



### Features:

- 2400-2483.5MHz
- Size: 3.2 x 1.6 x 1.1mm
- Efficiency: 66 %
- Gain: 1.1 dBi
- Polarization: Linear
- Power Handling: 5W
- RoHS Compliant
- Moisture Sensitivity Level MSL3

### Applications:

- Bluetooth, BLE, Zigbee, WiFi
- 2.4GHz ISM band radios

All dimensions are in mm / inches

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Series: Chip Antenna

Description: 2.4-2.4835GHz Ceramic SMT  
antenna, 4x4.25mm keep out area

PART NUMBER: W3008

### ELECTRICAL SPECIFICATIONS

Frequency	2400-2483.5MHz
Nominal Impedance	50 $\Omega$
Return Loss	-4dB
Radiation Pattern	Omni
Gain	1.1dBi
Efficiency	66%
Polarization	linear
Power Withstanding	5W

### MECHANICAL SPECIFICATIONS

Overall Length	3.2x1.6x1.1mm
Weight	33mg
Antenna Color / Material	Ceramic

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40~+85° C
Storage Temperature	-40~+85° C
RoHS Compliant	Yes

(\*) All RF parameters measured on 80\*37mm PCB with 4\*4.25mm clearance in free space. No matching component used.

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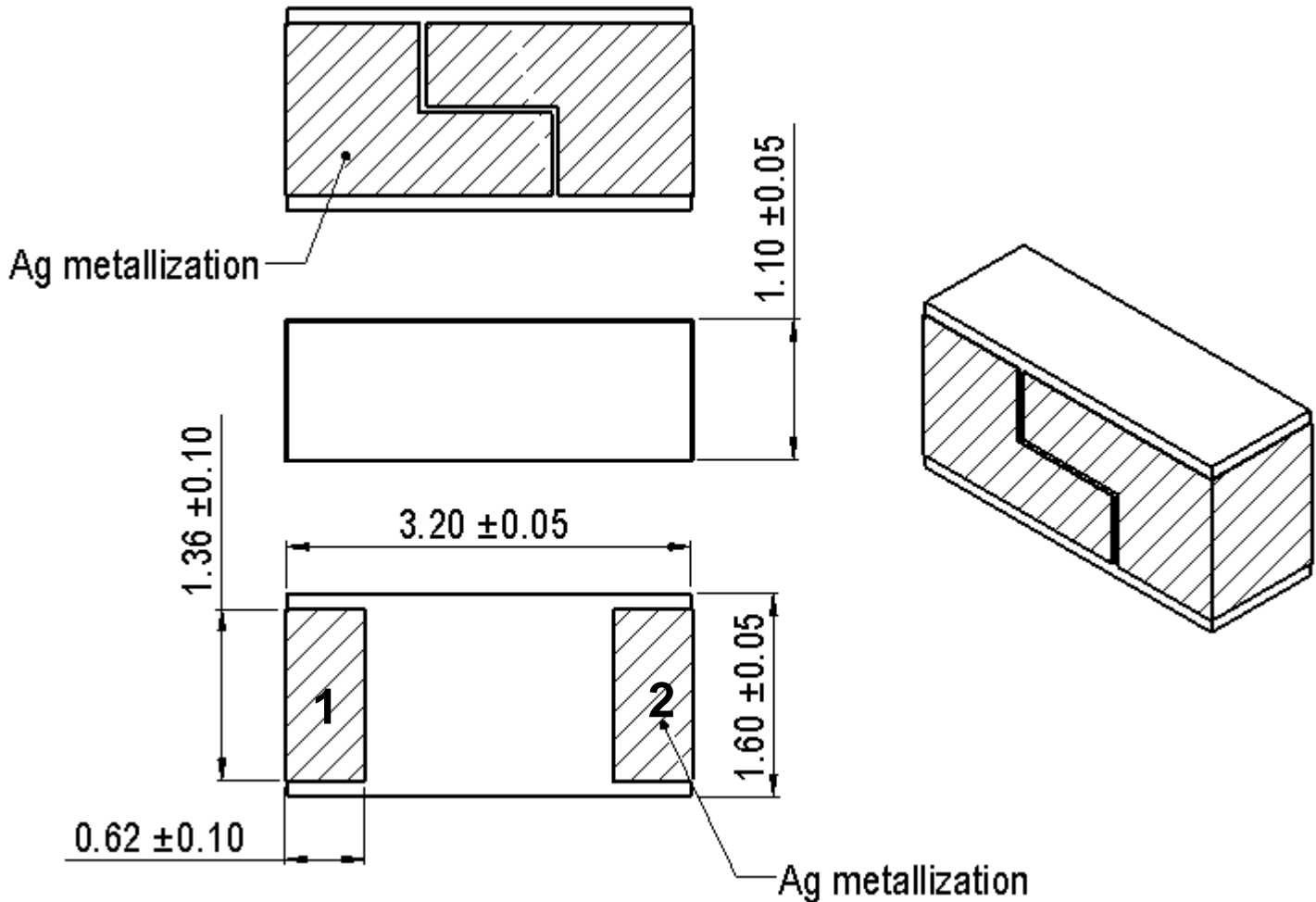
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## MECHANICAL DRAWING AND TERMINAL CONFIGURATION



