

DATA SHEET

WIRELESS COMPONENTS
Ceramic Patch Antenna
ANT2525B00DT1575A

GPS

PIN 25x25x4 mm



YAGEO
Phycomp

Product Specification –April 11, 2013 V.0



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 00D T I575A
(1) (2) (3) (4) (5) (6)

(1) PRODUCT

ANT = Antenna

(2) SIZE

2525=25x25 mm

(3) ANTENNA TYPE

B = Bulk Antenna

(4) SERIAL NO.

00D

(5) PACKING STYLE

T = Tray

(6) WORKING FREQUENCY

I575= 1.575 GHz

PHYCOMP CTC

CAN43134250DI581B

I2NC

43134250DI58

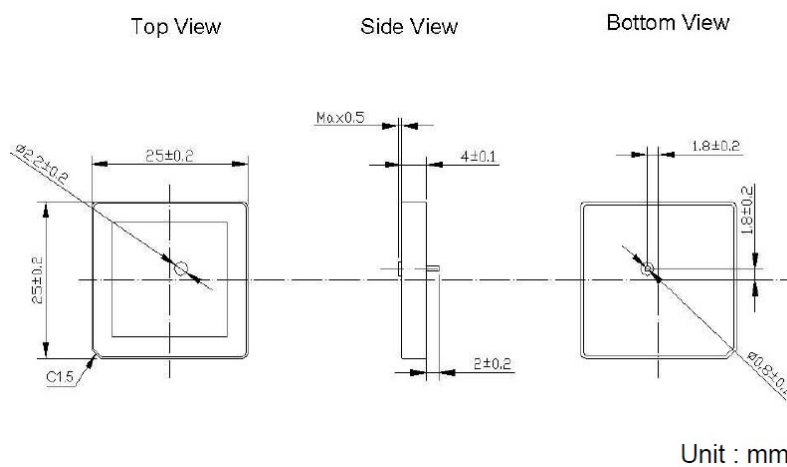
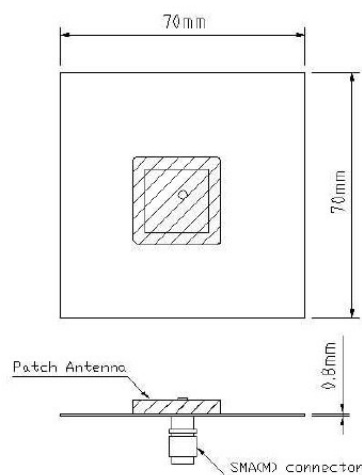
SPECIFICATION

Table I

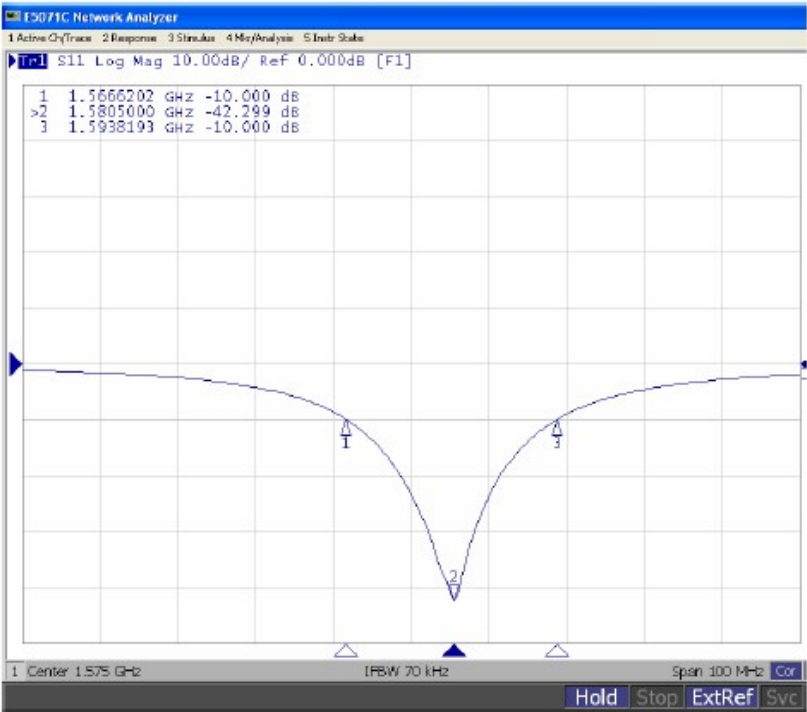
DESCRIPTION	VALUE
Centre Frequency	1580 ± 2MHz
Bandwidth	20 MHz (Typ.)
Gain	5.5 dBic (Typ.)
VSWR	2.0 Max..
Polarization	Right Hand Circular Polarization
Axis Ratio	≤ 3 dB
Beam Width	> 120 degrees
Impedance	50Ω
Operating Temperature	-40~105 °C

