

DATA SHEET

WIRELESS COMPONENTS

Ceramic Patch Antenna

ANT1515B00FT1575A

GPS

PIN 15 × 15 × 4 mm



FEATURES

- High radiation efficiency
- Pin-solder process
- RoHS compliant

APPLICATIONS

- Navigation device
- Telematics box
- Fleet management

ORDERING INFORMATION

All part numbers are identified by the series, packing type, material, size, antenna type, working frequency and packing quantity.

PART NUMBER

ANT 1515 B 00F T 1575A
 (1) (2) (3) (4) (5) (6)

(1) PRODUCT

ANT = Antenna

(2) SIZE

1515 = 15 × 15 mm

(3) ANTENNA TYPE

B = Bulk Antenna

(4) SERIAL NO.

00F

(5) PACKING STYLE

T = Tray

(6) WORKING FREQUENCY

1575 = 1.575 GHz

PHYCOMP CTC

CAN43134230F1581B

I2NC

43134230F158

SPECIFICATION

Table 1

| DESCRIPTION | VALUE |
|-----------------------|----------------------------------|
| Centre Frequency | 1580 ± 2MHz |
| Bandwidth | 8 MHz (Typ.) |
| Gain | 1.5 dBic (Typ.) |
| VSWR | 2.0 Max. |
| Polarization | Right Hand Circular Polarization |
| Axis Ratio | ≦ 3 dB |
| Beam Width | > 120 degrees |
| Impedance | 50Ω |
| Operating Temperature | -40~105 °C |

NOTE

1. Based on 40×40 mm² square ground plane.
2. Centre frequency will be offset to working frequency while changes of customer's housing and ground plane.
3. Please contact local sales if you need customized design to gain optimum antenna performance.

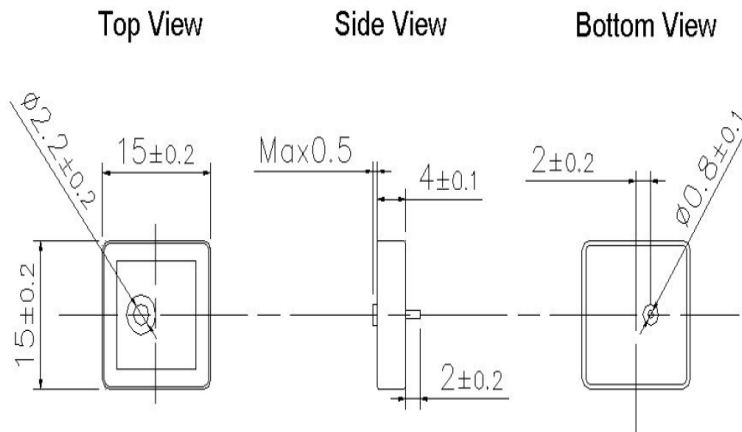
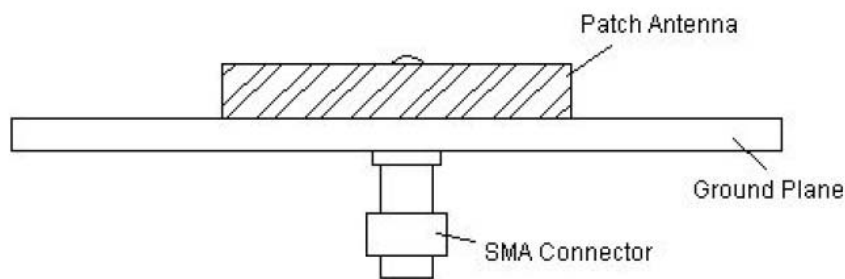


