

DATA SHEET

WIRELESS COMPONENTS
Ceramic Patch Antenna
ANT2525B00DT1516A
GPS & GLONASS
PIN 25*25*4 mm



FEATURES

- Support GPS & GLONASS system
- 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 00D T 1516A
 (1) (2) (3) (4) (5) (6)

(1) FAMILY

ANT = Antenna

(2) SIZE

2525 = 25 × 25

(3) ANTENNA TYPE

B = bulk Antenna

(4) SERIAL NO.

00D

(5) PACKING STYLE

T = Tray

(6) WORKING FREQUENCY

1516 = 1.575/1.602 GHz

PHYCOMP CTC

CAN43134250D1561B

I2NC

43134250D156

SPECIFICATION

Table 1

DESCRIPTION	VALUE
Centre Frequency	1575 ~ 1606 MHz
Gain	3.5 dBic (Typ.)
VSWR	2.5 Max
Polarization	Right Hand Circular Polarization
Axis Ratio	10 dB(Typ.)
Beam Width	> 120 degrees
Impedance	50 Ω
Operating Temperature	-40~105 °C

NOTE

1. Based on 70* 70 mm² square ground plane.
2. Central 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.

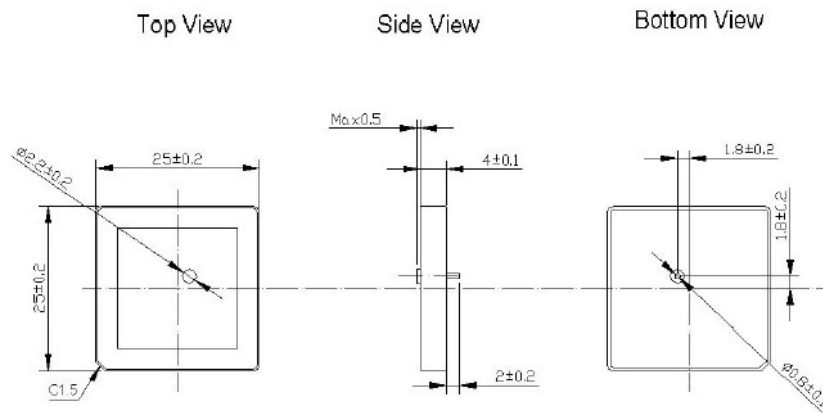
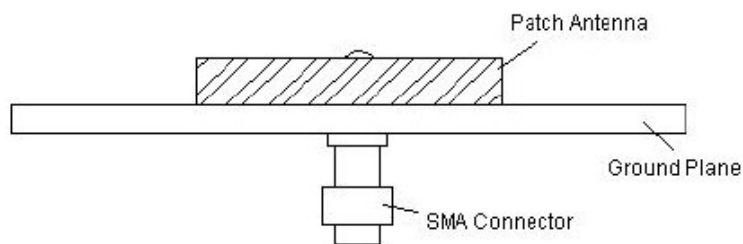