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.

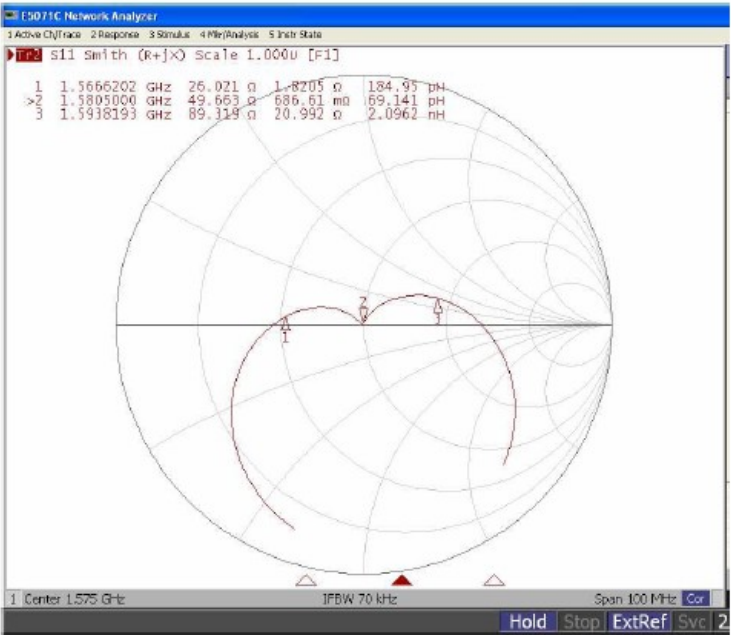
**Fig. 1** Mechanical Data**Fig. 2** Evaluation BoardGround Plane Size: 70*70 mm²

ELECTRICAL PERFORMANCES



1	1.5666202 GHz	-10.000 dB
> 2	1.5805000 GHz	-42.299 dB
3	1.5938193 GHz	-10.000 dB

Fig. 3 Return loss



1	1.5666202 GHz	26.021 Ω	1.8205 Ω	184.95 pH
> 2	1.5805000 GHz	49.663 Ω	686.61 m Ω	69.141 pH
3	1.5938193 GHz	89.319 Ω	20.992 Ω	2.0962 nH

