

DATA SHEET

WIRELESS COMPONENTS

Ceramic Patch Antenna

ANT2525B00FT1575A

GPS

PIN 25x25x4 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 2525 B 00F T I575A
 (1) (2) (3) (4) (5) (6)

(1) PRODUCT

ANT = Antenna

(2) SIZE

2525 = 25 × 25 mm

(3) ANTENNA TYPE

B= Bulk antenna

(4) SERIAL NO.

00F

(5) PACKING STYLE

T = Tray

(6) WORKING FREQUENCY

I575= 1.575 GHz

PHYCOMP CTC

CAN43134250F1581B

I2NC

43134250F158

SPECIFICATION

Table 1

DESCRIPTION	VALUE
Centre Frequency	1580 ± 2MHz
Bandwidth	20 MHz (Typ.)
Gain	5.5 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 70×70 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.

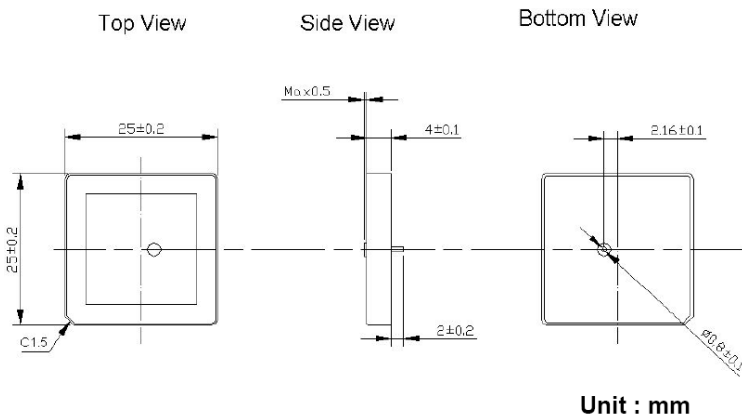
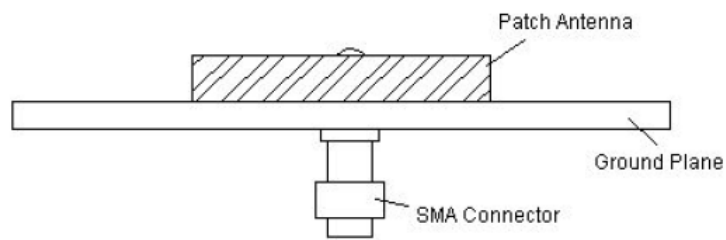


