

2.4GHz : Wi-Fi/BT External Antenna



PRO-EX-296

Request Samples



Check Inventory



Ø12 x 37 mm

RoHS/RoHS II Compliant

MSL Level = 1

Features

- Ultra-Compact
- High Reliability/ Sensitivity
- Easy to install
- ROHS Compliant
- Customizable Cable and Connector options

Applications

- Wi-Fi/Bluetooth/ZigBee/ISM
- IoT/M2M
- Network Devices
- Set top Boxes

Product Image



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Electrical Specification – Antenna

Parameter	Specification	Unit
Operating Frequency	2400 - 2500	MHz
Return Loss	< -11.2	dB
Polarization	Linear	-
Total Efficiency	>-1.1	dB
Peak Gain	3.0	dB _i
Impedance	50	Ω

Note: Performance will vary depending on the ground plane, application, and environment.

Mechanical Specification

Parameter	Specification
Antenna Dimension	Ø12 x 37 mm
Mounting Type	Screw
Material(s)	PC and PBT
Cable Type	Ø1.13 mm coaxial
Cable Length	100 ±3 mm
Connector Type	MHF-1 (F) (e.g. U.FL, IPEX)

Environmental Specification

Parameter	Specification
Storage Temperature	-30°C to +70°C

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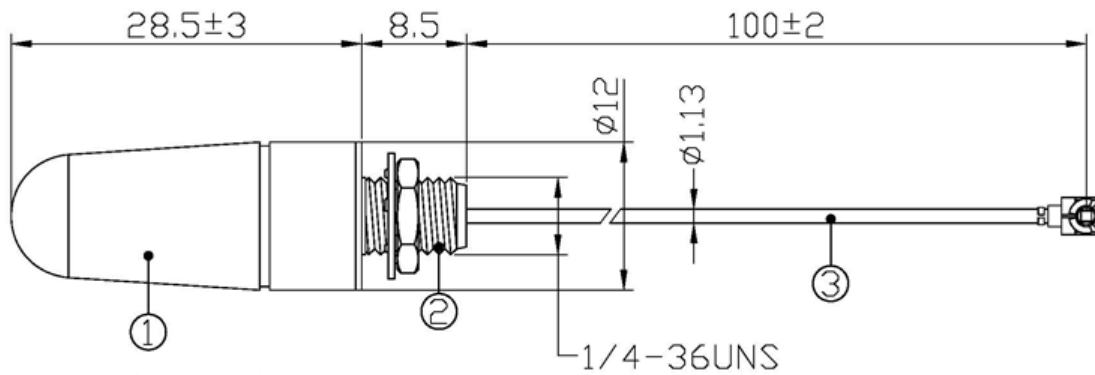


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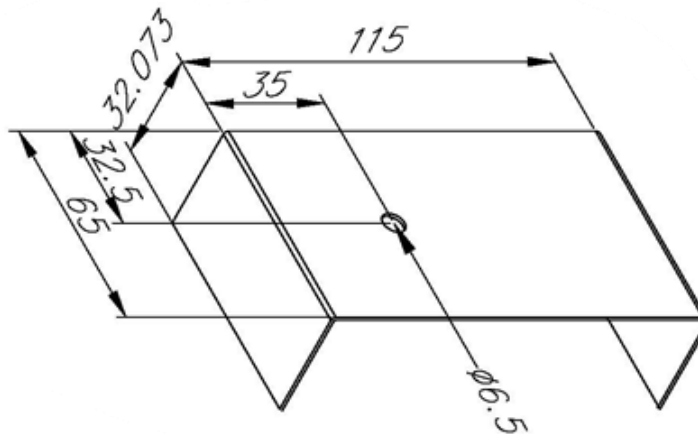
Product Dimensions



Unit: mm

Measurement Setup

The antenna measurements were all done in free space, assembled on an aluminum sheet metal test fixture according to the sketch below.



