

DATA SHEET

WIRELESS COMPONENTS
Ceramic Patch Antenna
ANT1818B00BT1516A

GPS & GLONASS
SMD 18 × 18 × 4 mm



FEATURES

- Support GPS & GLONASS system
- High radiation efficiency
- Reflow process compatible
- 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 1818 B 00B T 1516A
 (1) (2) (3) (4) (5) (6)

(1) PRODUCT

ANT = Antenna

(2) SIZE

1818 = 18 × 18 mm

(3) ANTENNA TYPE

B = Bulk Antenna

(4) SERIAL NO.

00B

(5) PACKING STYLE

T = Tray

(6) WORKING FREQUENCY

1516 = 1.575/1.602 GHz

PHYCOMP CTC

CAN43134240B1561B

I2NC

43134240B156

SPECIFICATION

Table 1

DESCRIPTION	VALUE
Operating Frequency	1575~1606 MHz
Bandwidth	GPS: 7 MHz(Typ.) Glonass: 7 MHz(Typ.)
Gain	GPS: 1.89 dBi (Typ.) Glonass: 2.59 dBi (Typ.)
VSWR	2.0 Max.
Polarization	RHCP
Axis Ratio	≤ 12 dB
Impedance	50 Ω
Operating Temperature	-40~105 °C

NOTE

1. Based on 50×50mm² 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.

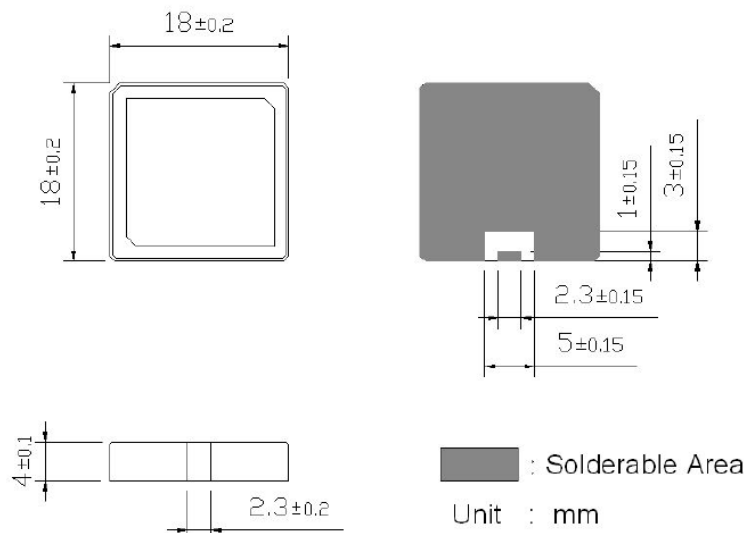


Fig. 1 Mechanical Data

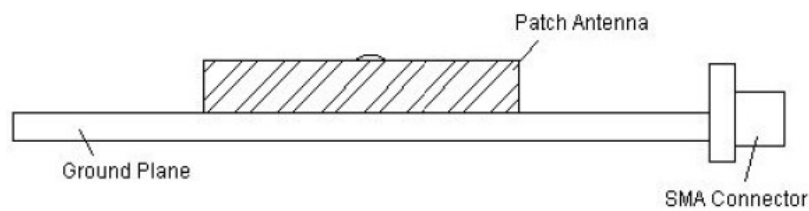


Fig. 2 Evaluation Board

Ground Plane Size: 50*50 mm²

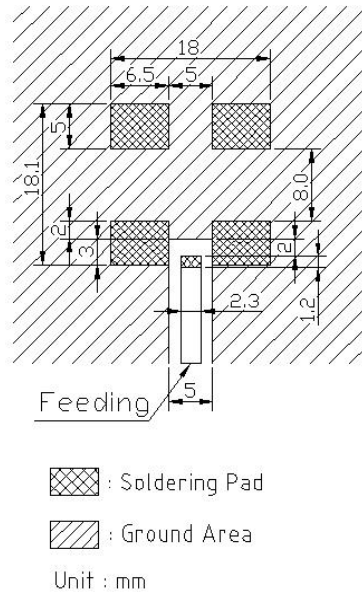
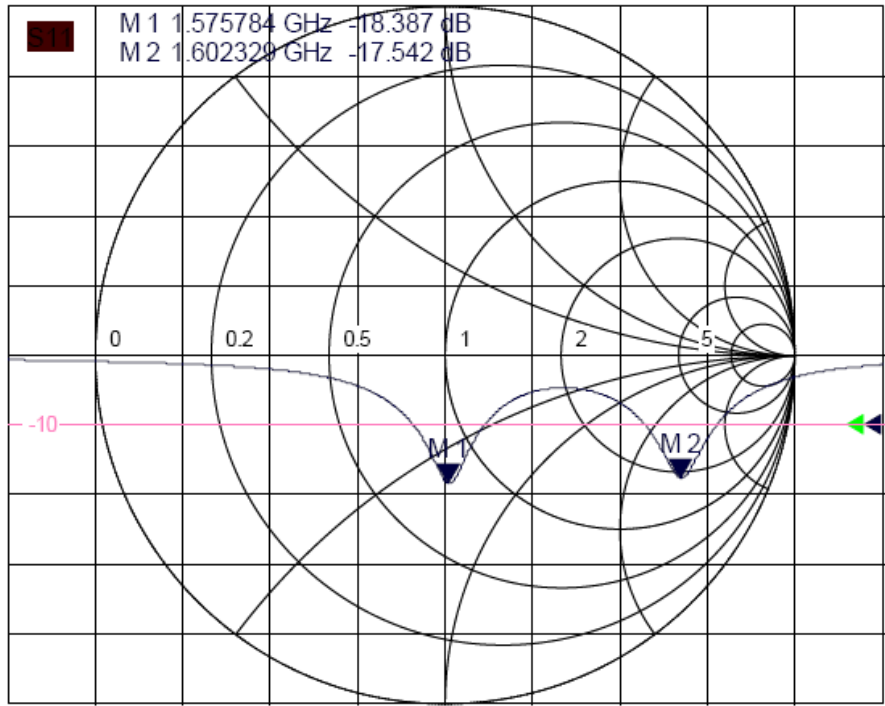


