

# 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)

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**(1) PRODUCT**

ANT = Antenna

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**(2) SIZE**

1515 = 15 × 15 mm

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**(3) ANTENNA TYPE**

B = Bulk Antenna

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**(4) SERIAL NO.**

00F

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**(5) PACKING STYLE**

T = Tray

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**(6) WORKING FREQUENCY**

1575 = 1.575 GHz

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**PHYCOMP CTC**

CAN43134230F1581B

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**I2NC**

43134230F158

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**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 mm<sup>2</sup> 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.

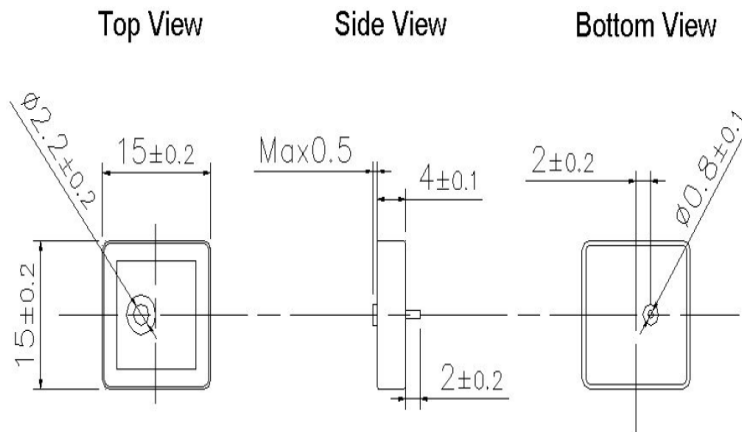
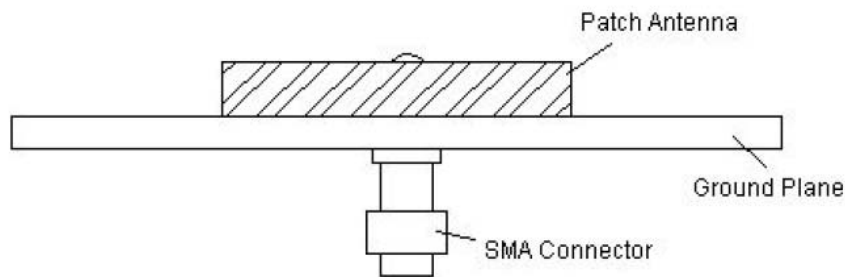


