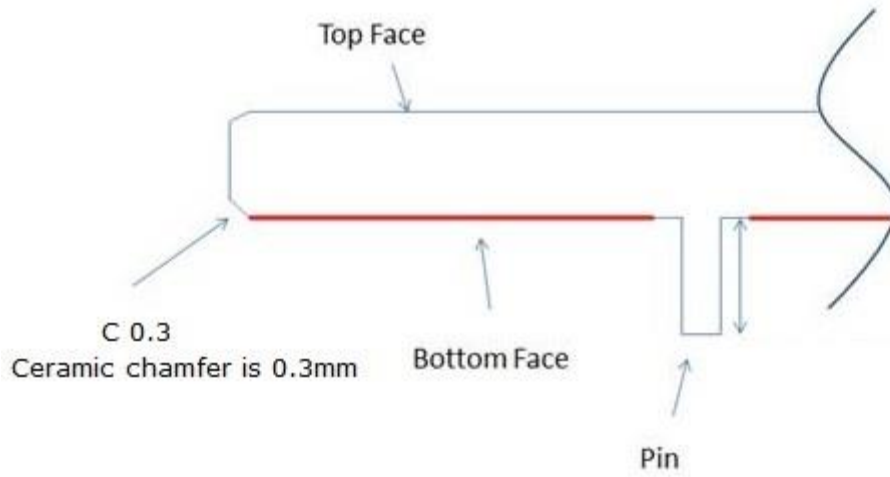
Bottom View



NOTES: 1. Double sided adhesive area. 

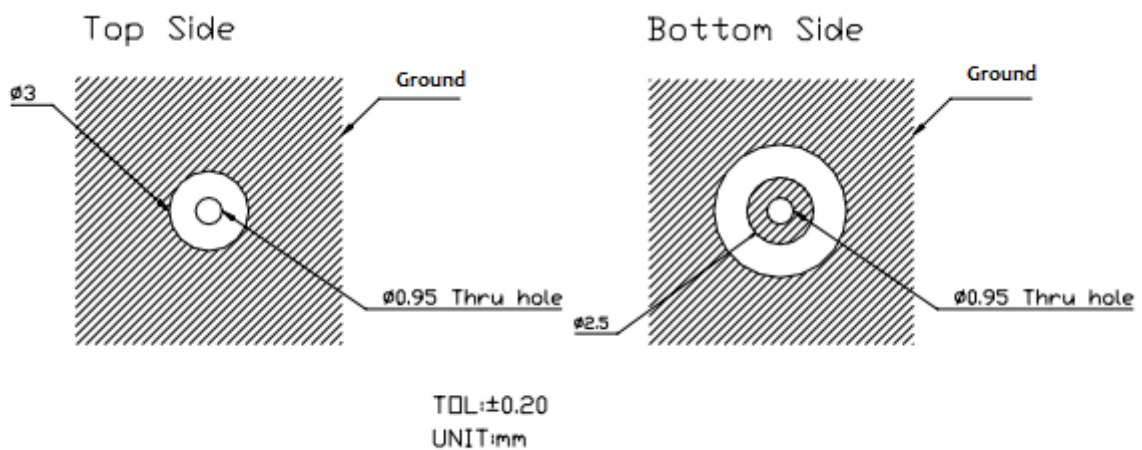
	Name	P/N	Material	Finish	QTY
1	Patch	001513C110007A	Ceramic	Clear	1
2	Double sided Adhesive	001013C050007A	NITTO 5015	White Linter	1

Adhesive Thickness



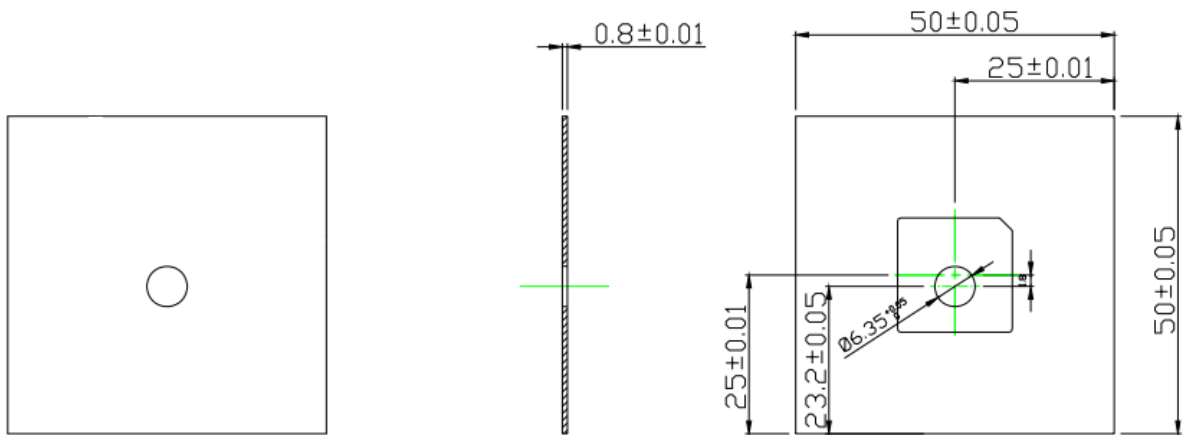
Red Line shows the adhesive without Liner - thickness 0.08~0.1mm