Fig. 1 Mechanical Data



Ground Plane Size: 40*40 mm²

Fig. 2 Evaluation Board

ELECTRICAL PERFORMANCES

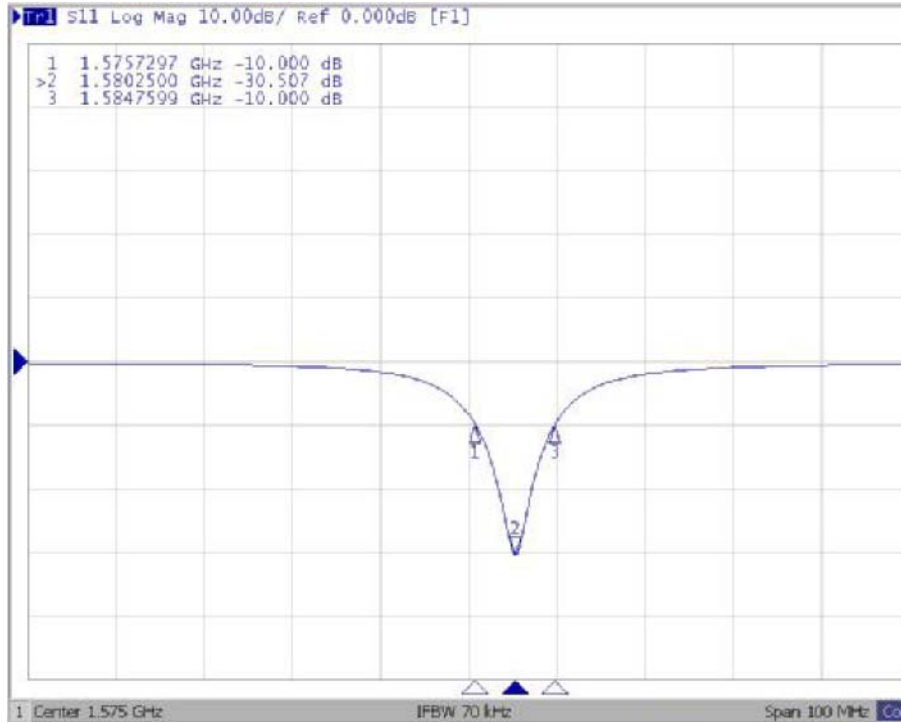


Fig. 3 Return loss

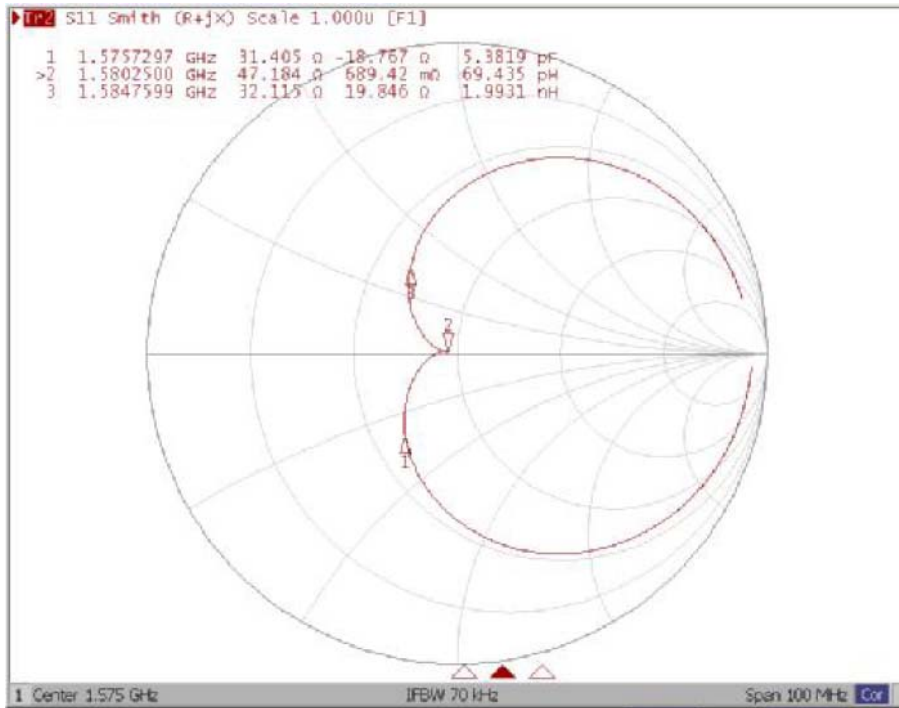


Fig. 4 Smith Chart



