

**Description: 35354 GNSS Patch Antenna**

**PART NUMBER: ANT3535B001TGNSSA**



**Features:**

- Size : 35x35x4mm
- High radiation efficiency
- GNSS band
- Pin-solder process
- RoHS compliant

**Applications:**

- GPS system
- Navigation device
- Telematics box
- Fleet management

All dimensions are in mm / inches

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**ELECTRICAL SPECIFICATIONS**

**Working Frequency**

BEIDOU : 1561 MHz  
GPS : 1575 MHz  
GLONASS : 1602 MHz

**Gain(Peak)**

BEIDOU 1561MHz : 5.4 dBic  
GPS 1575MHz : 5.5 dBic  
GLONASS 1602MHz : 5.5 dBic

**Gain(Average)**

BEIDOU 1561MHz : -0.68 dB  
GPS 1575MHz : -0.51 dB  
GLONASS 1602MHz : -0.60 dB

**Polarization**

RHCP

**Axial Ratio**

$\leq 13$  dB

**Impedance**

50  $\Omega$

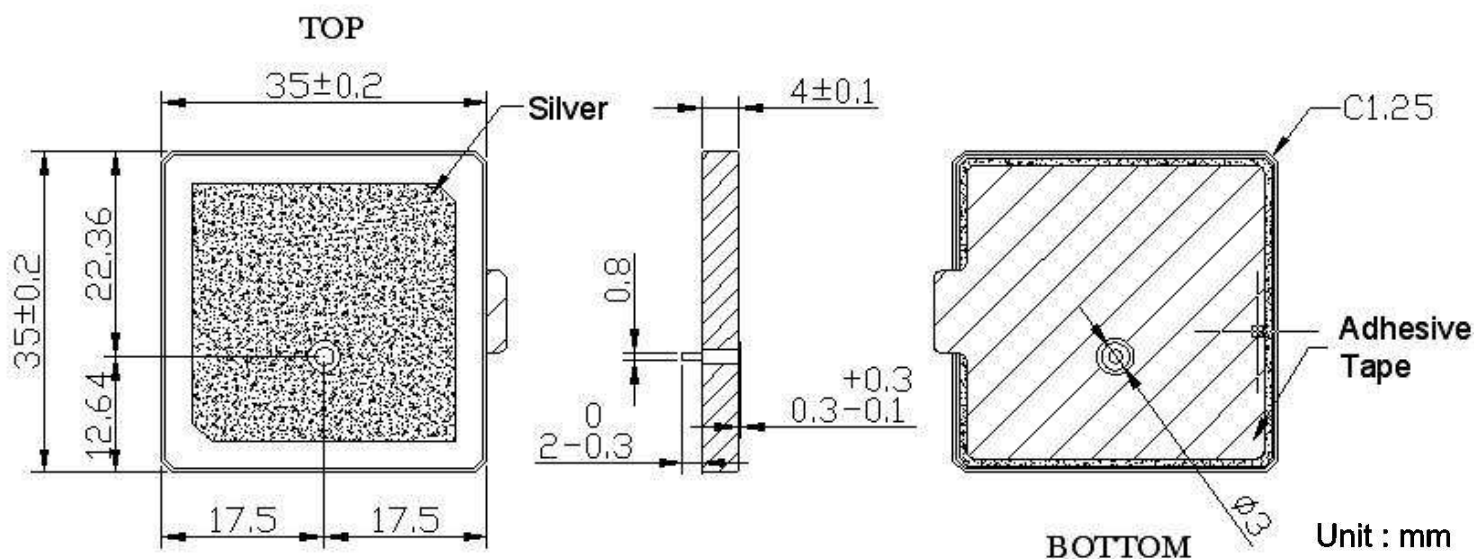
**Operating Temperature**

- 40 ~ 85 °C

**NOTE**

1. Based on 70×70 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.

**MECHANICAL DRAWING**



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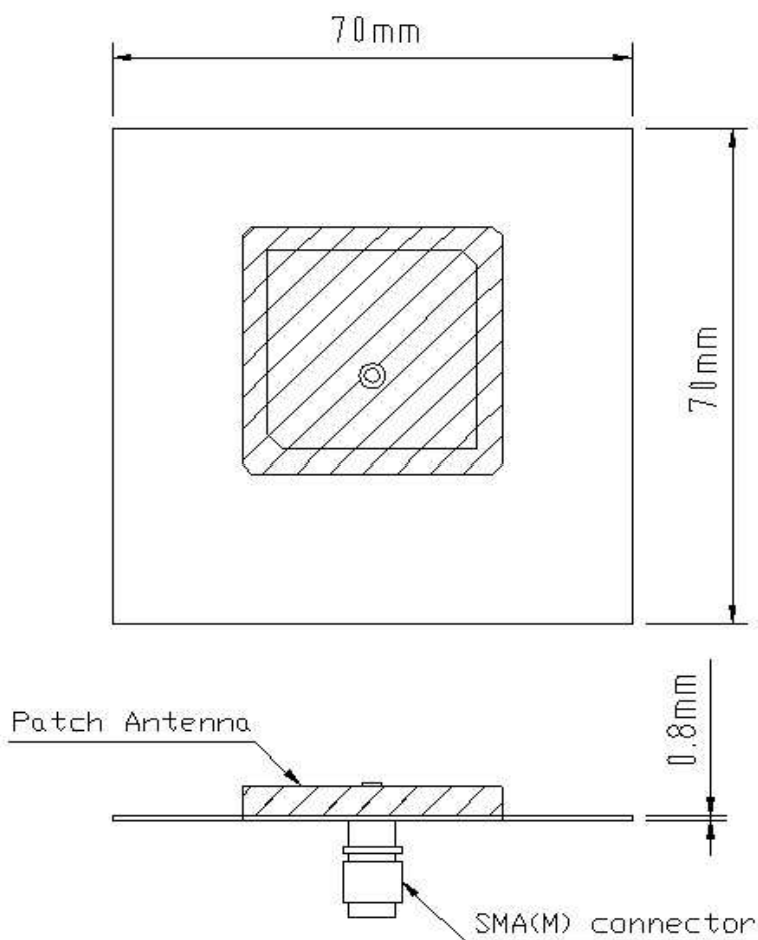
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**REFERENCE DESIGN OF EVALUATION BOARD**



**Ground Plane Size: 70x70 mm<sup>2</sup>**

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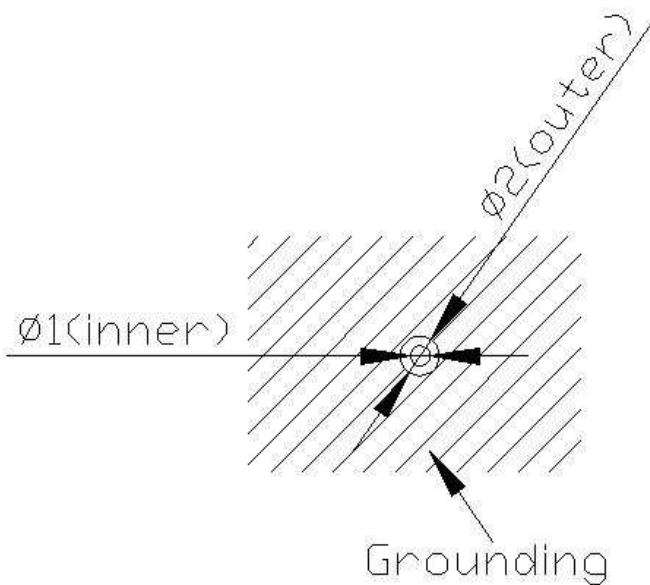
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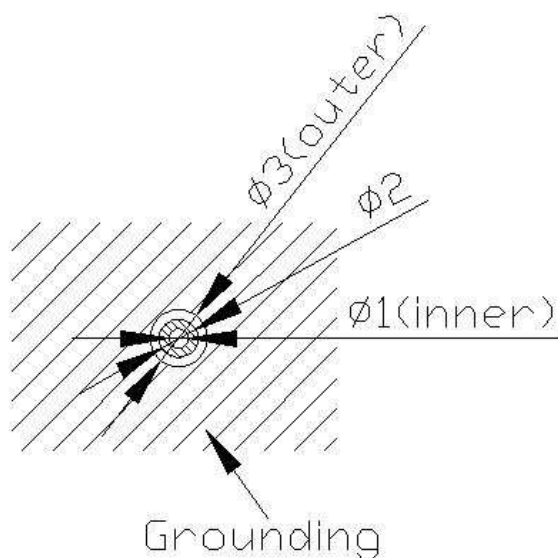
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**FOOTPRINT**

