

Description: PIN 18x18x2 GPS Patch Antenna

**PART NUMBER: ANT1818B00ET1575S**

**Features:**

- Size : 18.0x18.0x2.0 mm
- High radiation efficiency
- Pin-solder process
- RoHS compliant

**Applications:**

- Navigation device
- Telematics box
- Fleet management

**ELECTRICAL SPECIFICATIONS**

| Description           | VALUE                            |
|-----------------------|----------------------------------|
| Dimension             | 18.0×18.0×2.0 mm <sup>3</sup>    |
| Centre Frequency      | 1580± 3 MHz                      |
| Bandwidth             | 8 MHz (Typ.)                     |
| Gain                  | 3.0 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.

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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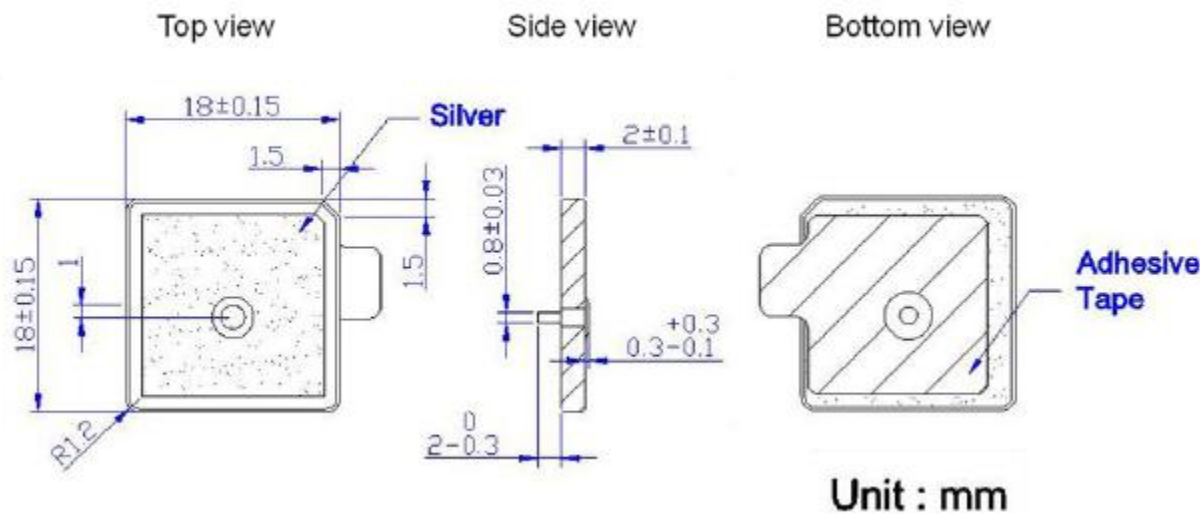
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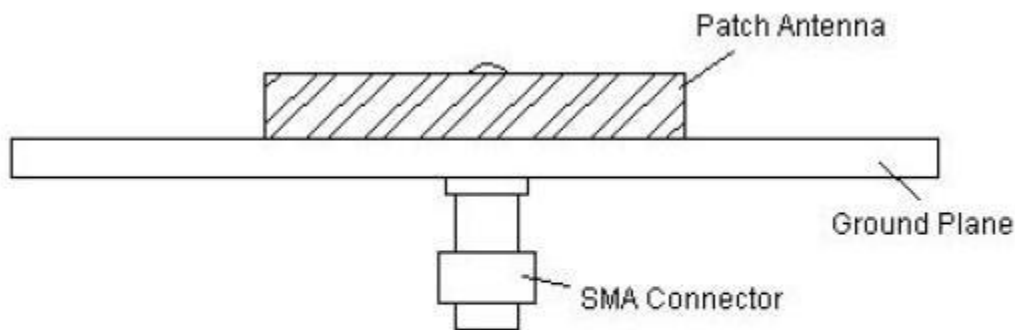
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**ELECTRICAL SPECIFICATIONS**