Unit: mm



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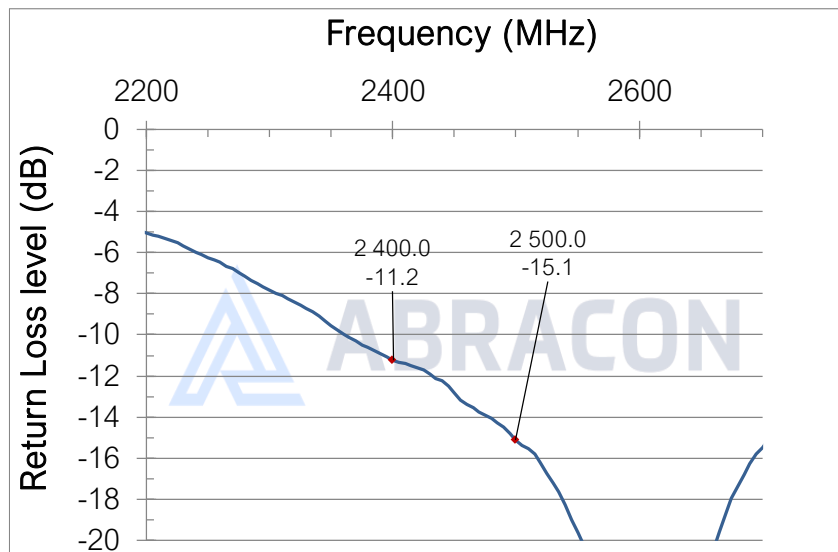


Ø12 x 37 mm

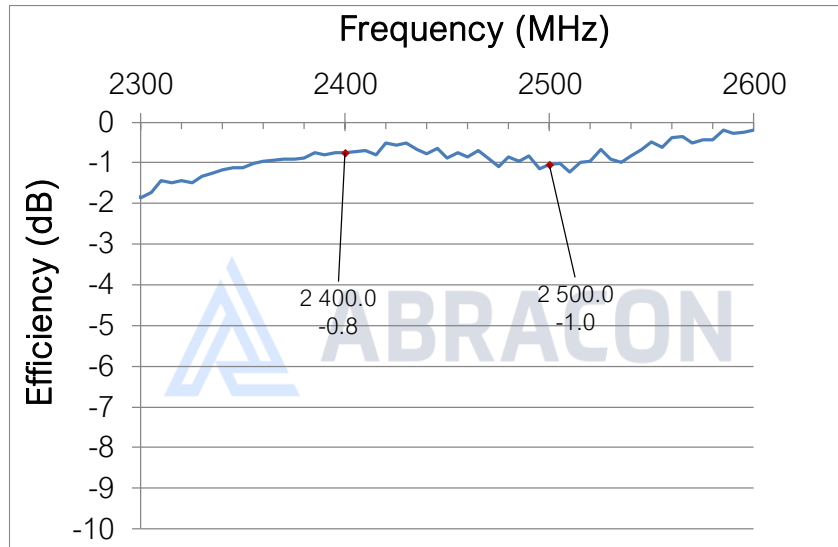
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Reflection Characteristics – Return Loss



Radiation Characteristics – Total Efficiency (dB)



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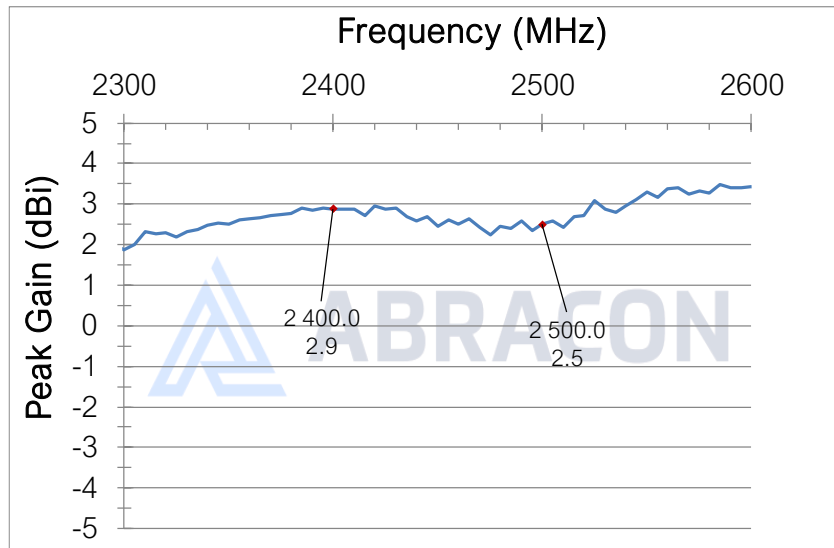