Layout Dimension



*Note Layout Dimensions may be affected by the thickness of the PCB

6. Test Jig and Dimension



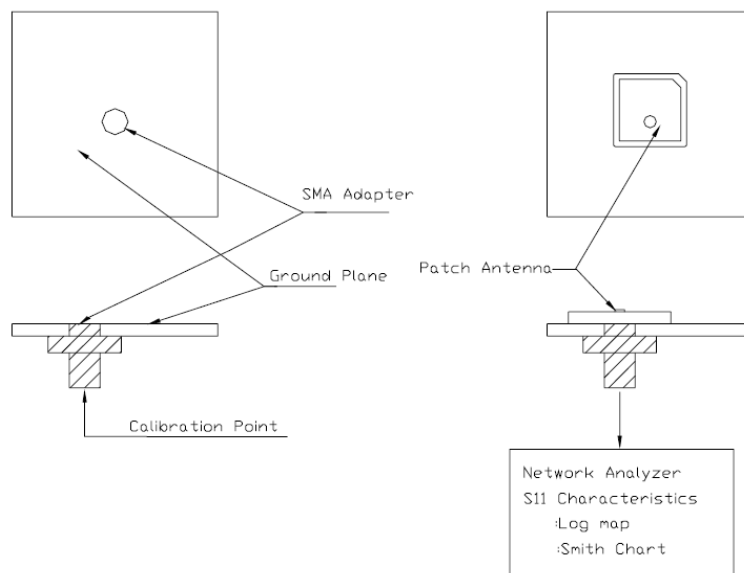
BOTTOM-SIDE

TOP-SIDE

Test Fixture Antenna Setup and Measurements

Test Fixture

Antenna Setup & Measurements

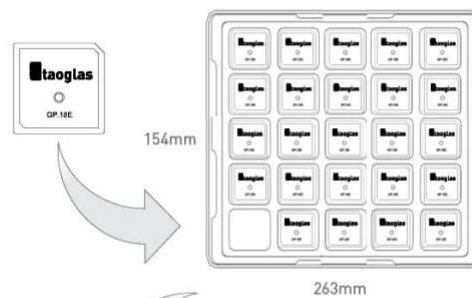


7. Packaging

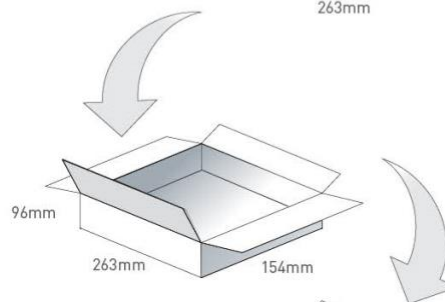
GP.1575.18.2.A.02

Packaging Specifications

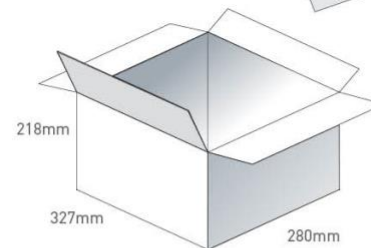
25 pcs GP.1575.18.2.A.02 per tray
Tray Dimensions - 263*154mm
Total Weight - 143g



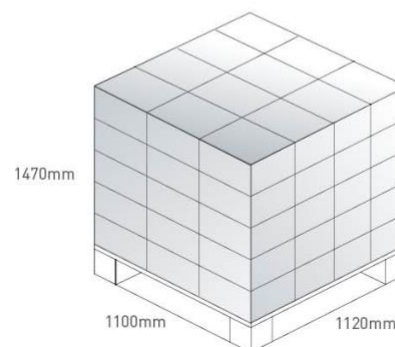
8 trays / 200 pcs per small box
Box Dimensions - 263*154*96mm
Weight - 1.1Kg



4 boxes / 800 pcs per carton
Carton Dimensions - 327*280*218mm
Weight - 4.6Kg



Pallet Dimensions 1100mm*1120mm*1470mm
72 Cartons per pallet
12 Cartons per layer
6 Layers



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