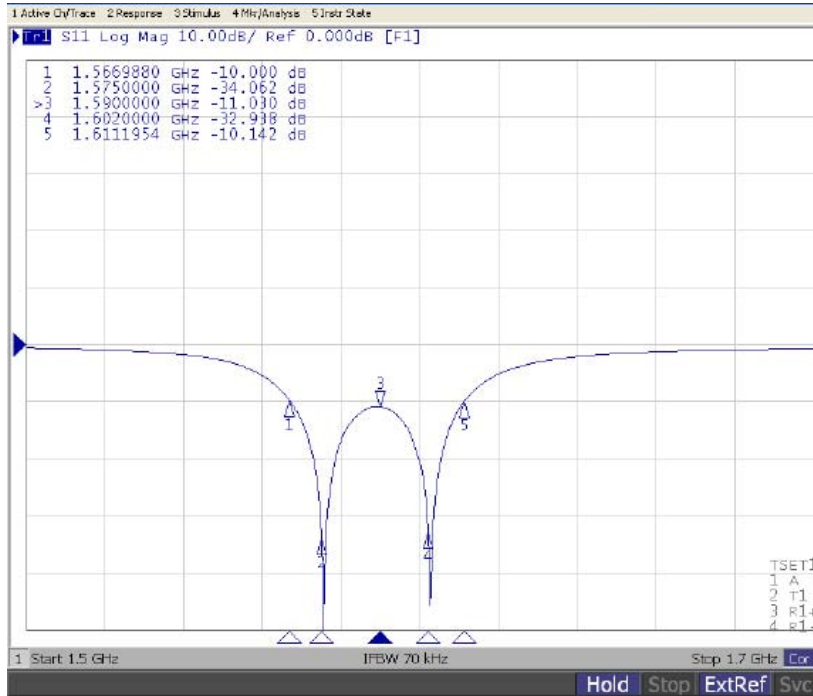
Fig. 1 Mechanical data



Ground Plane Size: 70*70 mm²

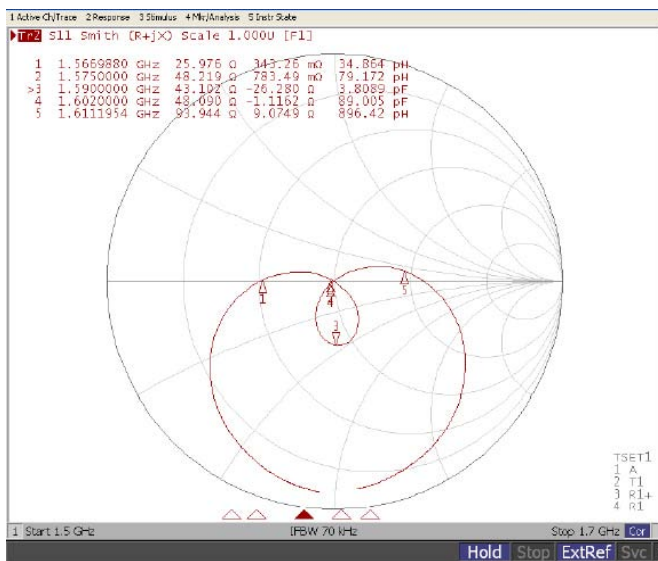
Fig. 2 Evaluation Board

ELECTRICAL PERFORMANCES



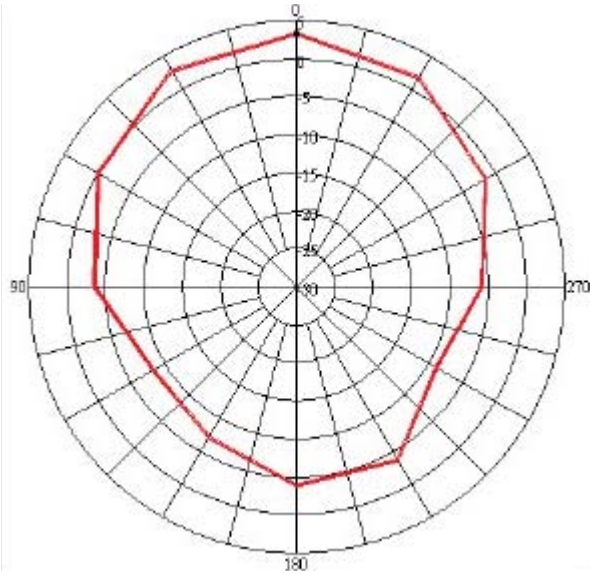
1	1.5669880 GHz	-10.000 dB
2	1.5750000 GHz	-34.062 dB
>3	1.5900000 GHz	-11.030 dB
4	1.6020000 GHz	-32.938 dB
5	1.6111954 GHz	-10.142dB

