

## 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.

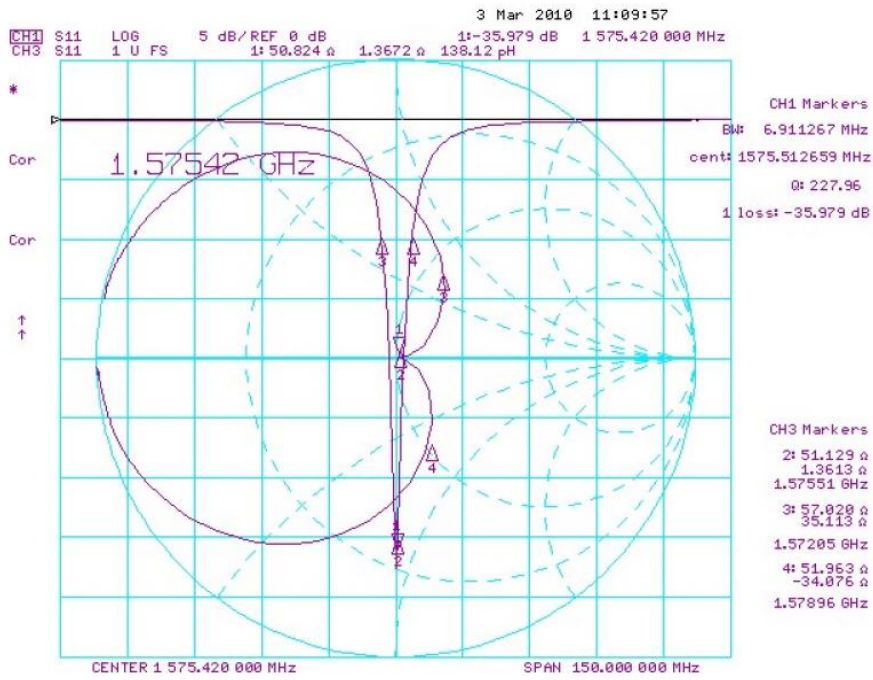
## 2. Specification Table

Original Patch Specification tested on 50\*50mm ground plane

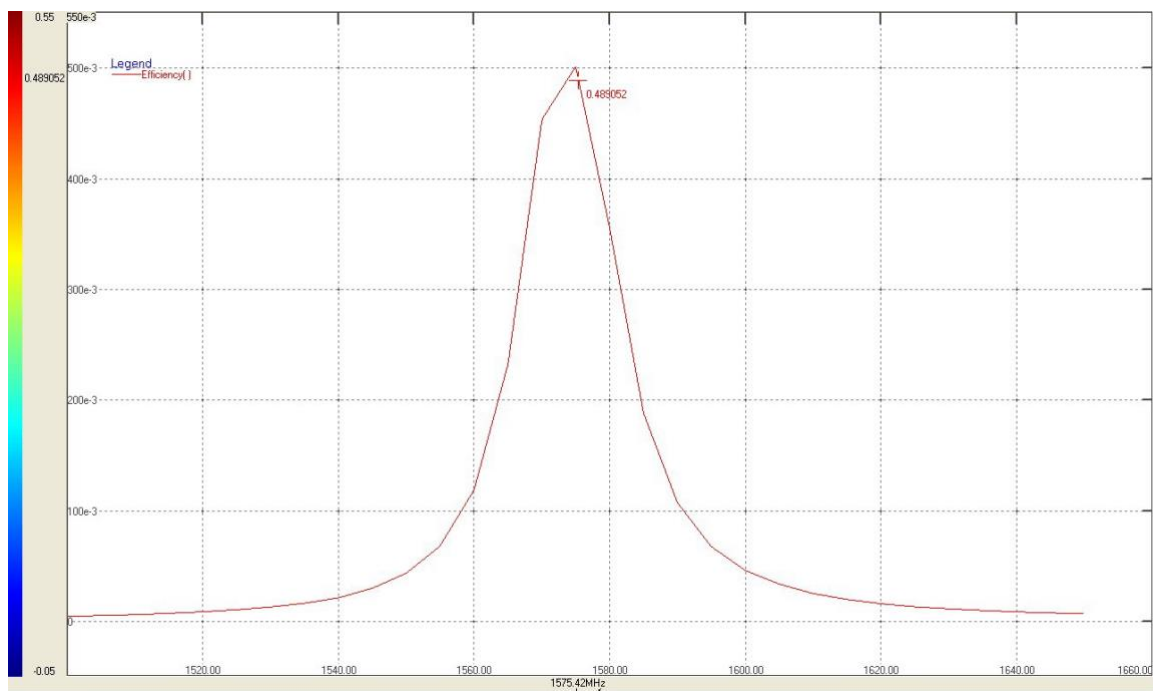
No	Parameter	Specification
1	Center Frequency	1575MHz +/- 3MHz
2	Impedance	50Ω
3	Bandwidth	5 MHz min Return Loss <-10dB
4	VSWR	1.5 max
5	Gain toward Zenith	-0.5 dBic typ.
6	Gain at 10°Elevation	-----
7	Axial Ratio	3dB Max.
8	Polarization	Right Hand Circular Polarization
9	Frequency Temperature Coefficient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