**Top View**



**Bottom View**



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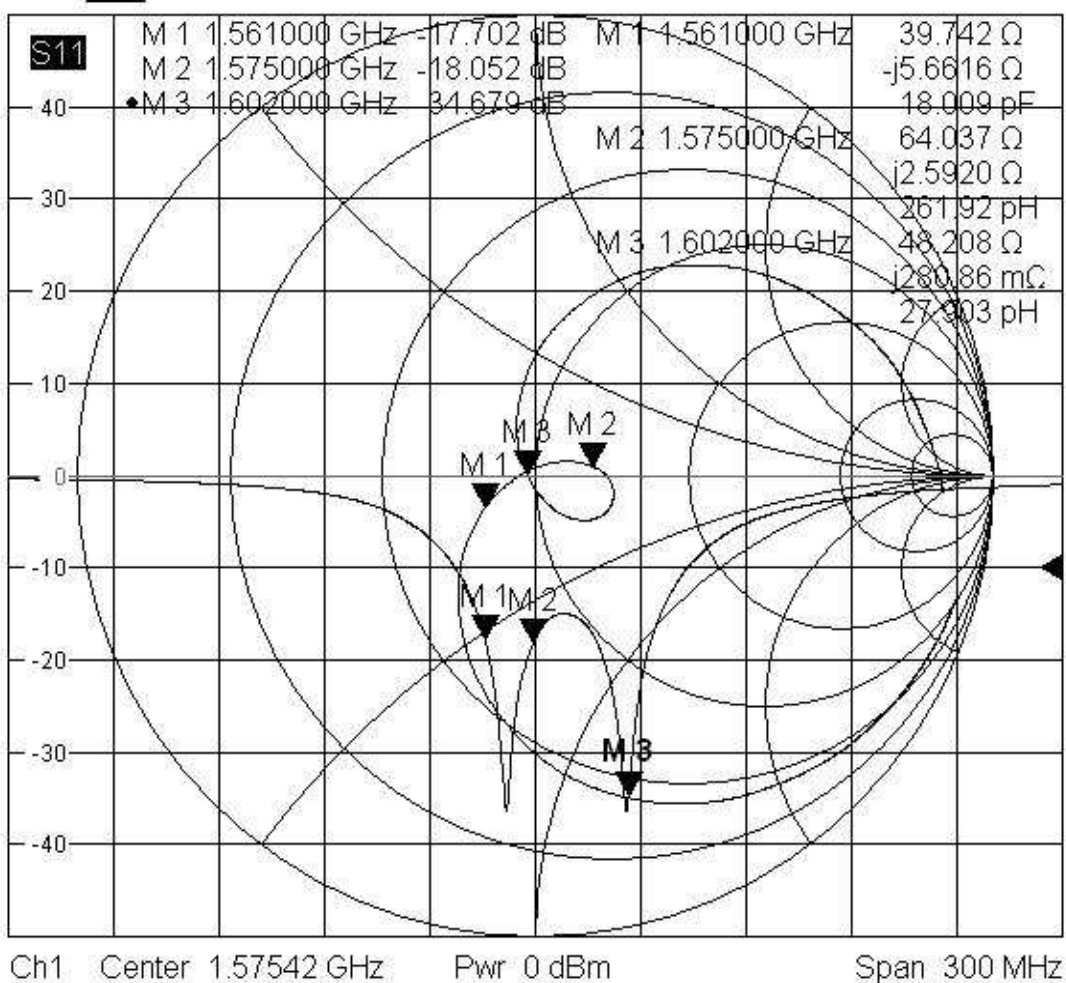
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**RETURN LOSS**