Fig 3 Return loss

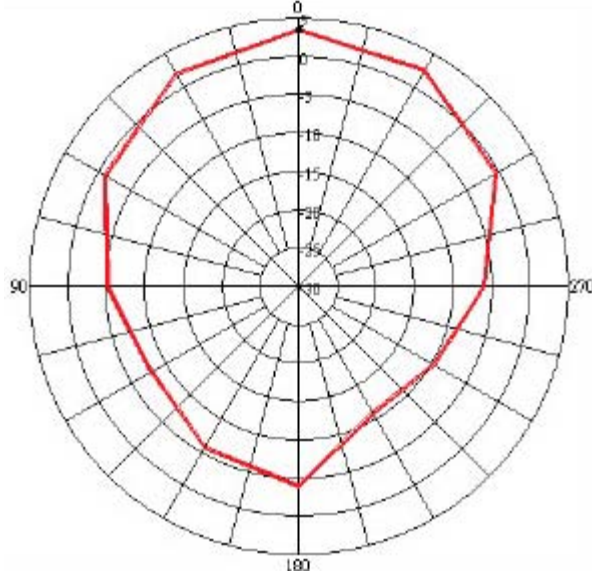


1	1.5669880 GHz	25.976 Ω	343.26m Ω	34.864 pH
2	1.5750000 GHz	48.219 Ω	783.49 m Ω	79.172 pH
>3	1.5900000 GHz	43.102 Ω	- 26.280 Ω	3.8089 pF
4	1.6020000 GHz	48.090 Ω	- 1.1162 Ω	89.005 pF
5	1.6111954 GHz	93.944 Ω	9.0749 Ω	896.42 pH