### 3. Electrical Specification

#### Smith Chart

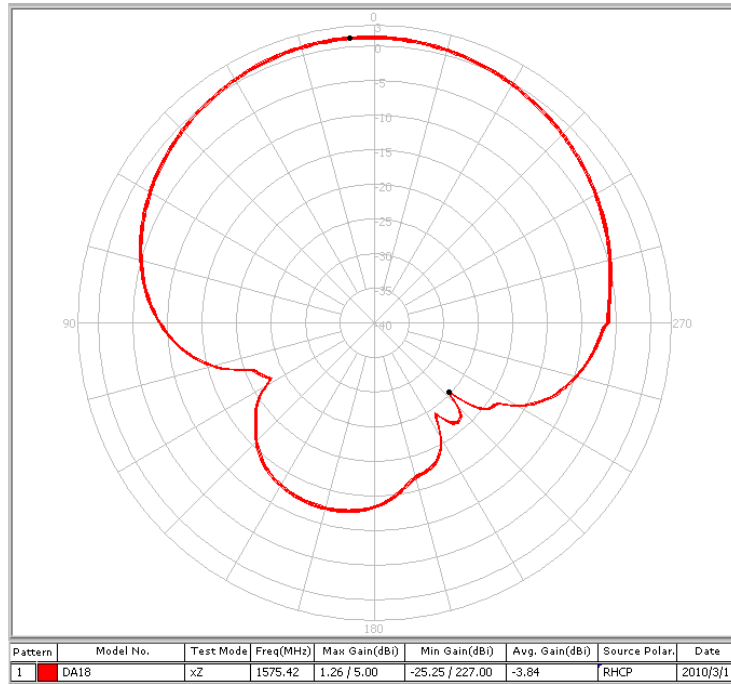


#### Efficiency

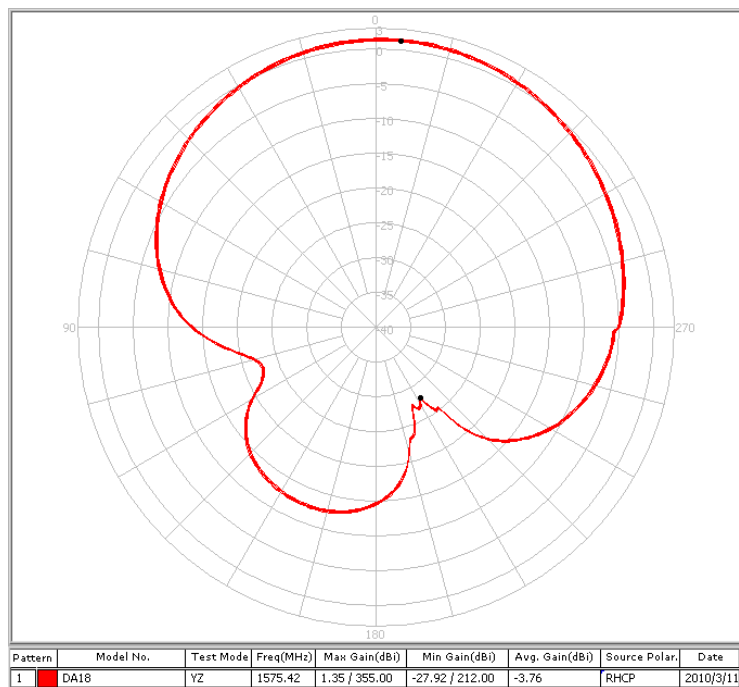


## 4. 2D Radiation Patterns

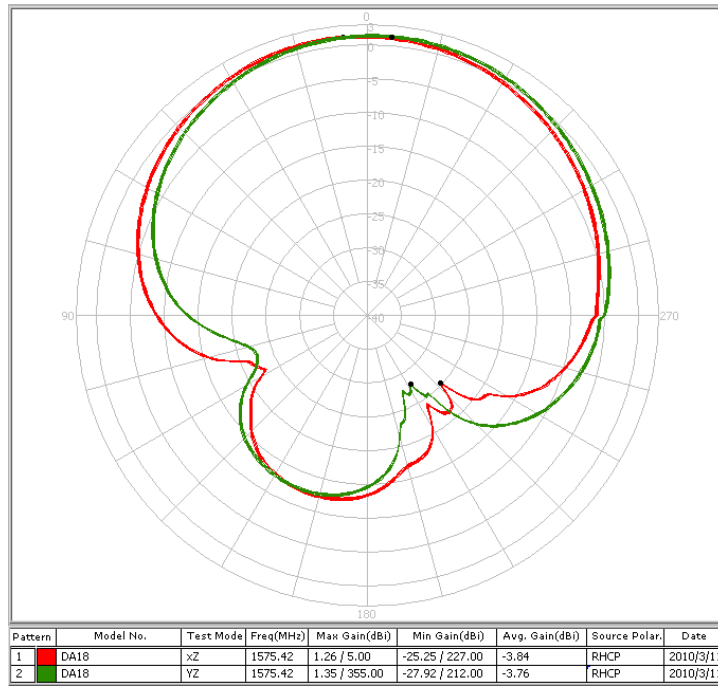
### XZ Plane Radiation



### YZ Plane Radiation

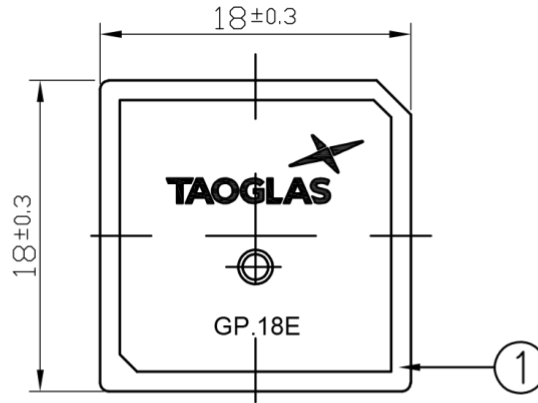