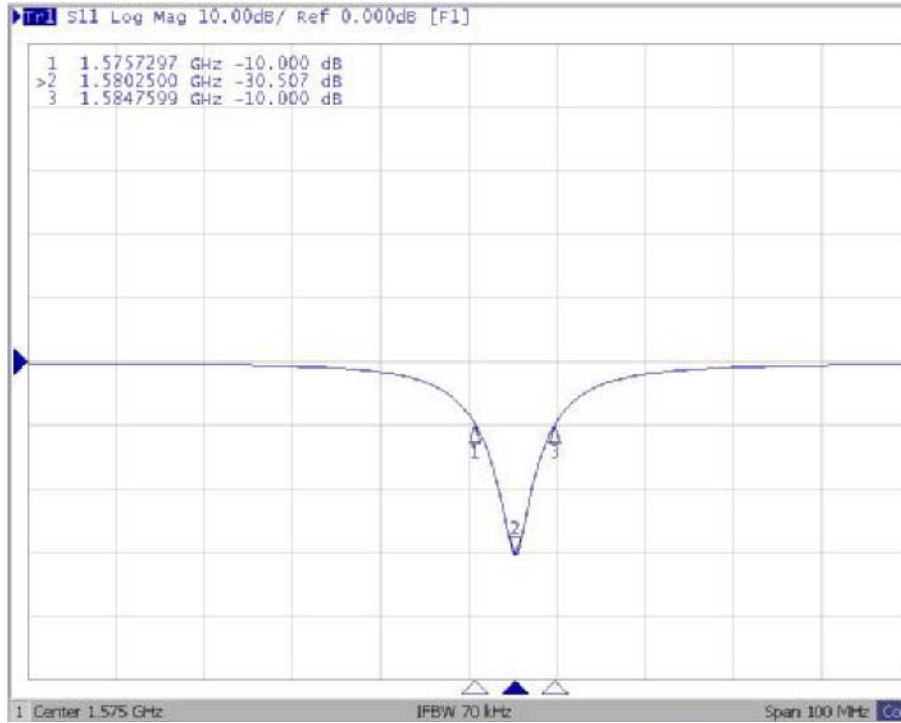
Fig. 1 Mechanical Data



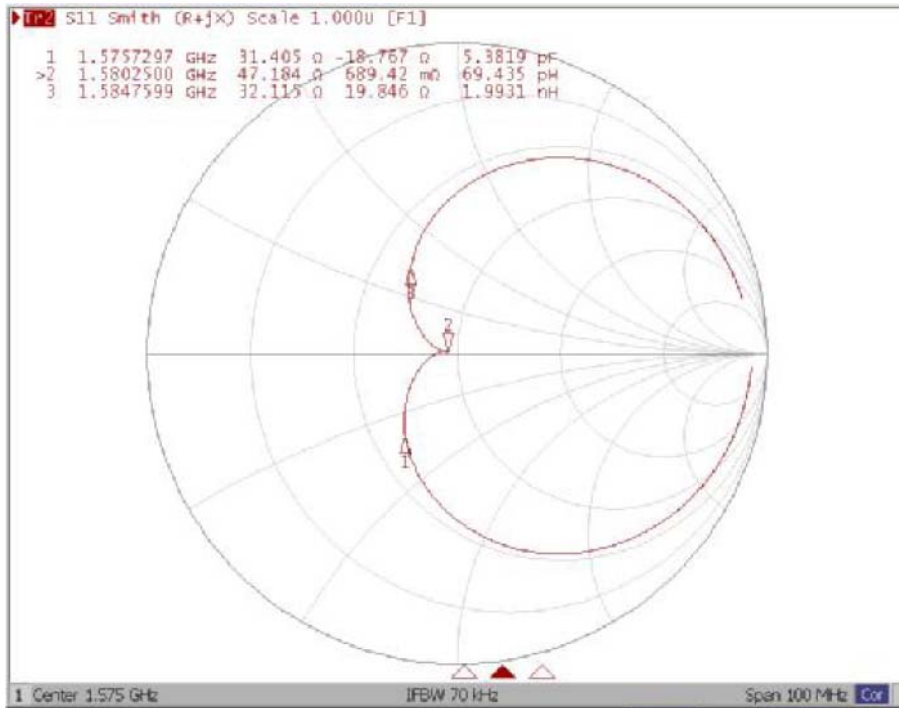
**Ground Plane Size: 40\*40 mm<sup>2</sup>**