No.	Terminal Name	Terminal Dimensions
1	Feed /GND	0.62 x 1.36 mm
2	Feed /GND	0.62 x 1.36 mm
Antenna is symmetrical, either one of pads 1 or 2 can be used as feed terminal		

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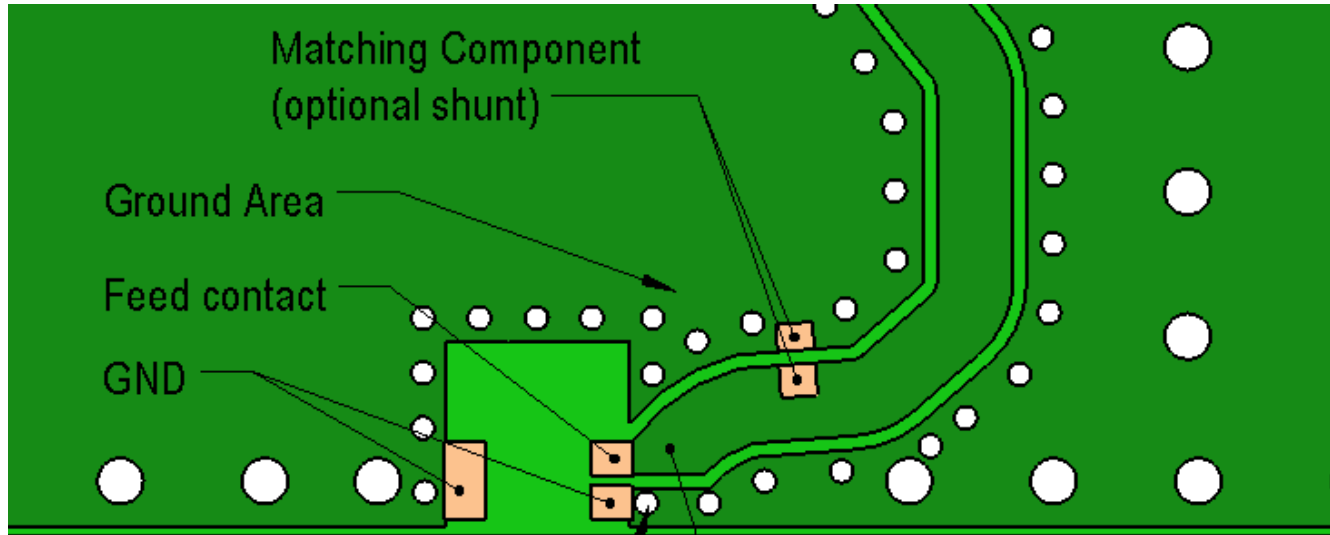
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## MECHANICAL DRAWING AND TERMINAL CONFIGURATION