## XZ Plane Radiation

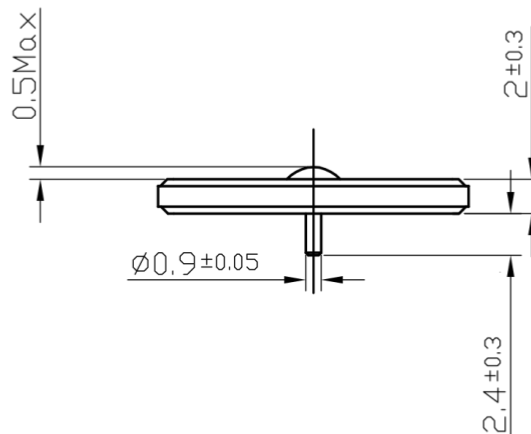


## 5. Mechanical Drawing (Unit: mm)

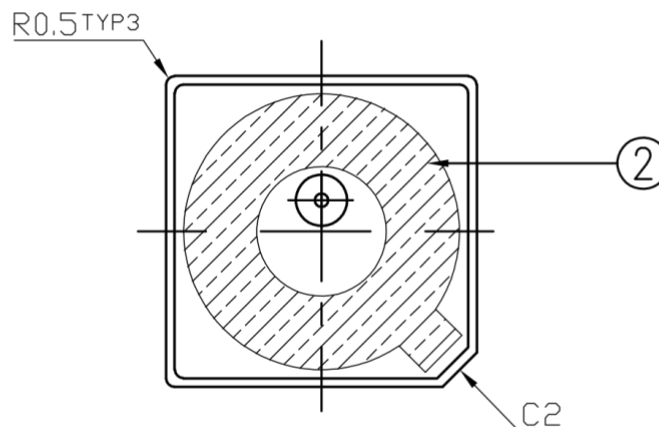
Top View



Side View



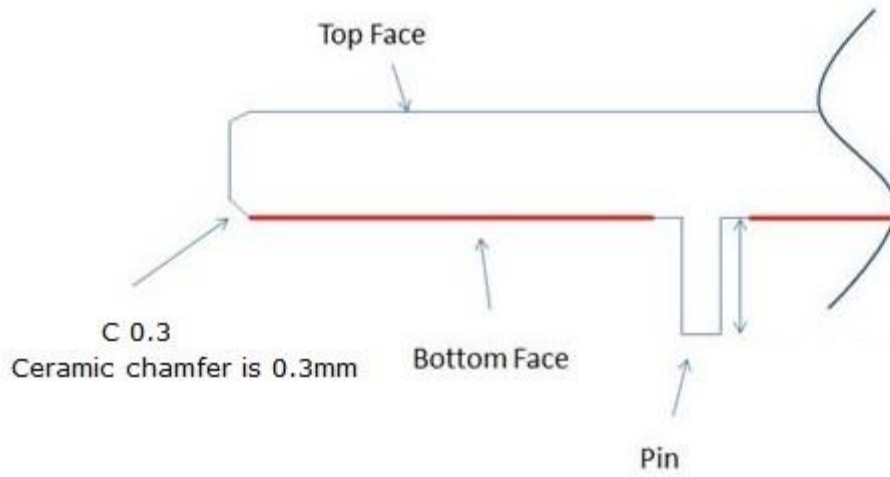
Bottom View



NOTES: 1. Double sided adhesive area. 

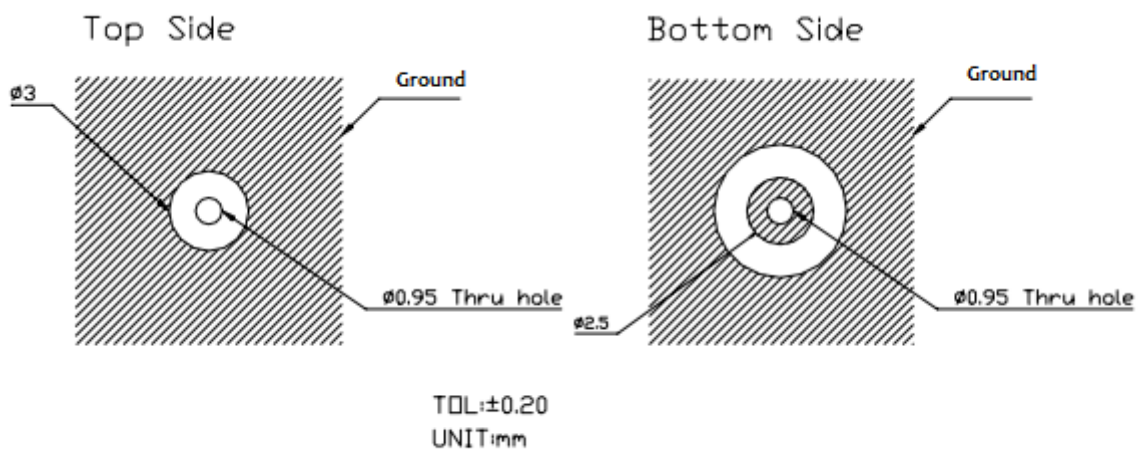
