

# DATA SHEET

## WIRELESS COMPONENTS

Ceramic Patch Antenna  
ANT1818B00ET1575S

GPS

PIN 18 × 18 × 2 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 1818 B 00E T 1575S**  
 (1) (2) (3) (4) (5) (6)

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(1) PRODUCT

ANT = Antenna

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(2) SIZE

1818 = 18 × 18 mm

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(3) ANTENNA TYPE

B = Bulk Antenna

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(4) SERIAL NO.

00E

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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

CAN43934240E1581B

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I2NC

43934240E158

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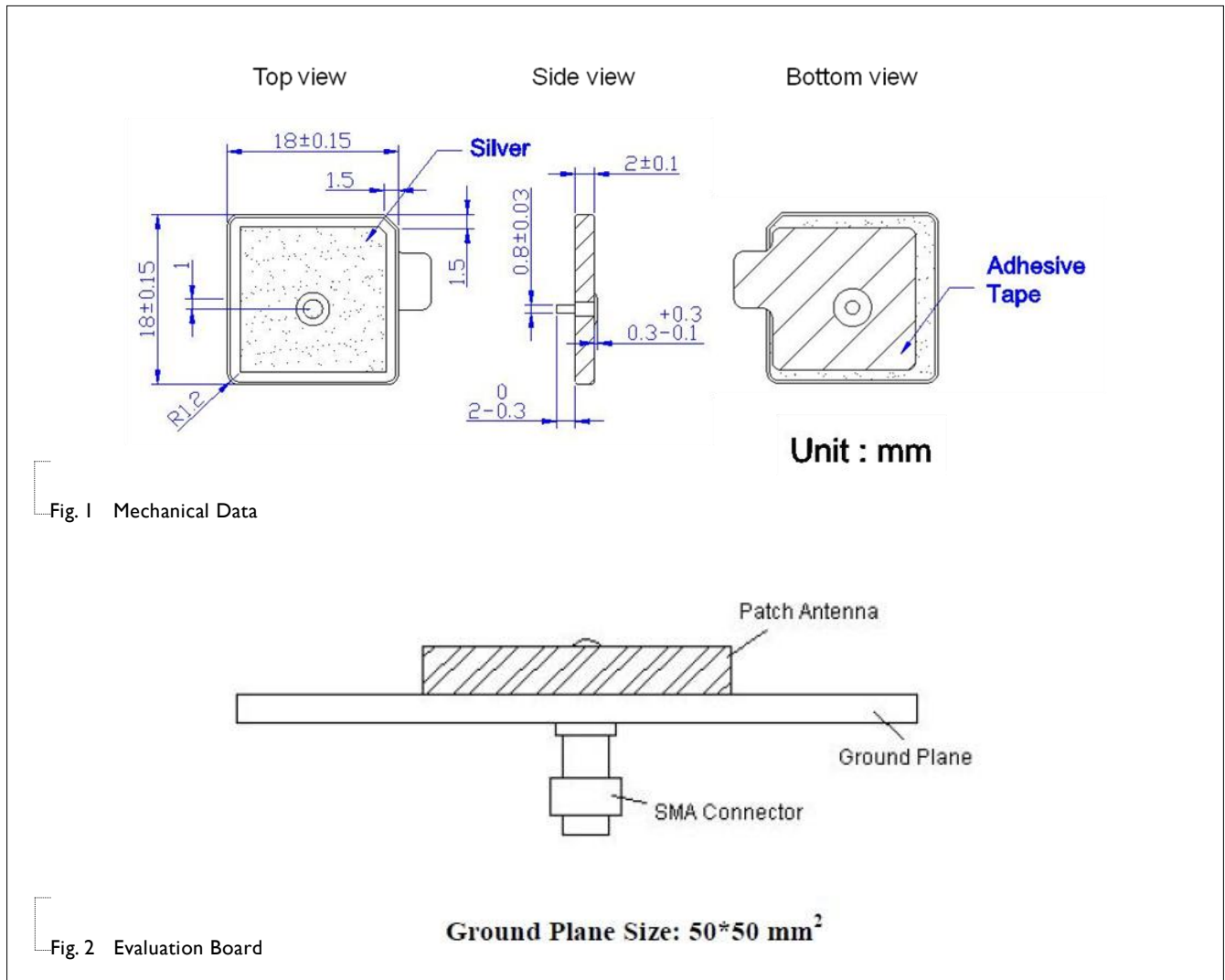
**SPECIFICATION**

