

## SPECIFICATION

PART NO.	<b>GP.1575.15.4.B.02</b>
SPEC NO.	<b>GP.15A</b>
PRODUCT NAME	15mm*15mm*4mm 1575mhz GPS Patch Antenna <b>RoHS Compliant</b>



## 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.

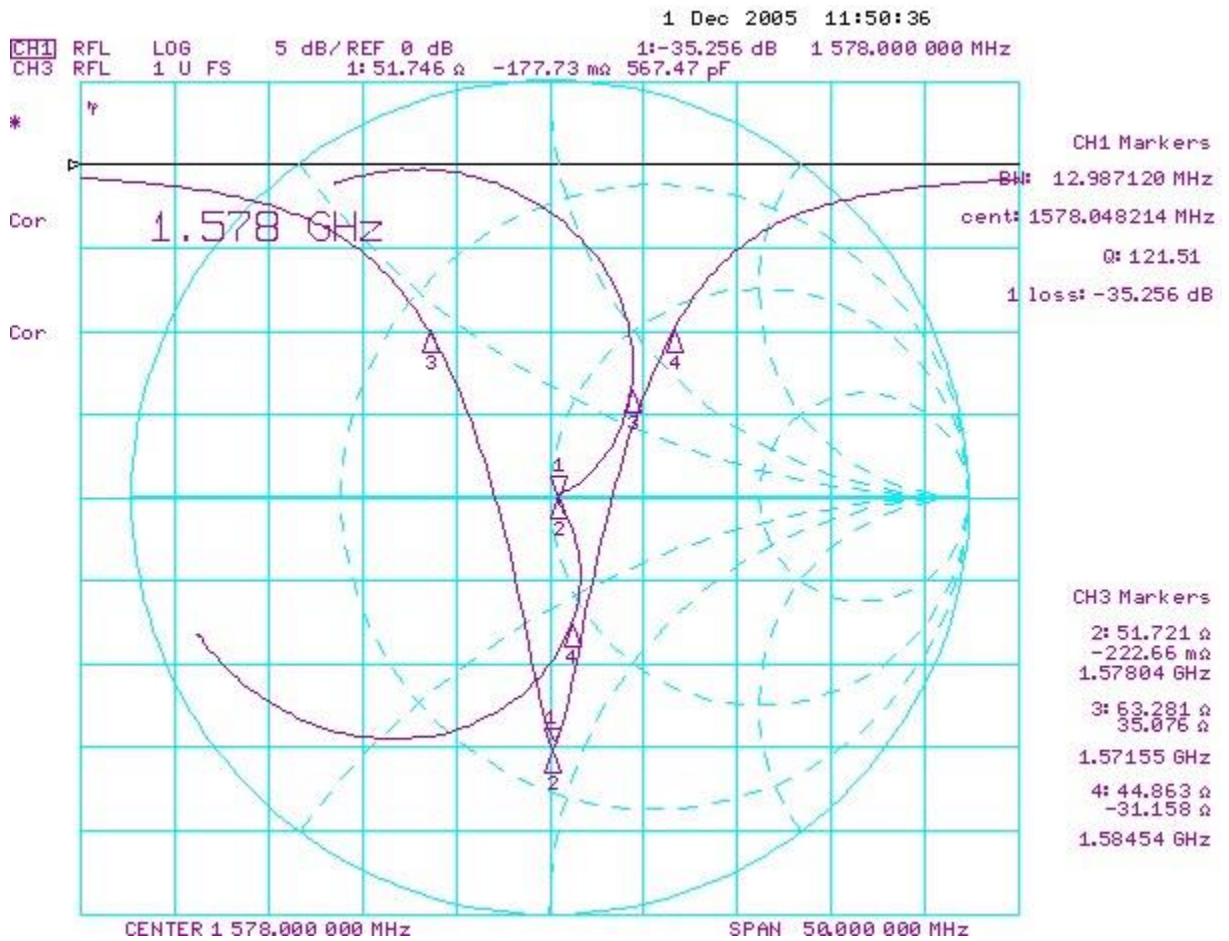
## 2. Specification Table

No	Parameter	Specification	Notes
1	Range of Receiving Frequency	1575.42 MHz $\pm$ 1.023 MHz	
2	Center Frequency	1578 $\pm$ 2MHz	With 66x52.5mm ground plane
3	Bandwidth	6 MHz min	Return Loss <-10 dB
4	VSWR	1.5 max	Center Frequency
5	Gain at Zenith	1.0 dBic typ.	
6	Gain at 10°elevation	- -	
7	Axial Ratio	3 dB max	
8	Polarization	RHCP	
9	Impedance	50 Ohms	
10	Frequency Temperature Coefficient ( $\tau_f$ )	0 $\pm$ 20ppm / °C	-40°C to +85°C
11	Operating Temperature	-40°C to +85°C	