Trc1 S11 dB Mag 10 dB / Ref -10 dB Cal int 1 of 1 (Max)  
Trc2 S11 Smith Ref 1 U Cal int



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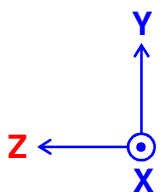
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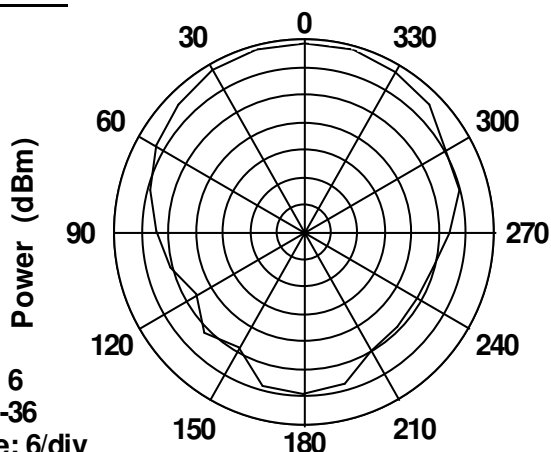
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**RADIATION PATTERN**

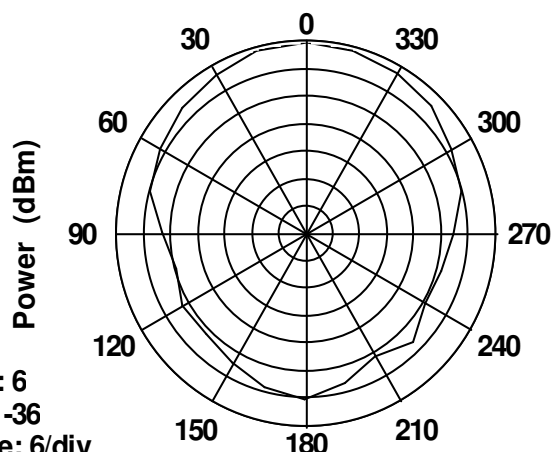