**Ground cleared under antenna, clearance area 4 mm x 4.25mm**

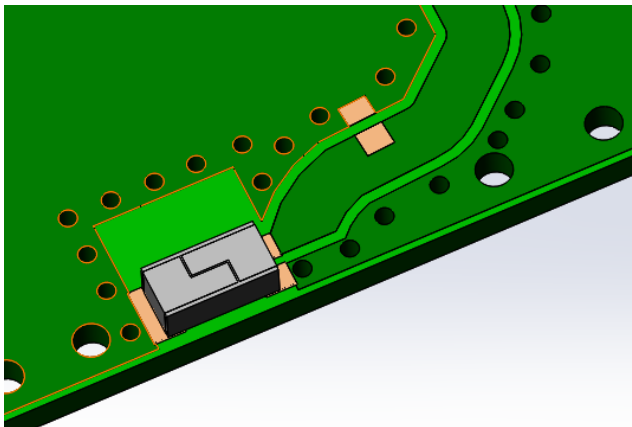


Ground Via Hole

Ground area should be surround with ground via holes

Feed line 50Ohm

Any type of 50 Ohm feed line can be used. inner layers on feed line area need to designed to give 50 Ohm characteristics to feed line.



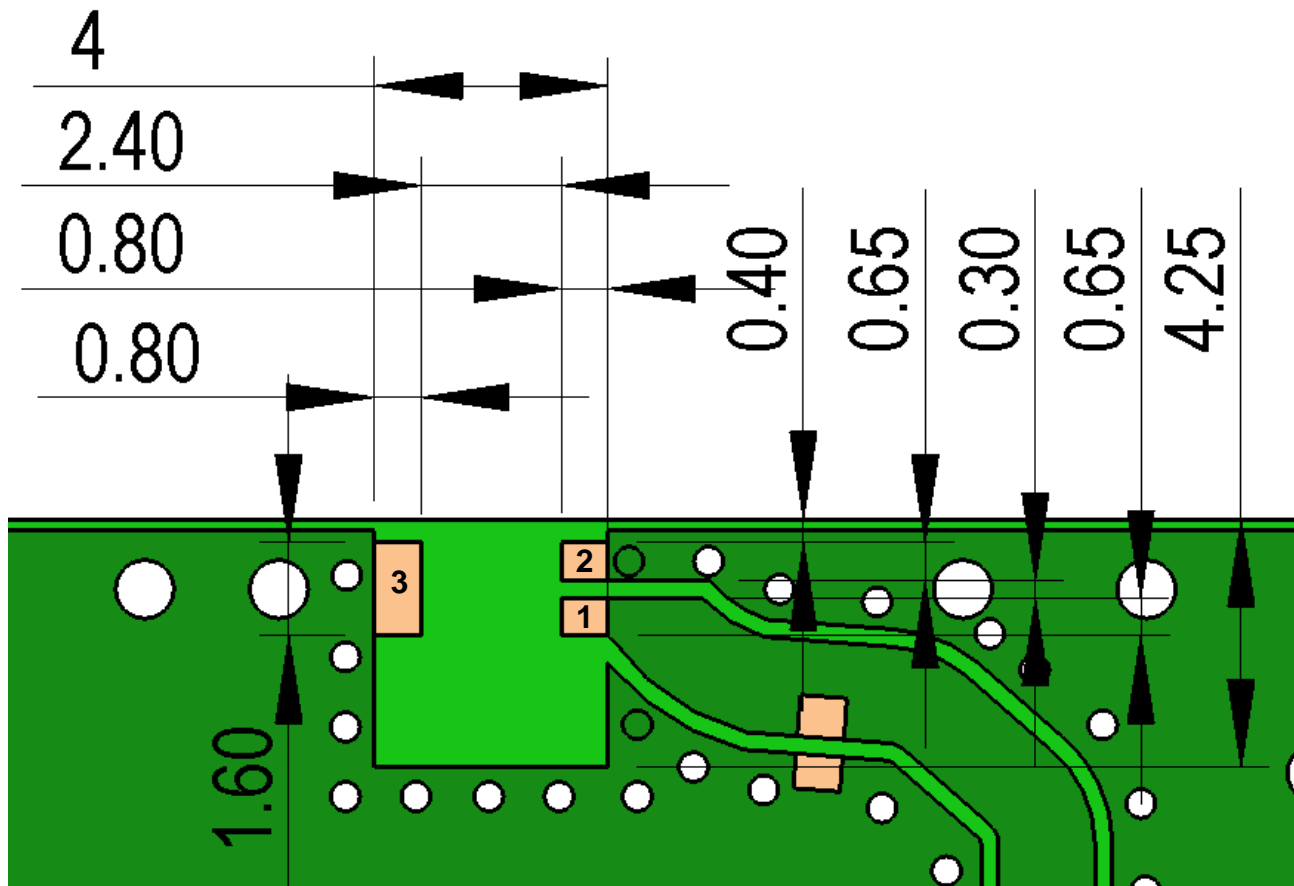
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## MECHANICAL DRAWING AND TERMINAL CONFIGURATION