Fig. 5 Axial Ratio measurement

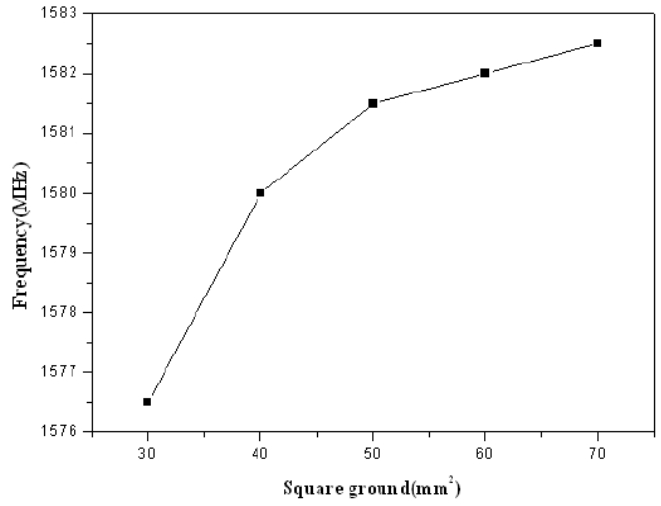


Fig. 6 Center Frequency V.S. Ground Plane

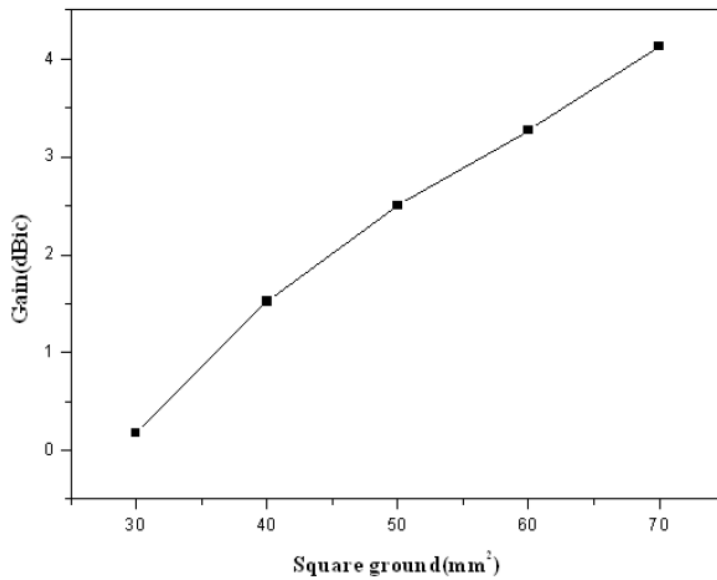
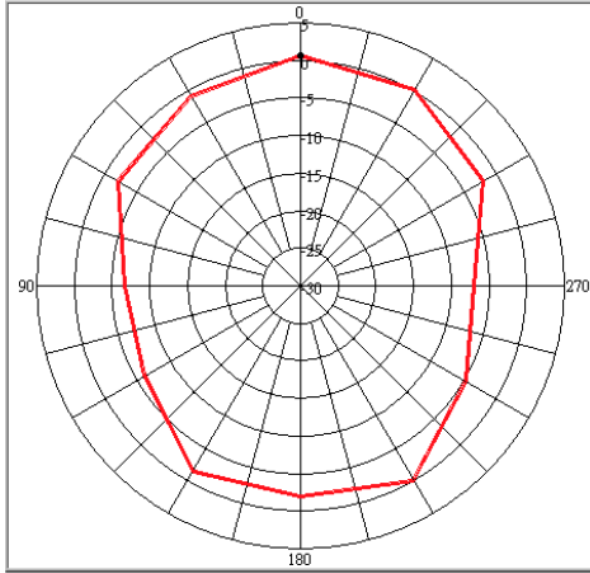
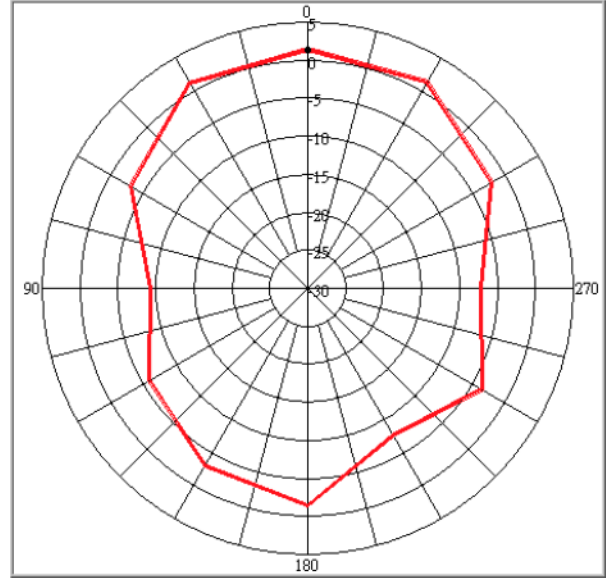