Fig. 2 Evaluation Board

**ELECTRICAL PERFORMANCES**



**Fig. 3** Return loss



**Fig. 4** Smith Chart

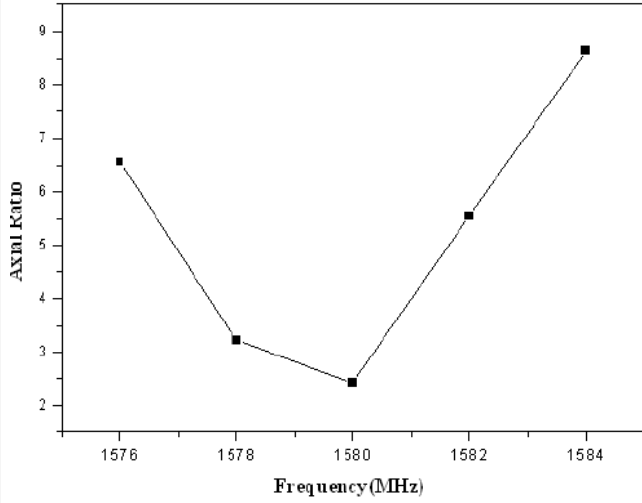


Fig. 5 Axial Ratio measurement

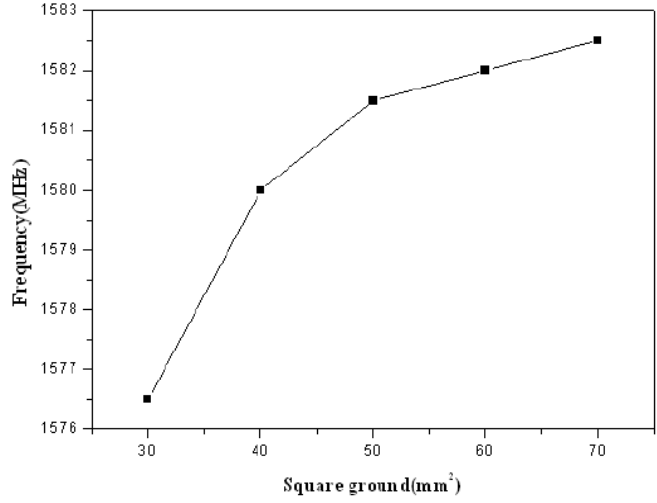


Fig. 6 Center Frequency V.S. Ground Plane

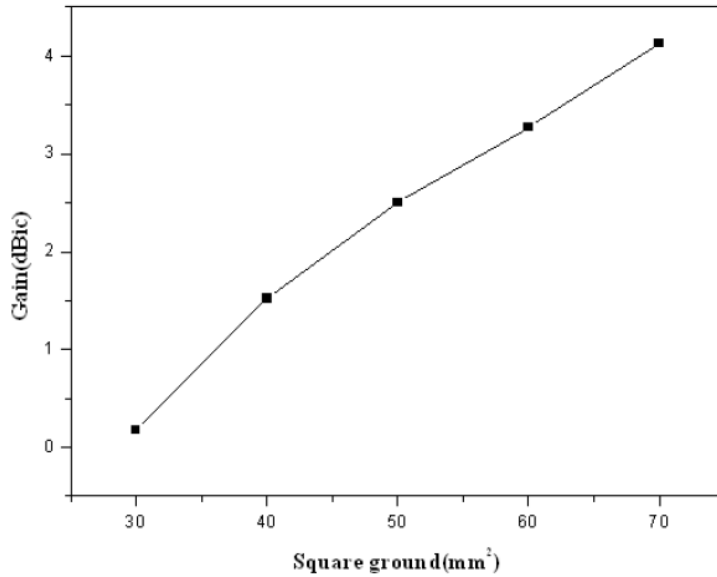
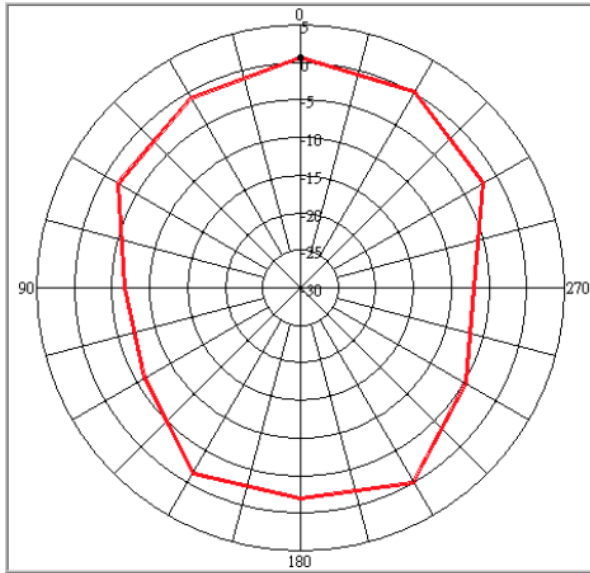
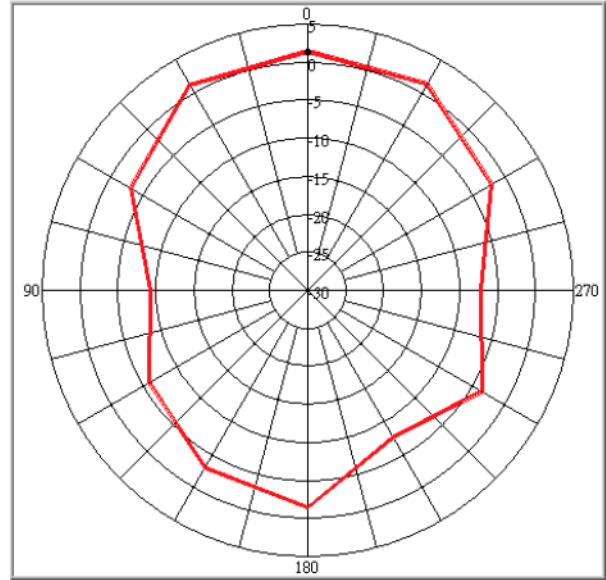


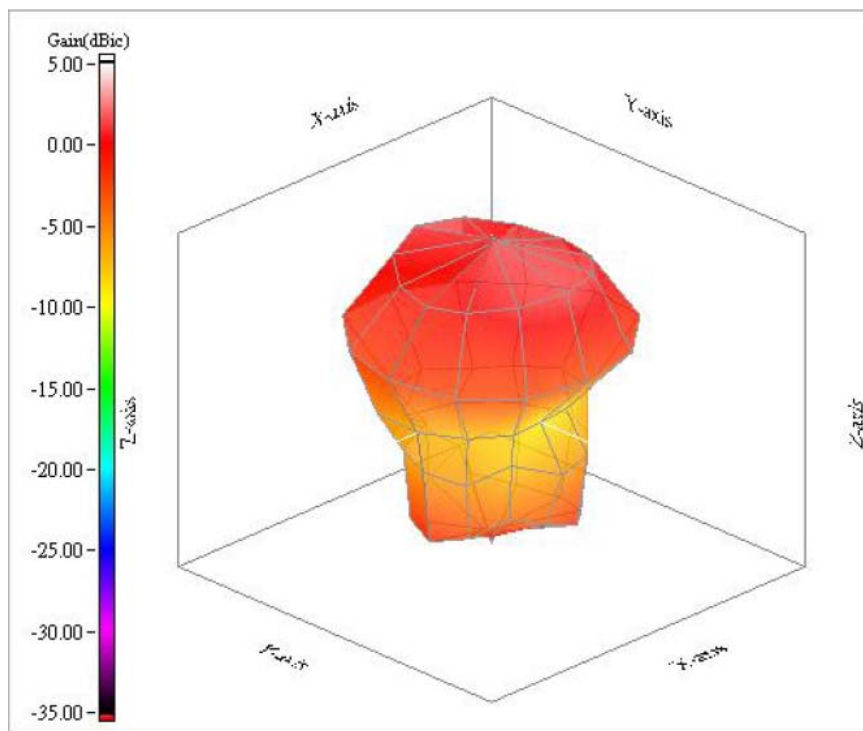
Fig. 7 Antenna Gain V.S. Ground Plane



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