**Recommended Antenna Pad Dimensions on PCB Layout (top surface)**  
**Ground cleared under antenna, clearance area 4 mm x 4.25 mm**



**PCB contact pads**

No.	Terminal Name	Terminal Dimensions
1	Feed	0,80 x 0,65 mm
2	GND	0,80 x 0,65 mm
3	GND	0,80 x 1,60 mm

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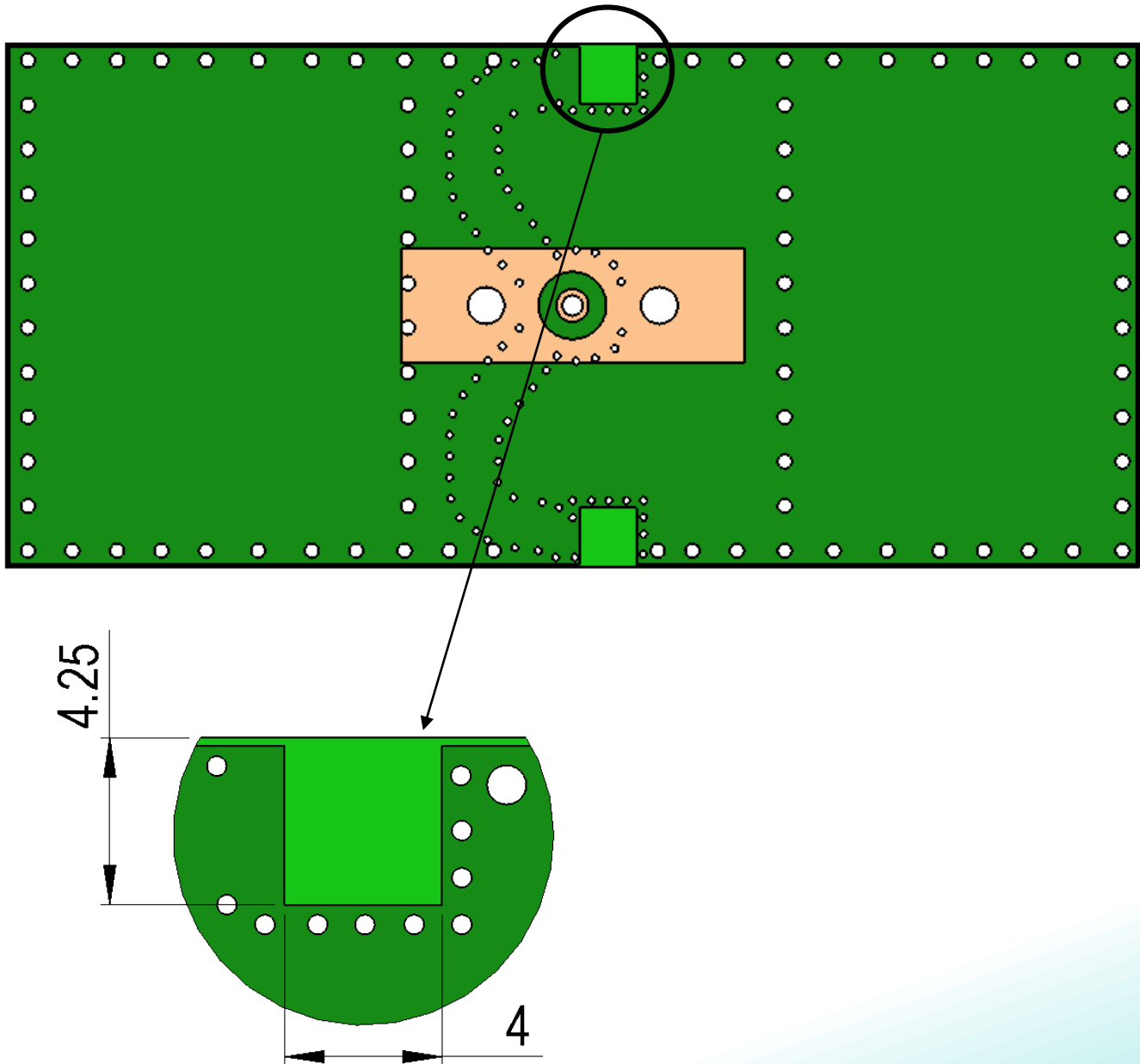
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antenna, 4x4.25mm keep out area