Fig. 4 Smith Chart

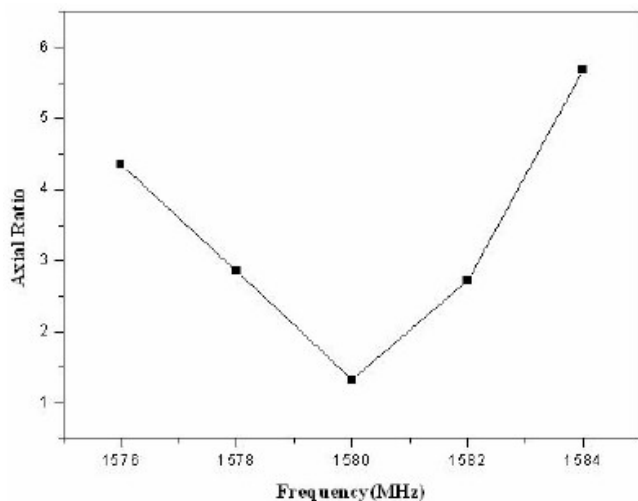


Fig. 5 Axial Ratio measurement

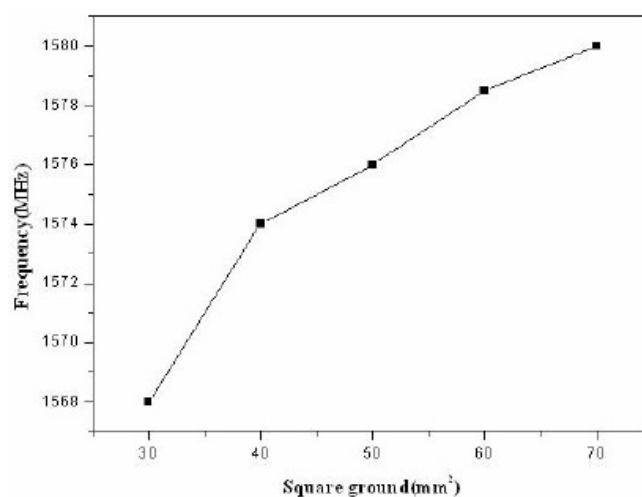


Fig. 6 Center Frequency V.S. Ground Plane

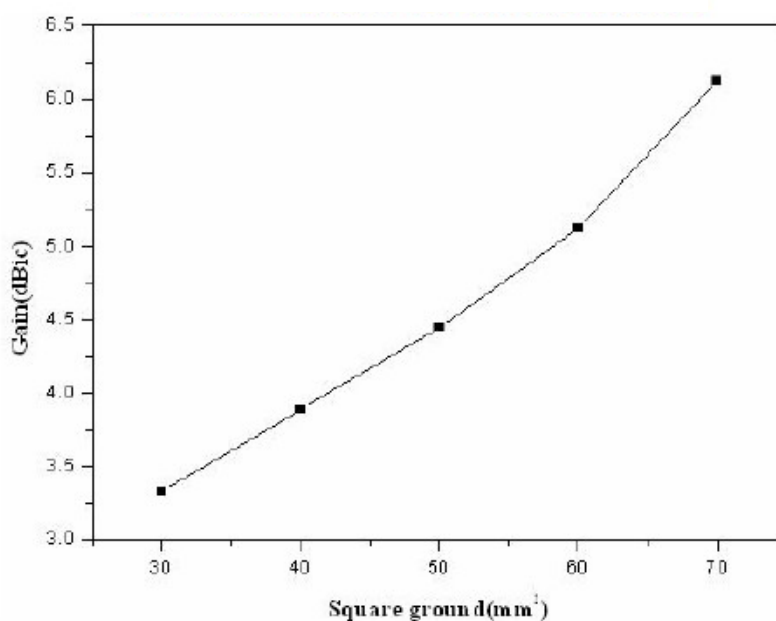
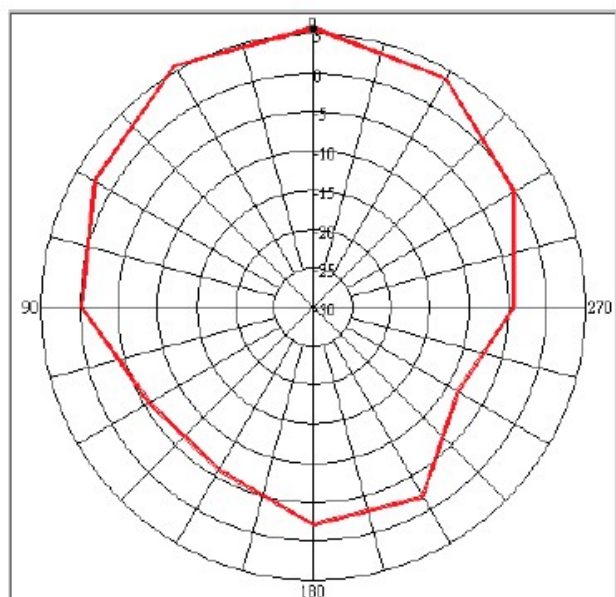
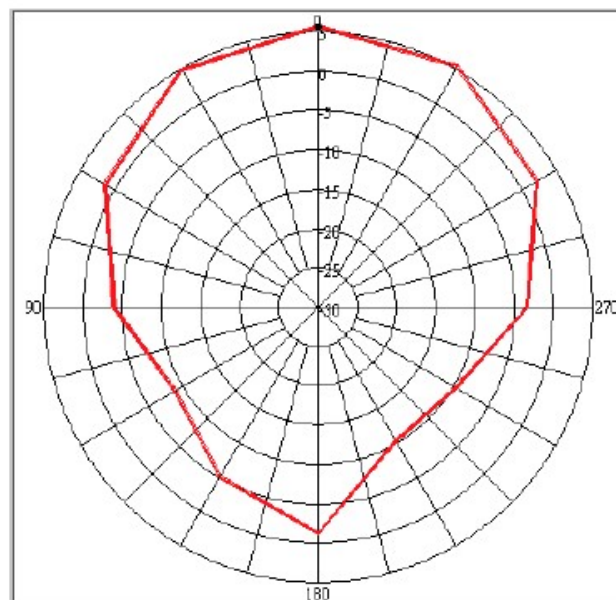