Ø12 x 37 mm

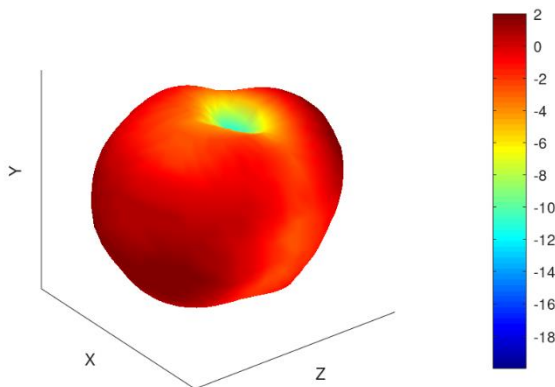
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Radiation Characteristics – Maximum Gain



Radiation Characteristics – 3D Pattern @ 2450 MHz



Unit: dBi



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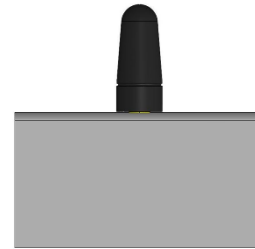
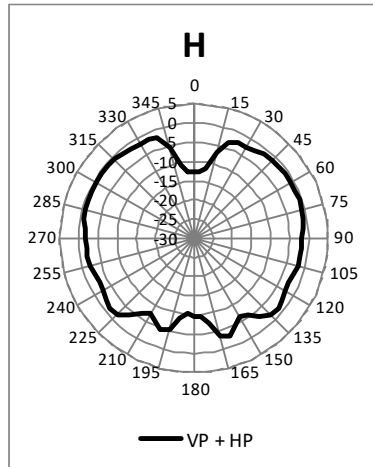
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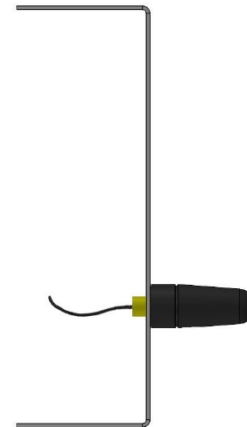
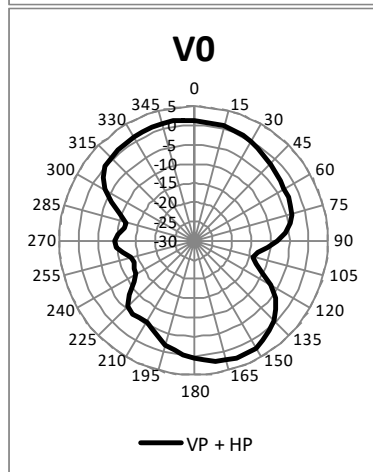
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Radiation Characteristics – 2D Pattern @ 2450 MHz

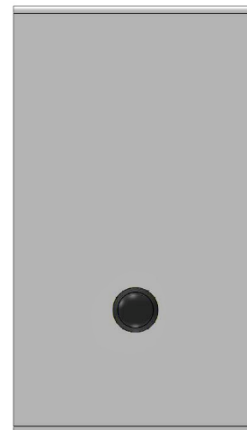
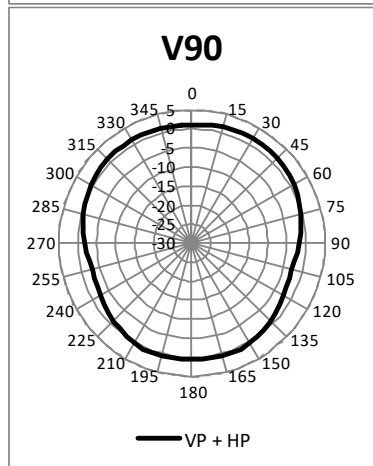
XY-plane:



YZ-plane:



XZ-plane:



VP: Vertical Polarization
HP: Horizontal Polarization

Unit: dBi



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Packaging

The antenna is delivered in a plastic bag.

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