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MECHANICAL DRAWING AND TERMINAL CONFIGURATION

*Recommended Antenna Pad Dimensions on PCB Layout (bottom surface)  
Ground cleared under antenna, clearance area 4 mm x 4.25 mm*



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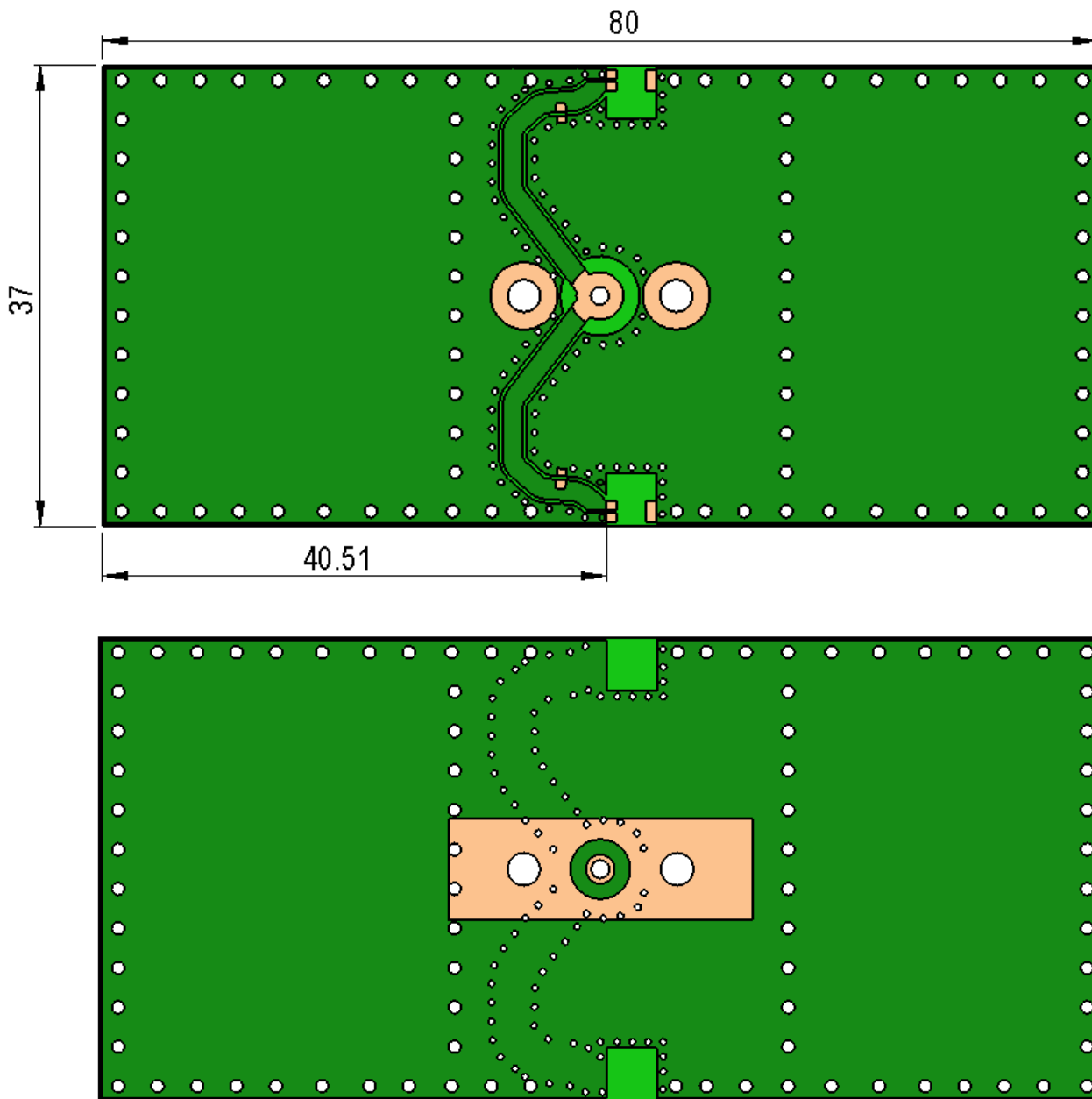
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## MECHANICAL DRAWING AND TERMINAL CONFIGURATION