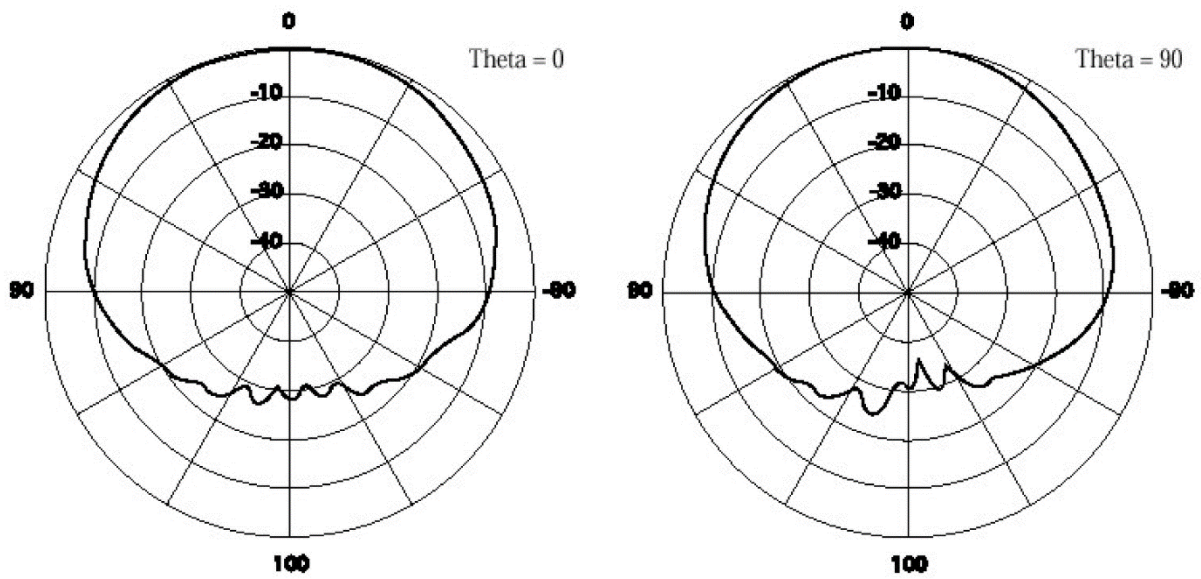
**Table 1**

### 3. Electrical Specification

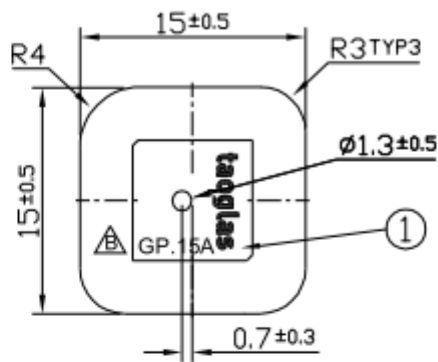
#### 3.1 Smith Chart



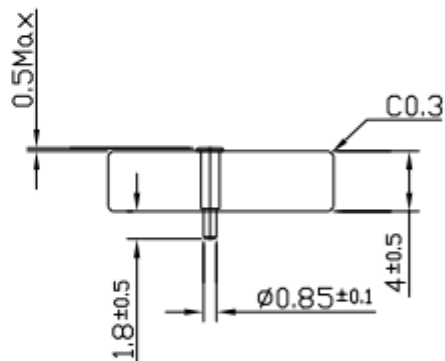
## 4. Antenna Gain Chart (Spin Dipole Method)