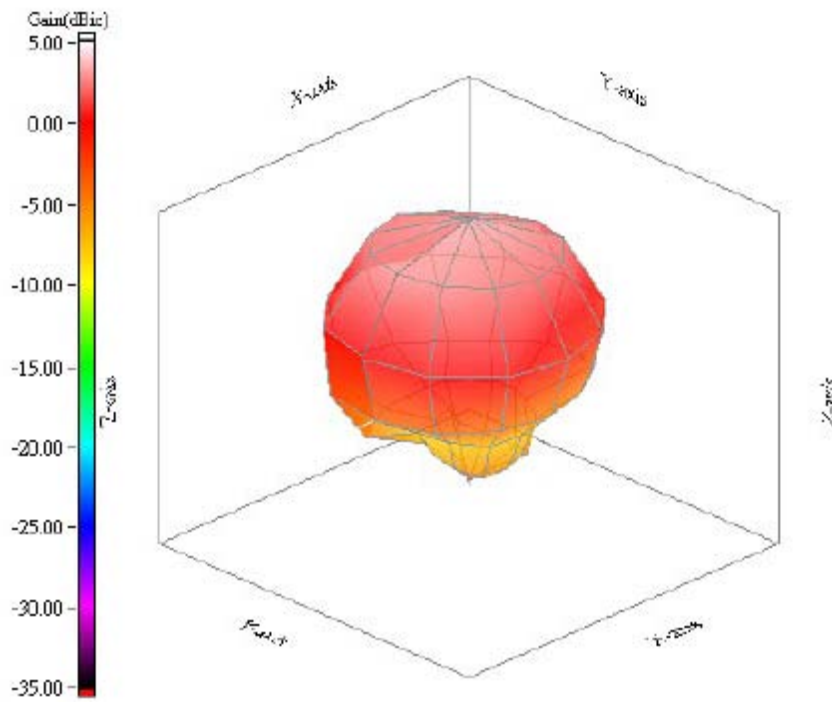
Fig. 4 Smith Chart



2D x-z plane pattern

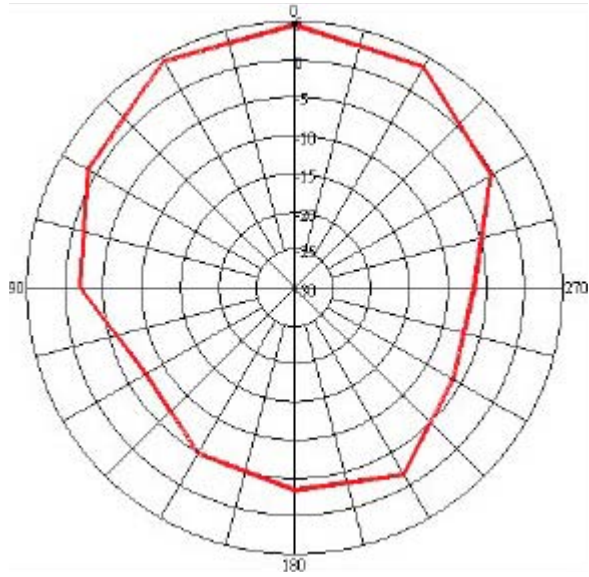


2D y-z plane pattern

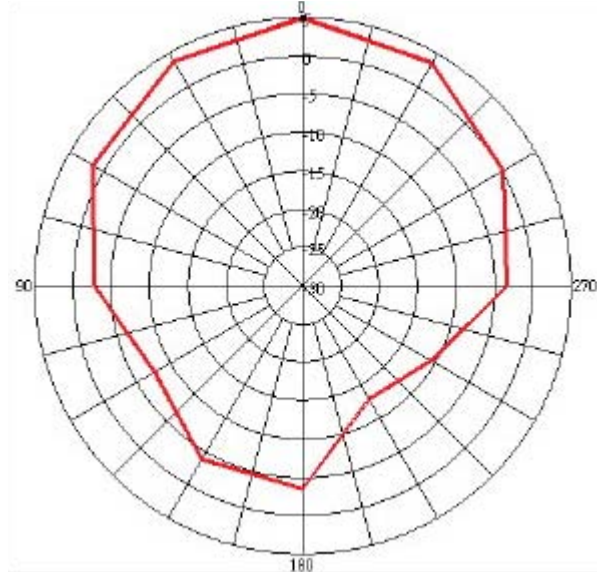


3D radiation pattern

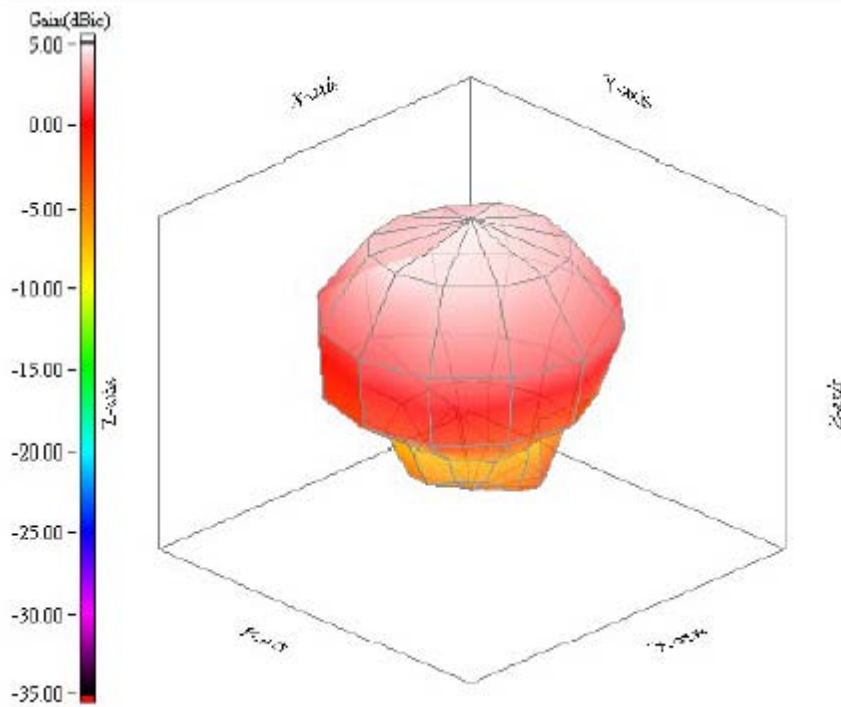
Fig. 8 Radiation Pattern (Frequency = 1575MHz)