*Recommended test board layout for electrical characteristic measurement, test board outline size 80 x 37mm*



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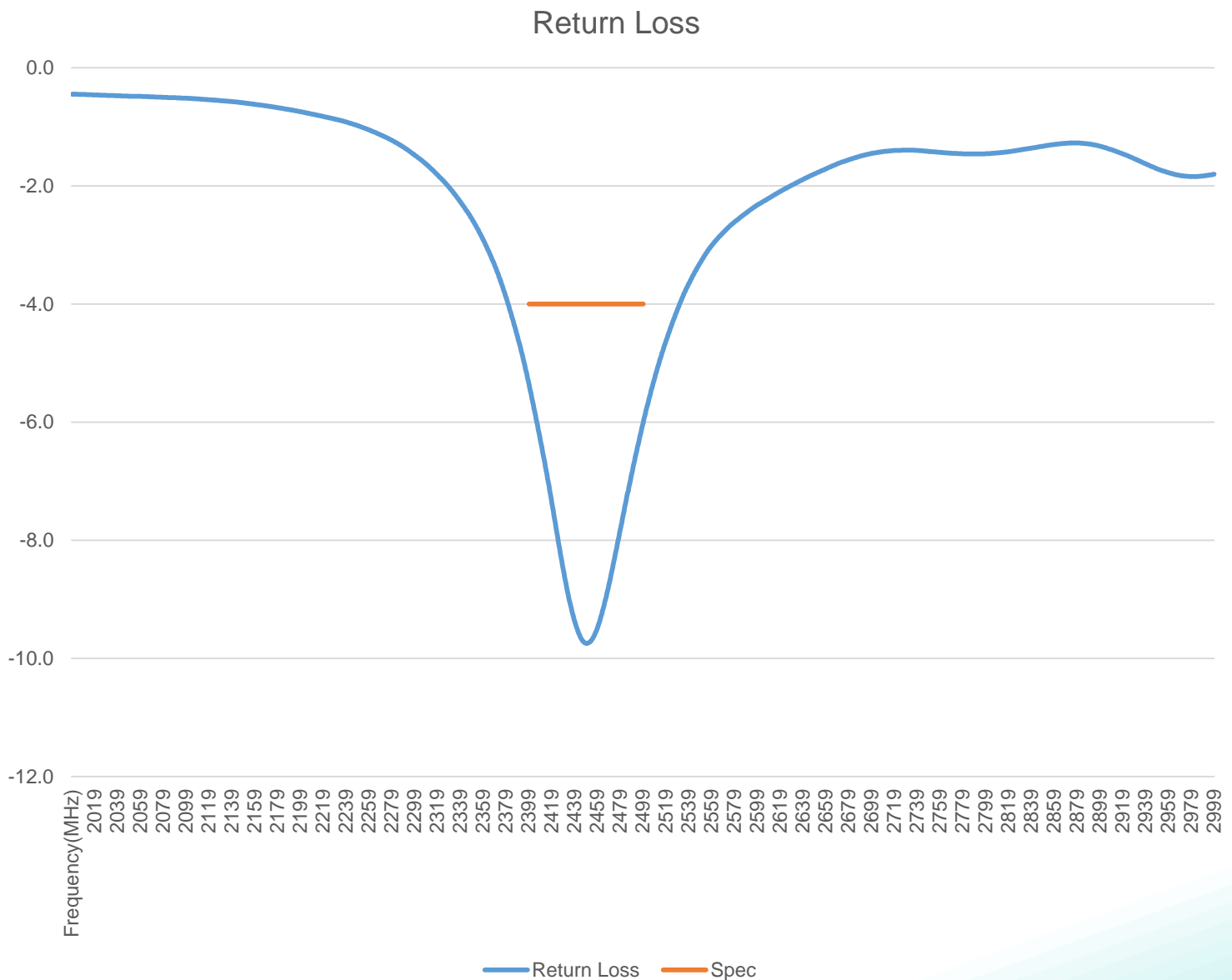
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## CHARTS

### Return loss



(\*) All RF parameters measured on 80\*37mm PCB with 4\*4.25mm clearance in free space. No matching component used.