Table I

DESCRIPTION	VALUE
Centre Frequency	1580 ± 3MHz
Bandwidth	8 MHz (Typ.)
Gain	3 dBic (Typ.)
VSWR	1.5 Max.
Polarization	Right Hand Circular Polarization
Axis Ratio	≅ 3 dB
Beam Width	> 120 degrees
Impedance	50Ω
Operating Temperature	-40~105 °C

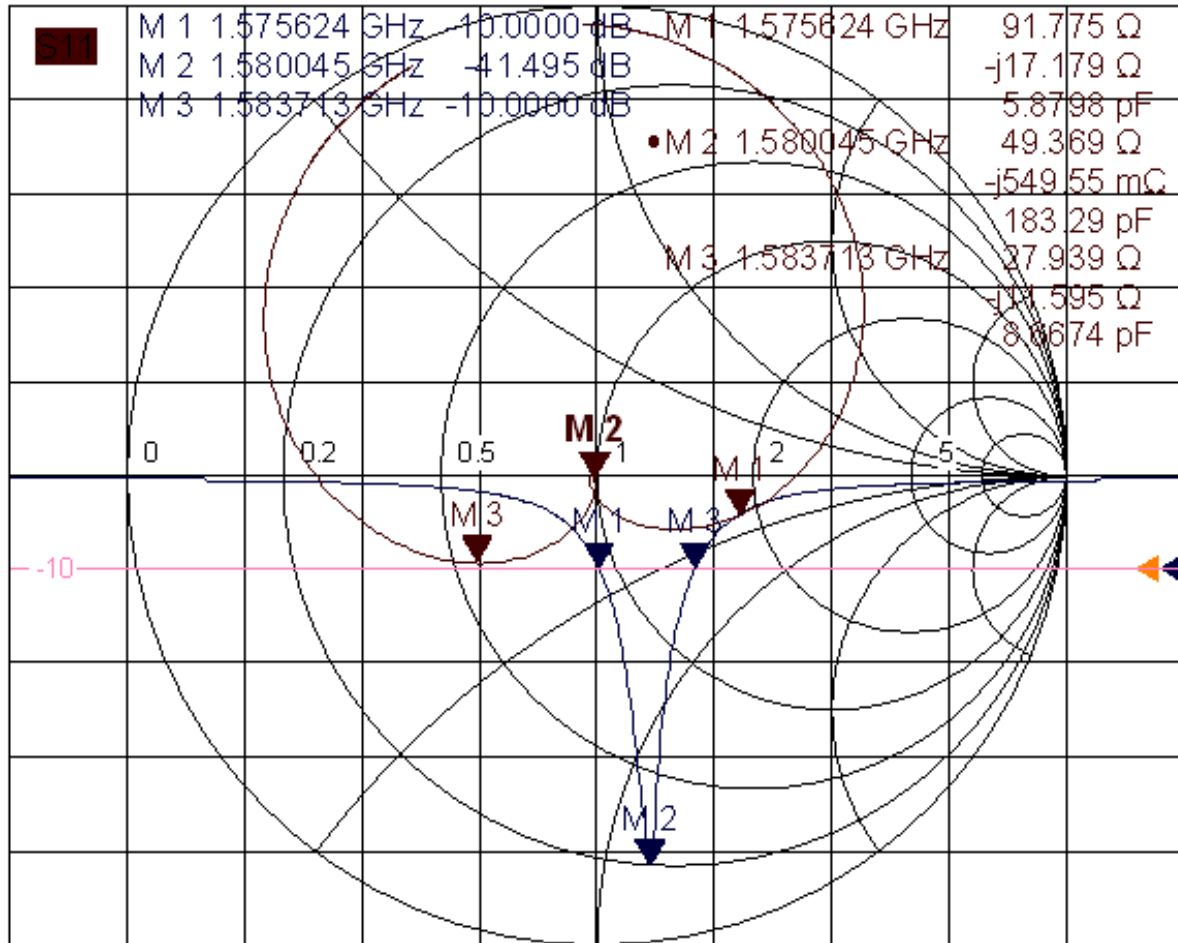
**NOTE**

1. Based on 50×50 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.



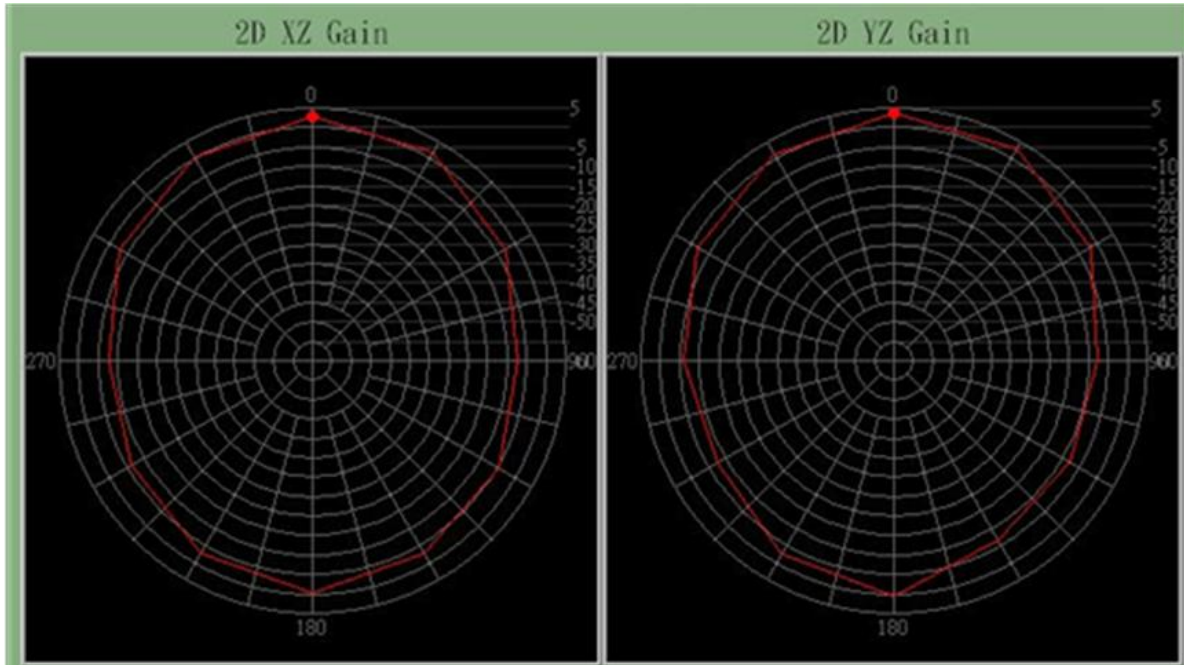