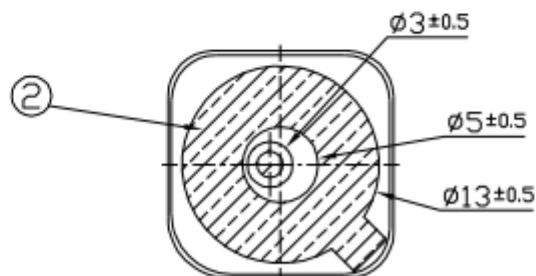
## 5. Mechanical Drawing



Top View



Side View



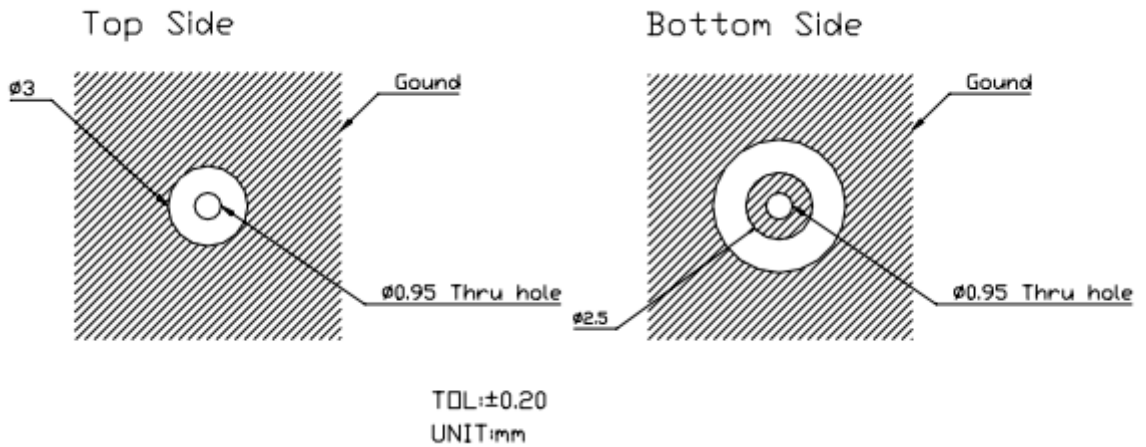
Bottom View

	Name	Material	Finish	QTY
1	Patch 15x15x4	Ceramic	Clear	1
2	Double sided Adhesive	Tesa 4972	White Liner	1

NOTES:

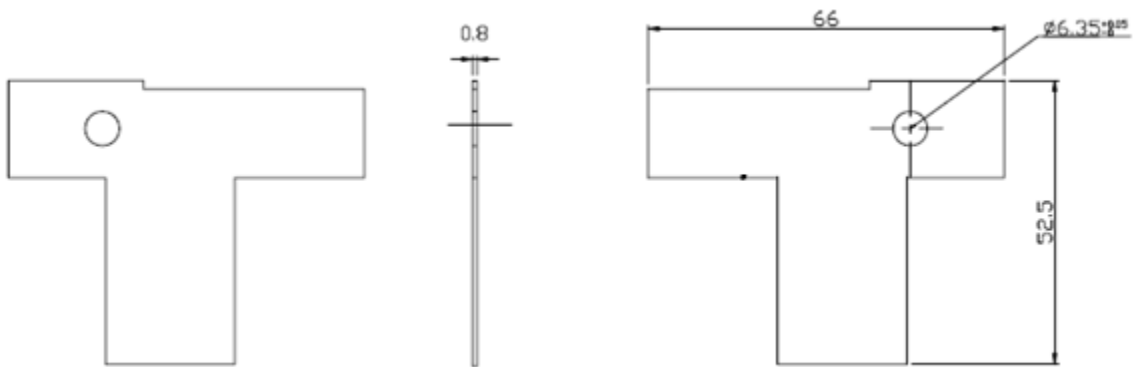
1. Double sided adhesive area 

## 5.1 Layout Dimension

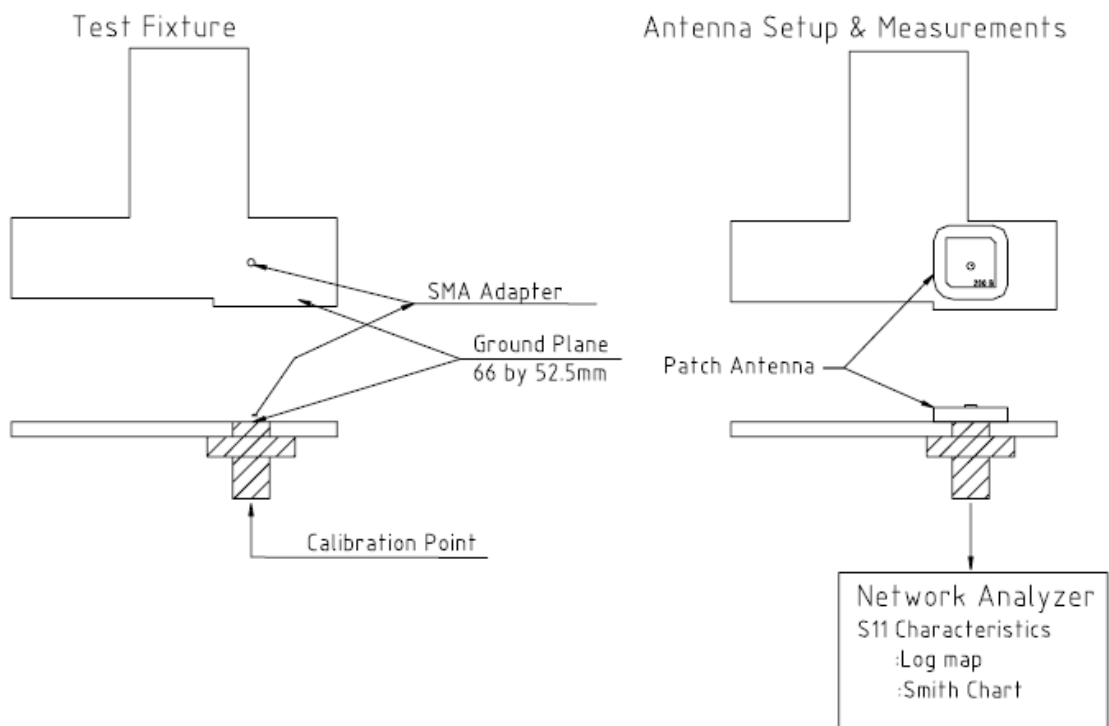


\*Note Layout Dimensions may be affected by the thickness of the PCB

## 6. Test Jig and Dimensions

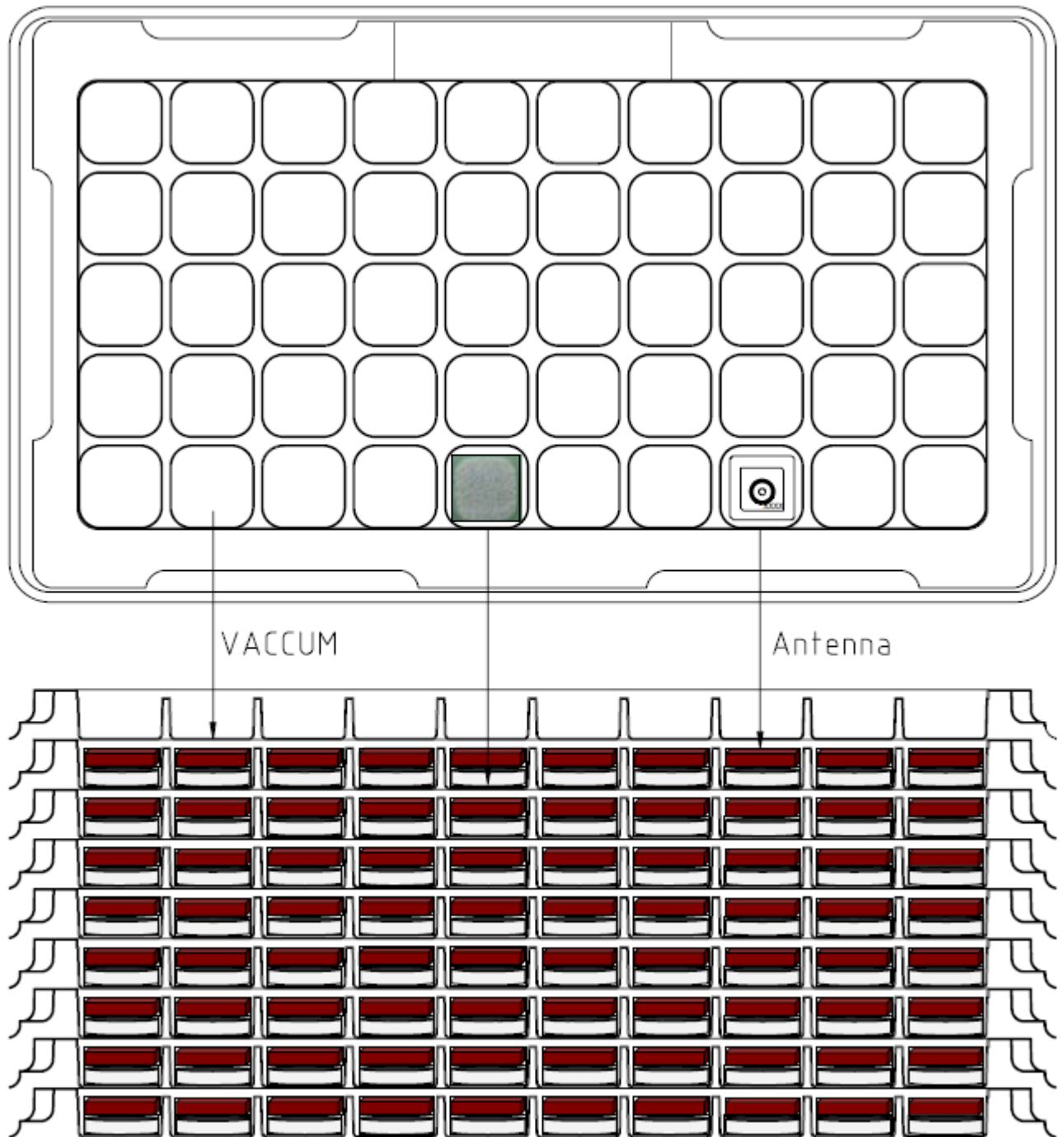


## 6.1 Test Fixture Antenna Setup & Measurements



## 7. Packaging

Pieces per Inner Carton: 400



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## Packing

