

# **SPECIFICATION**

PART NO. **GP.1575.15.4.B.02** 

SPEC NO. **GP.15A** 

PRODUCT NAME 15mm\*15mm\*4mm 1575mhz GPS Patch Antenna RoHS Compliant





## **1. 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.

### 2. Specification Table

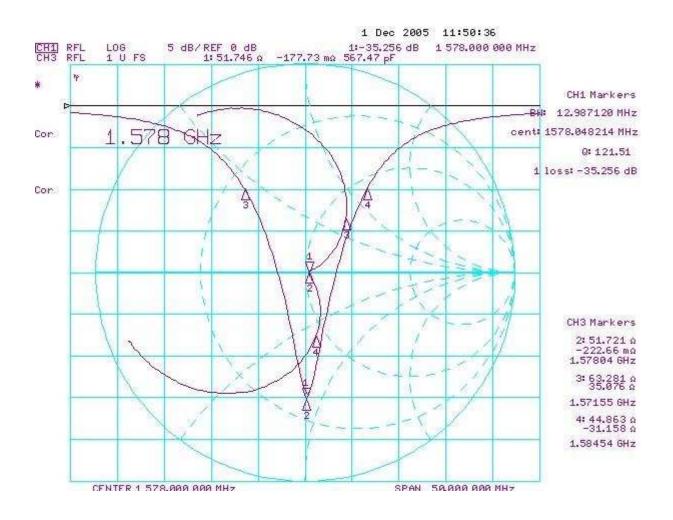
| No | Parameter                                       | Specification           | Notes                       |
|----|---|-------------------------|-----------------------------|
| 1  | Range of Receiving<br>Frequency                 | 1575.42 MHz ± 1.023 MHz |                             |
| 2  | Center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

Table 1



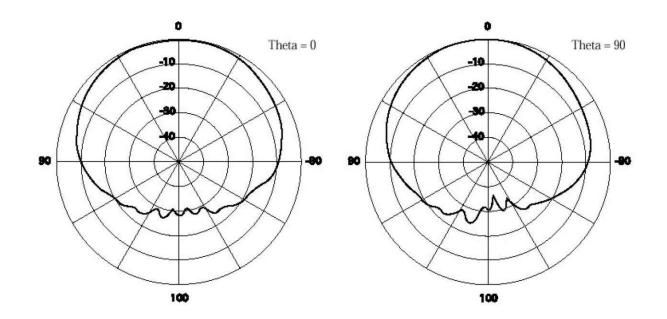
## **3. Electrical Specification**

#### 3.1 Smith Chart



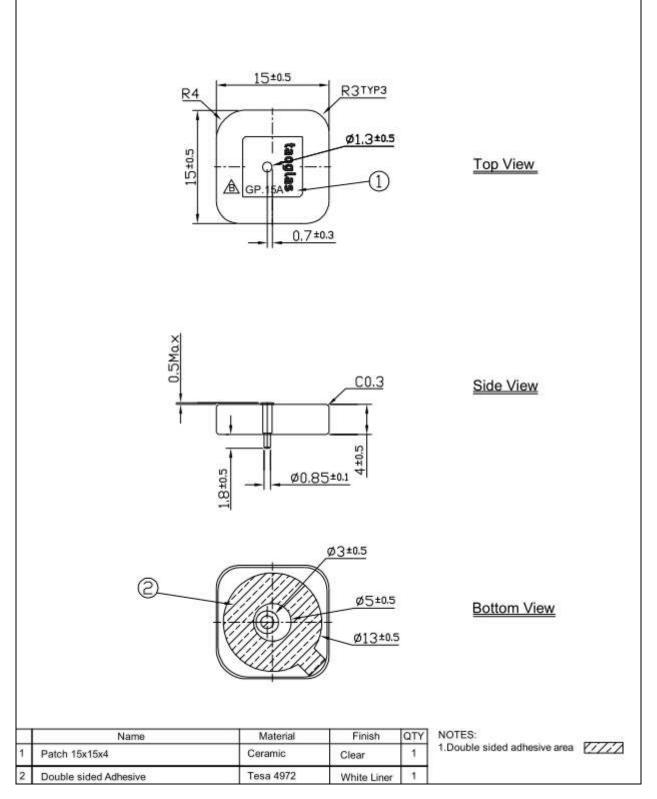


## 4. Antenna Gain Chart (Spin Dipole Method)



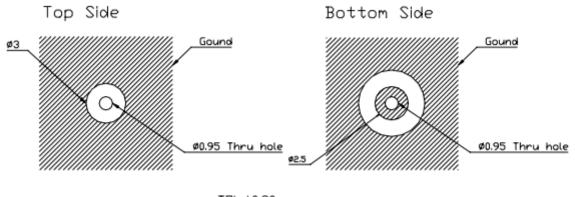


# **5. Mechanical Drawing**





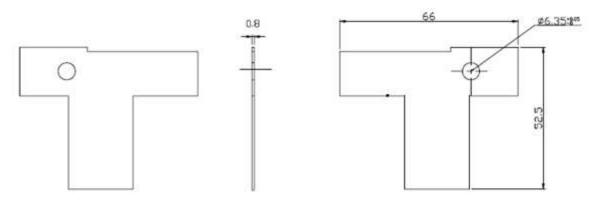
#### **5.1 Layout Dimension**



TOL:±0.20 UNIT:mm

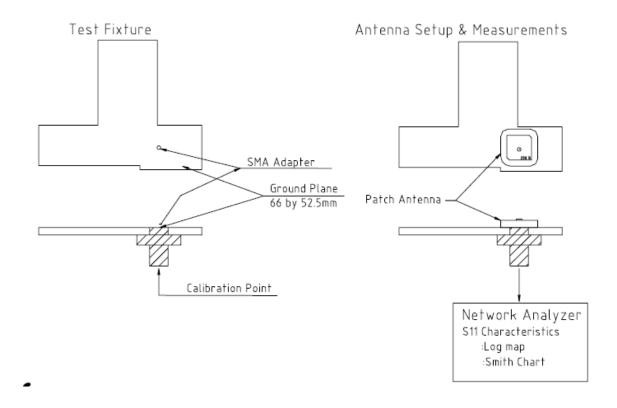
\*Note Layout Dimensions may be affected by the thickness of the PCB

# 6. Test Jig and Dimensions





#### **6.1 Test Fixture Antenna Setup & Measurements**





# **7. Packaging** Pieces per Inner Carton: 400