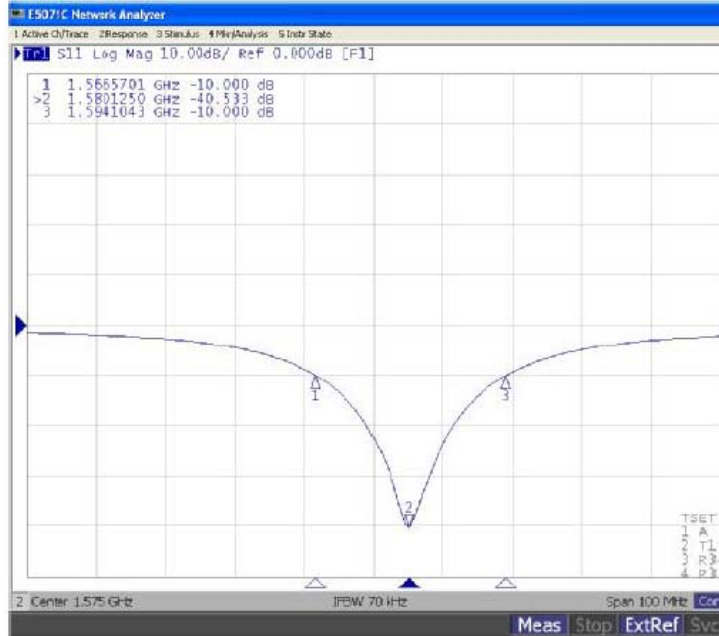
Fig. 1 Mechanical Data



Ground Plane Size: 70*70 mm²

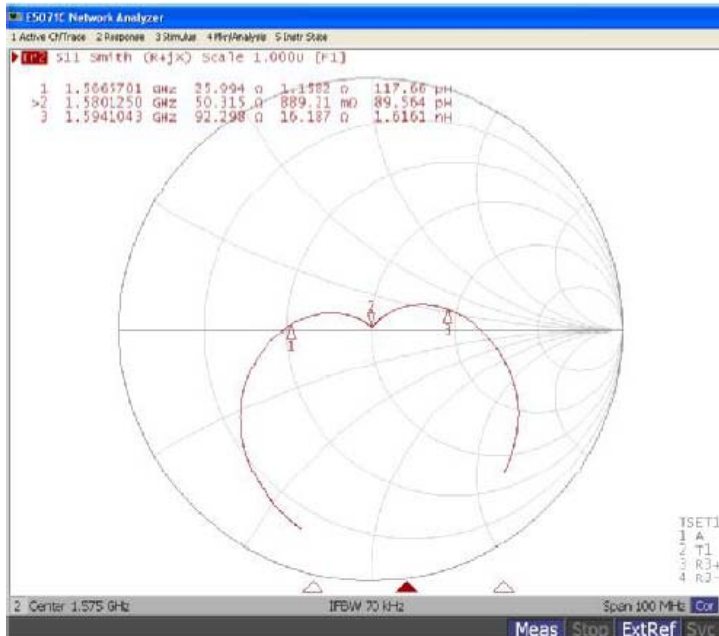
Fig. 2 Evaluation Board

ELECTRICAL PERFORMANCES



1	1.5665701 GHz	-10.000dB
>2	1.5801250 GHz	-40.533dB
3	1.5941043 GHz	-10.000dB

Fig. 3 Return loss



1	1.5665701 GHz	25.994 Ω	1.1582Ω	117.66 pH
>2	1.5801250 GHz	50.315 Ω	889.21 mΩ	89.564 pH
3	1.5941043 GHz	92.298 Ω	16.187Ω	1.6161 nH