**Mechanical Data**



**Ground Plane Size: 50\*50 mm<sup>2</sup>**

**Evaluation Board**

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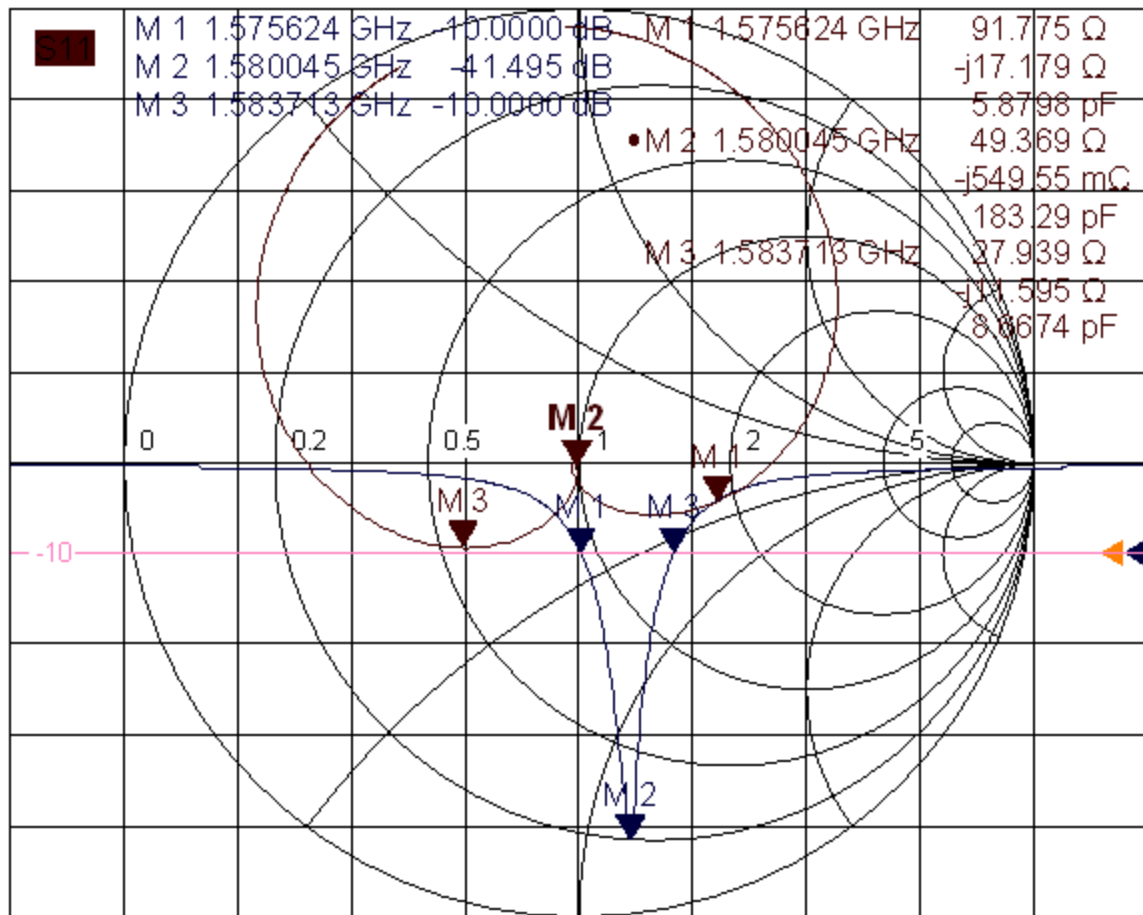
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|            |     |        |                   |           |              |
|------------|-----|--------|-------------------|-----------|--------------|
| Trc1       | S11 | dB Mag | 10 dB / Ref-10 dB | Cal       | 1 of 1 (Max) |
| Trc2       | S11 | 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

[ Return loss

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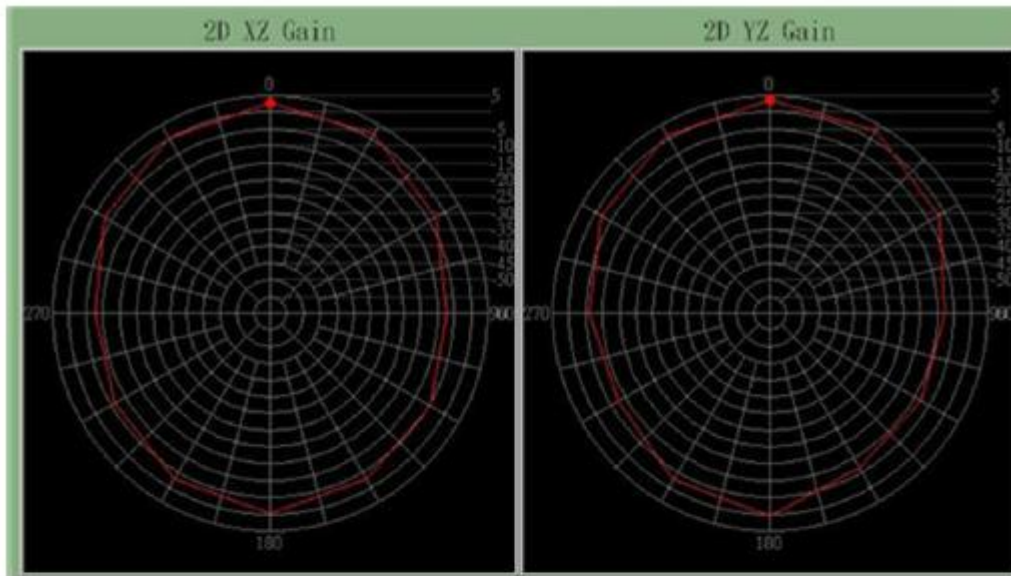
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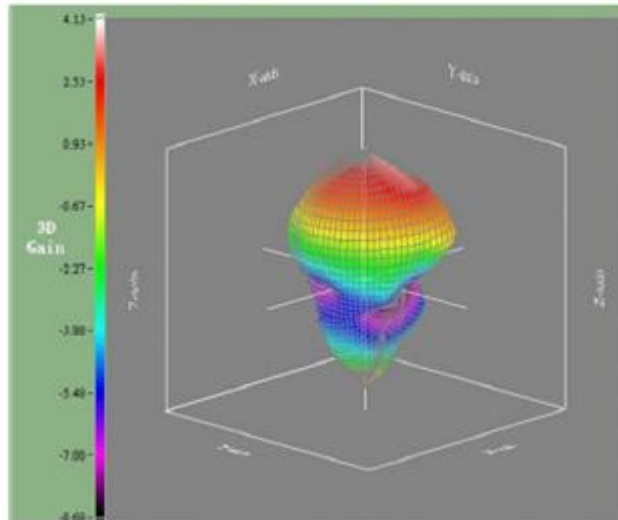
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**ELECTRICAL SPECIFICATIONS**



2D x-z plane pattern

2D y-z plane pattern



3D radiation pattern

Return los:

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### REVISION HISTORY

| Revision  | Date          | Description |
|-----------|---------------|-------------|
| Version 1 | Nov. 25, 2020 | - New issue |