Fig. 3 Footprint

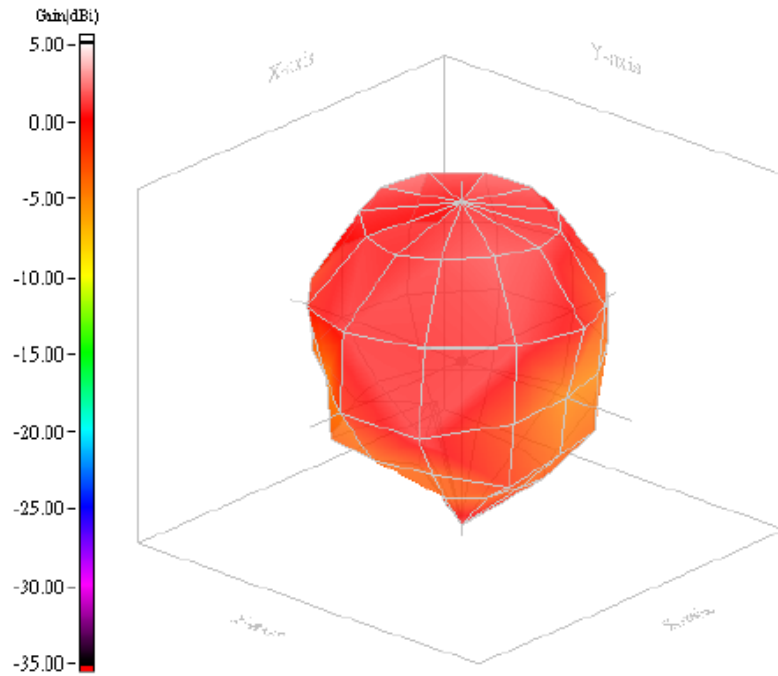
ELECTRICAL PERFORMANCES

Trc1	S11	dB Mag	10 dB / Ref -10 dB	Cal	1 of 1 (Max)
Trc2	S11	Smith	Ref 1 U	Invisible	
Mem3[Trc1]	S11	dB Mag	10 dB / Ref -10 dB	Invisible	
Mem4[Trc2]	S11	Smith	Ref 1 U	Invisible	



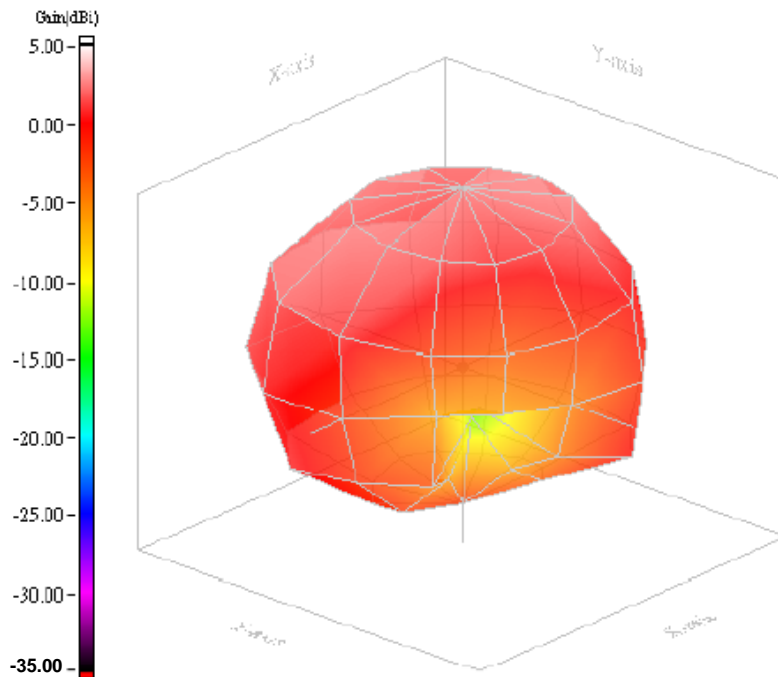
Ch1 Center 1.57542 GHz Pwr 0 dBm Span 100 MHz

Fig. 4 Return loss



3D radiation pattern

Fig. 5
Radiation Pattern (Frequency = 1575MHz)



3D radiation pattern

Fig. 6
Radiation Pattern (Frequency = 1602MHz)

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Dec 24, 2013	-	- New data sheet for Patch antenna, SMD Feed size 18×18×4 mm