Fig. 4 Smith Chart

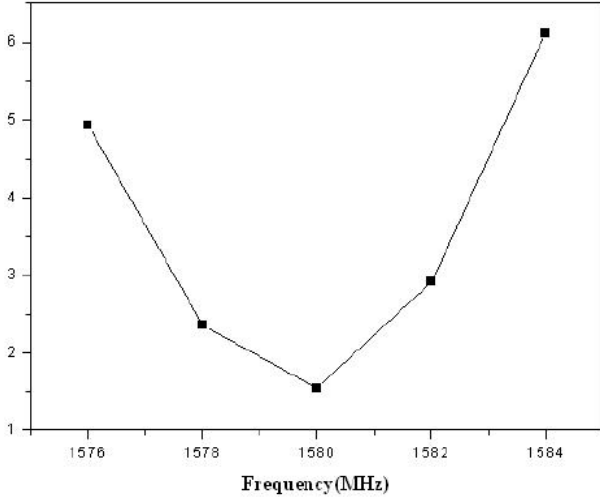


Fig. 5 Axial Ratio measurement

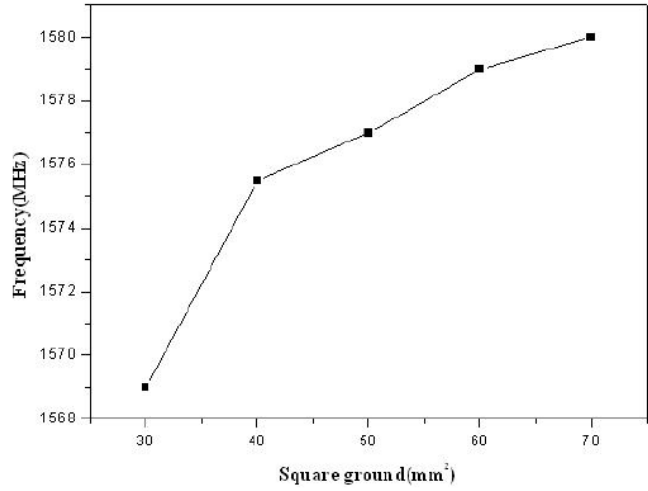


Fig. 6 Center Frequency V.S. Ground Plane

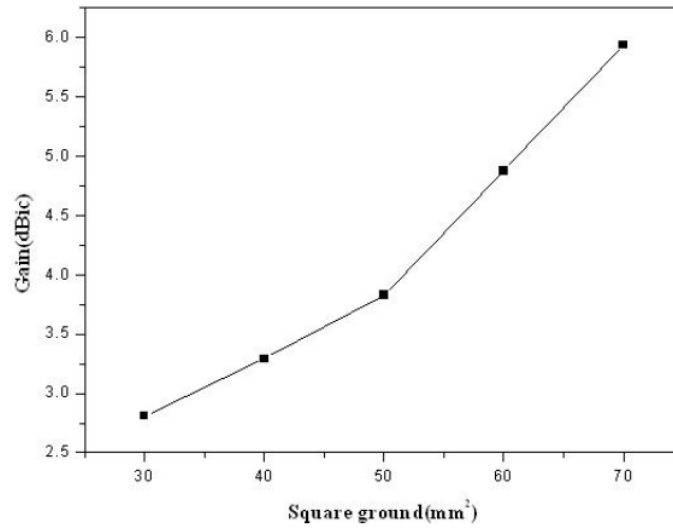
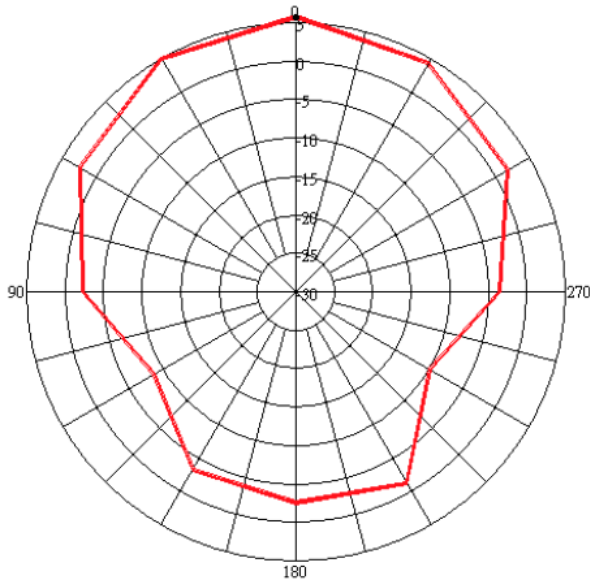
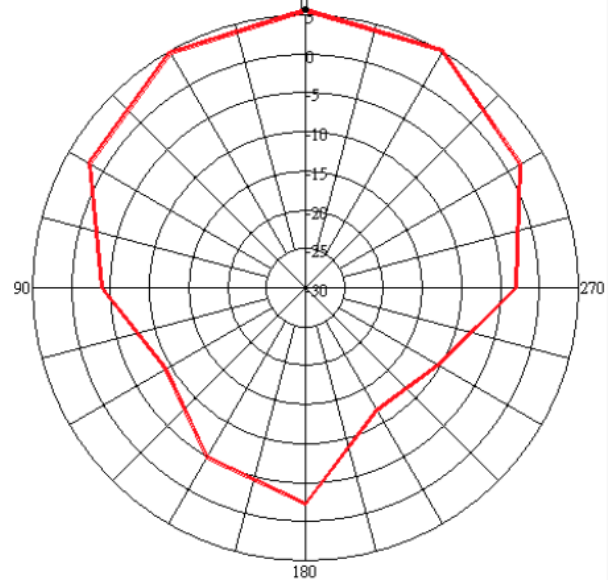


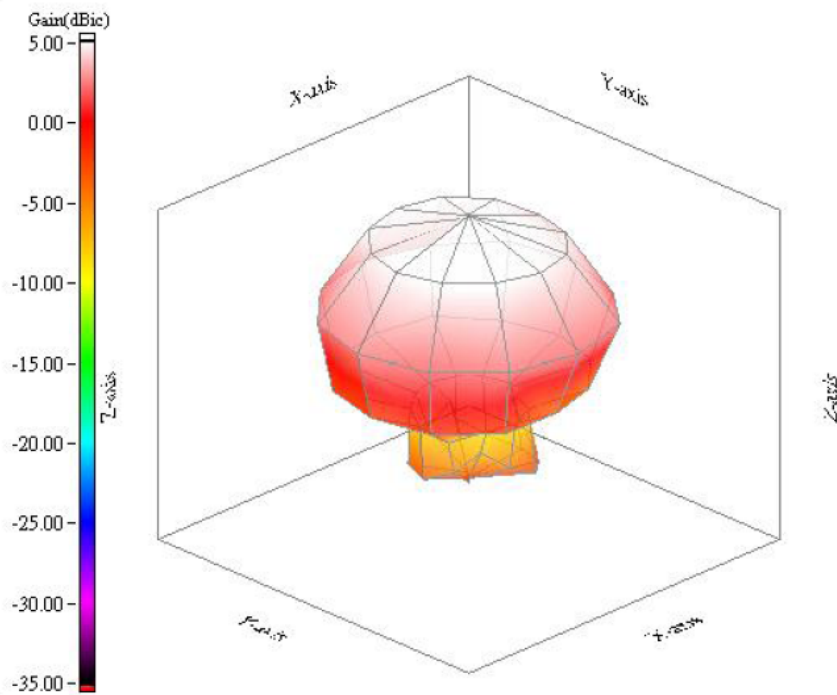
Fig. 7 Antenna Gain V.S. Ground Plane



2D x-z plane pattern



2D y-z plane pattern



3D radiation pattern

Fig. 8 Radiation Pattern (Frequency = 1580MHz)

REVISION HISTORYREVISION DATE CHANGE NOTIFICATION DESCRIPTION

Version 0	Feb 23, 2013	-	- New data sheet for Patch antenna, PIN Feed size 25 × 25 × 4 mm
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