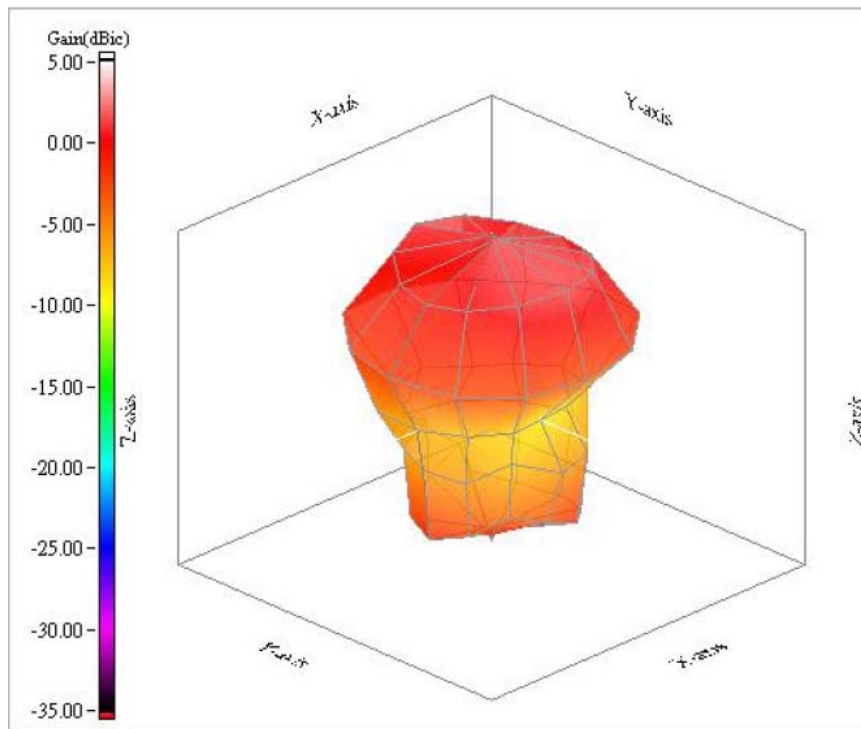
Fig. 7 Antenna Gain V.S. Ground Plane



2D x-z plane pattern



2D y-z plane pattern



3D radiation pattern

Fig. 8 Radiation Pattern (Frequency = 1580MHz)

REVISION HISTORY**REVISION DATE CHANGE NOTIFICATION DESCRIPTION**

| | | | |
|-----------|--------------|---|--|
| Version 0 | Feb 08, 2013 | - | - New data sheet for Patch antenna, PIN Feed size 15×15×4 mm |
|-----------|--------------|---|--|