2D x-z plane pattern

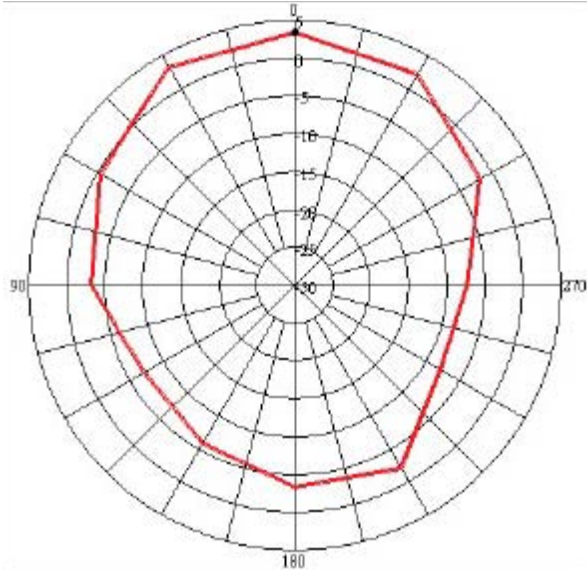


2D y-z plane pattern

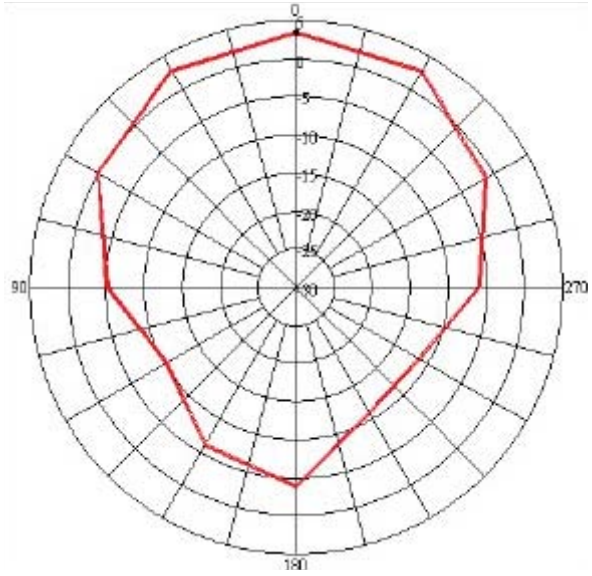


3D radiation pattern

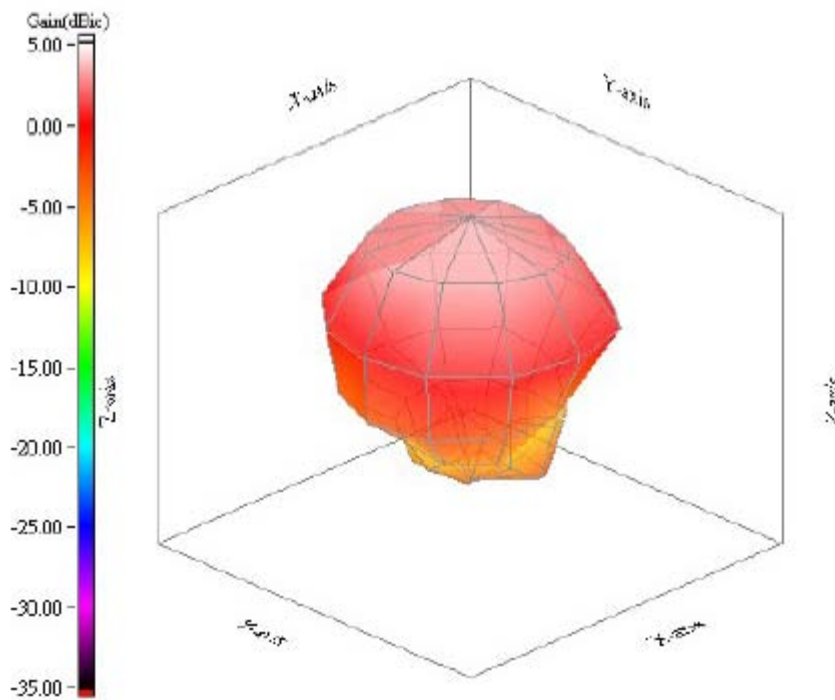
Fig. 9 Radiation Pattern (Frequency = 1590MHz)



2D x-z plane pattern



2D y-z plane pattern



3D radiation pattern

Fig. 10 Radiation Pattern (Frequency = 1602MHz)

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Feb. 01, 2013	-	- New data sheet for GPS&GLONASS Patch antenna, PIN Feed size 25*25*4 mm