ELECTRICAL PERFORMANCES

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



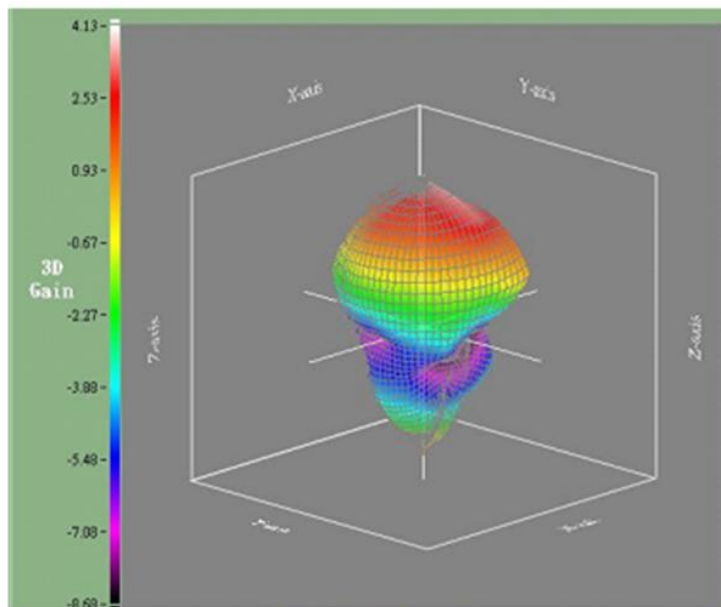
Ch1 Center 1.57542 GHz Pwr 0 dBm Span 100 MHz

Fig. 3 Return loss



2D x-z plane pattern

2D y-z plane pattern



**3D radiation pattern**

Fig. 4 Radiation Pattern (Frequency = 1580MHz)

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Mar. 09, 2015	-	- New data sheet for Patch antenna, PIN Feed size 18×18×2 mm