	Name	P/N	Material	Finish	QTY
1	Patch	001513C110007A	Ceramic	Clear	1
2	Double sided Adhesive	001013C050007A	NITTO 5015	White Linter	1

## Adhesive Thickness



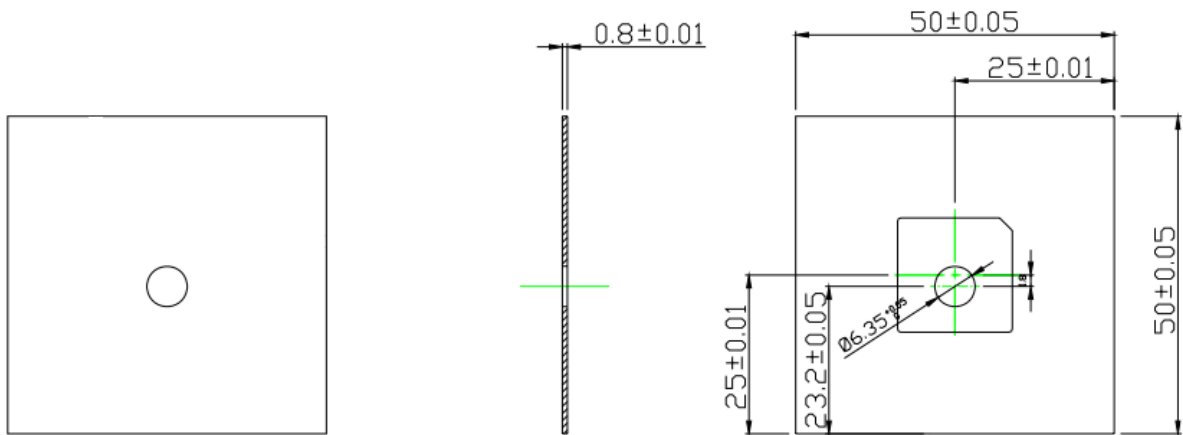
Red Line shows the adhesive without Liner - thickness 0.08~0.1mm

## 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