Evaluation board and XYZ direction

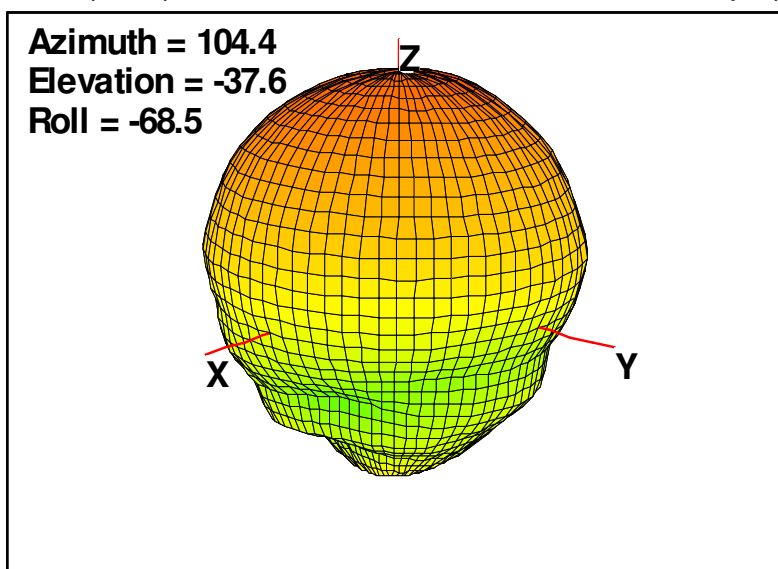
**1561MHz**



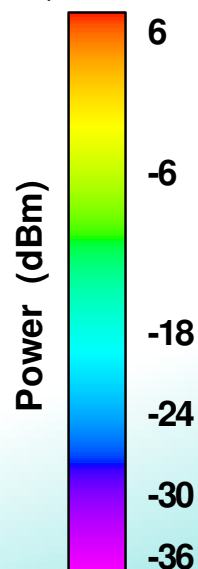
2D x-z plane pattern



2D y-z plane pattern



3D radiation pattern



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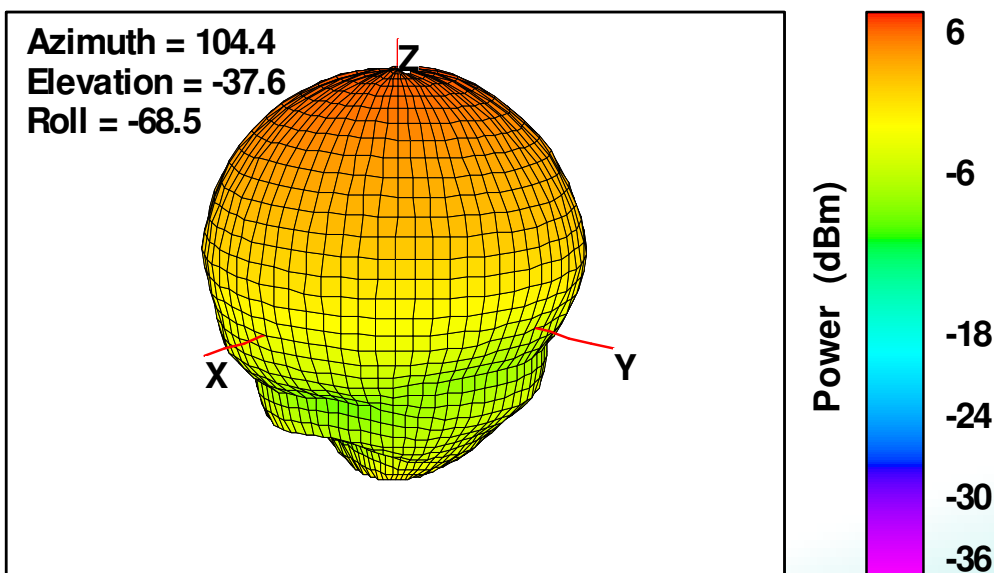
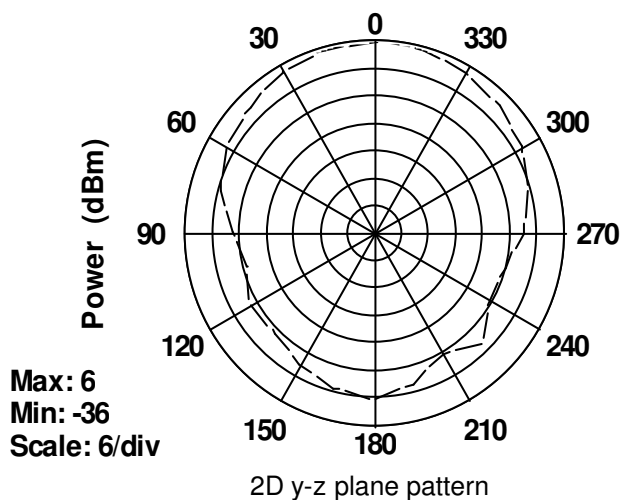
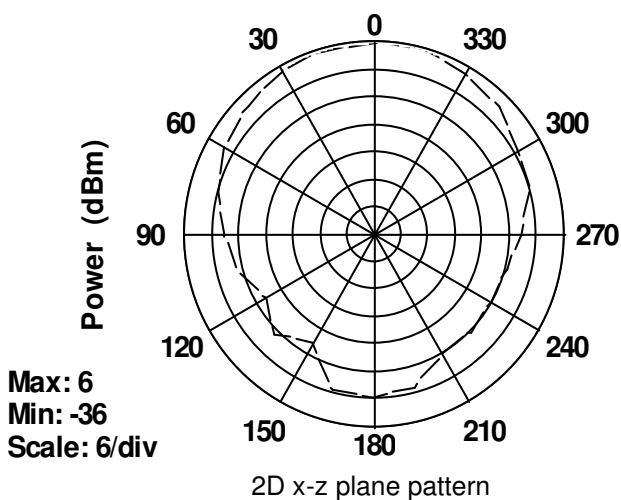