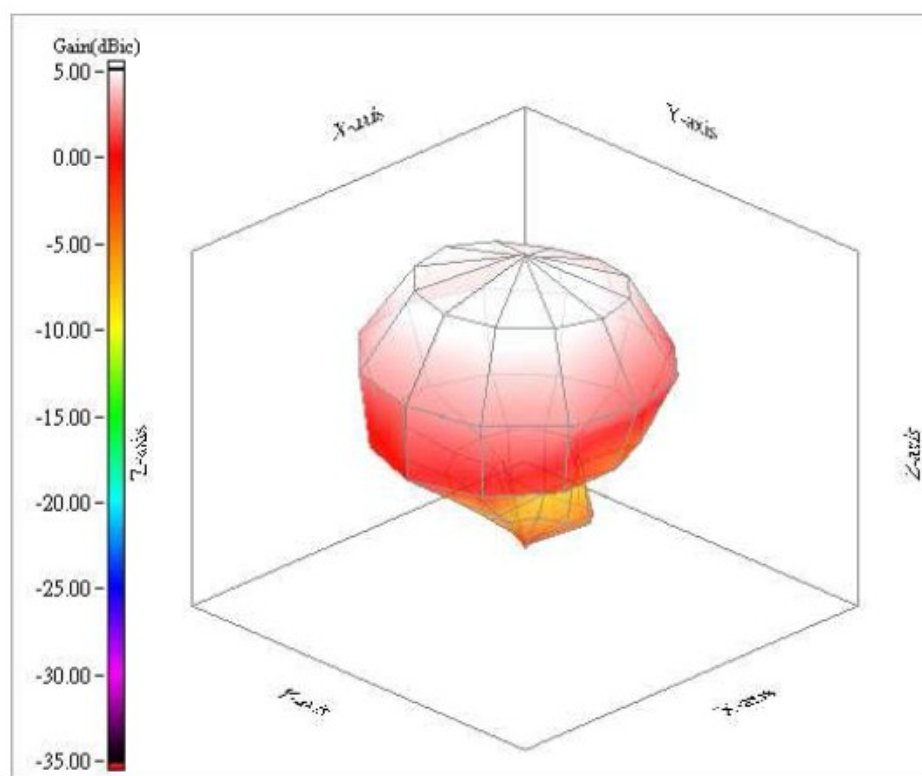


Fig. 7 Antenna Gain V.S. Ground Plane

**2D x-z plane pattern****2D y-z plane pattern****3D radiation pattern****Fig. 8 Radiation Pattern (Frequency = 1580MHz)**

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Apr. 11, 2013	-	- New data sheet for Patch antenna, PIN Feed size 25×25×4 mm