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**RADIATION PATTERN**

**1575MHz**



3D radiation pattern

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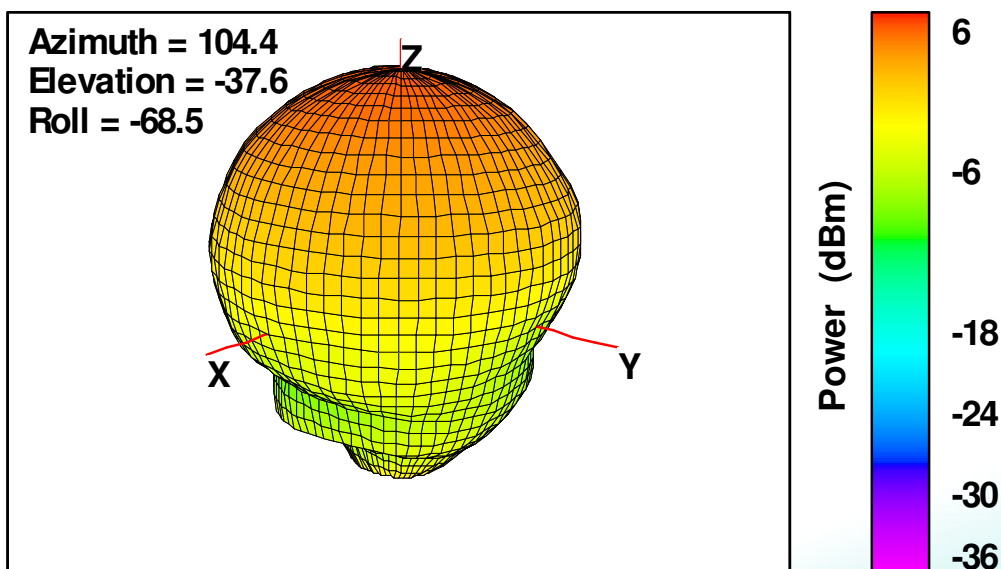
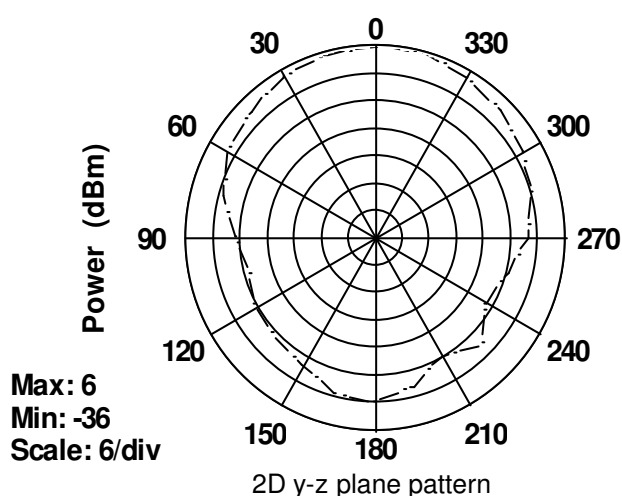
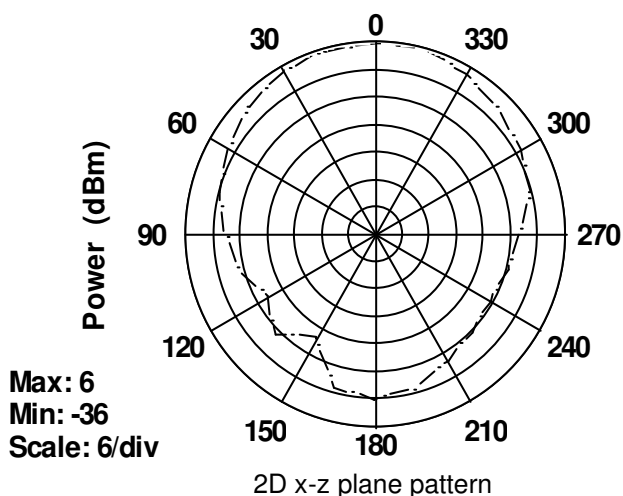
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**RADIATION PATTERN**

**1602MHz**



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### REVISION HISTORY

Revision	Date	Description
Version 1	May. 28, 2021	- New issue

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