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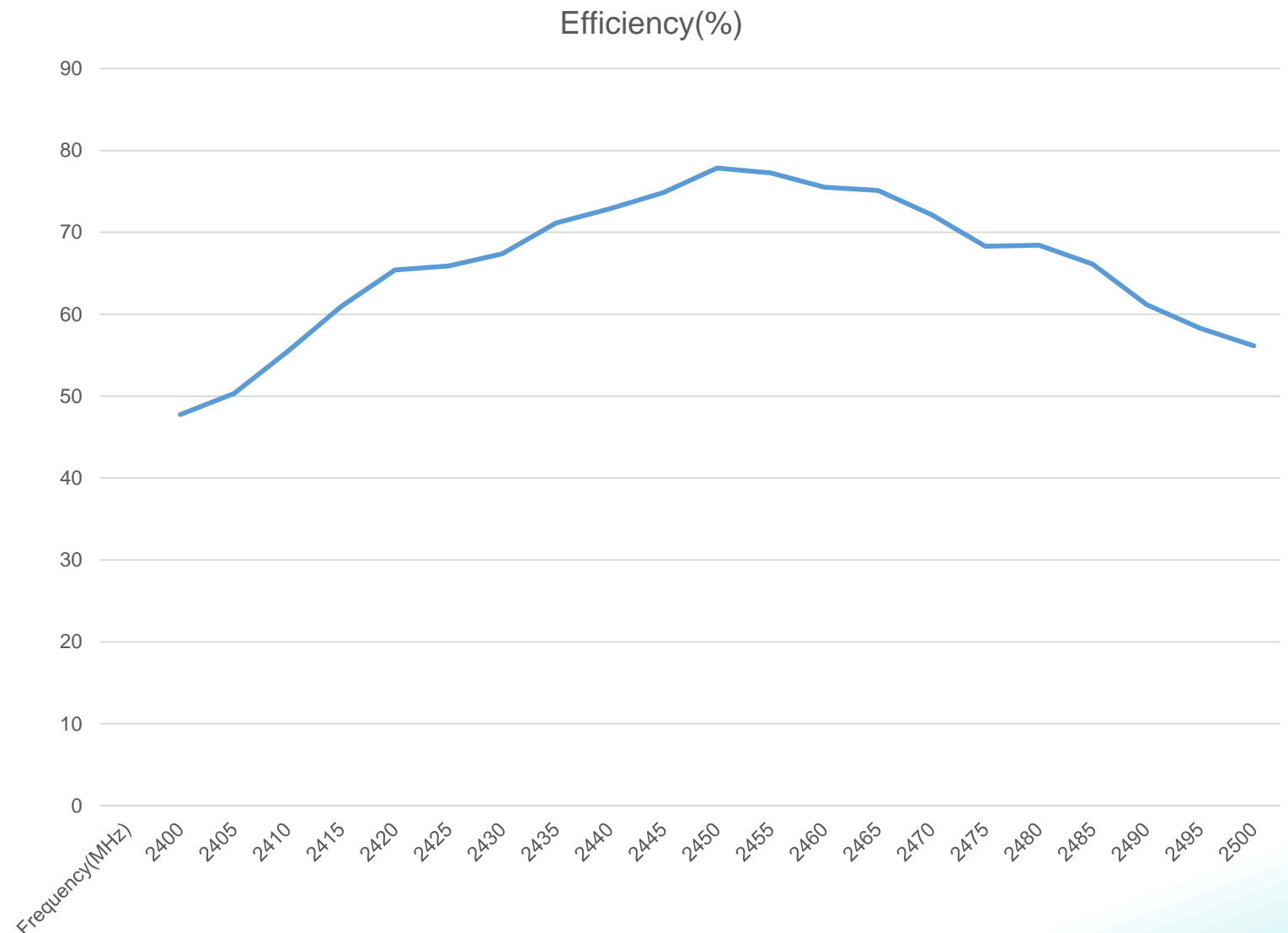
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## CHARTS

### Efficiency(%)



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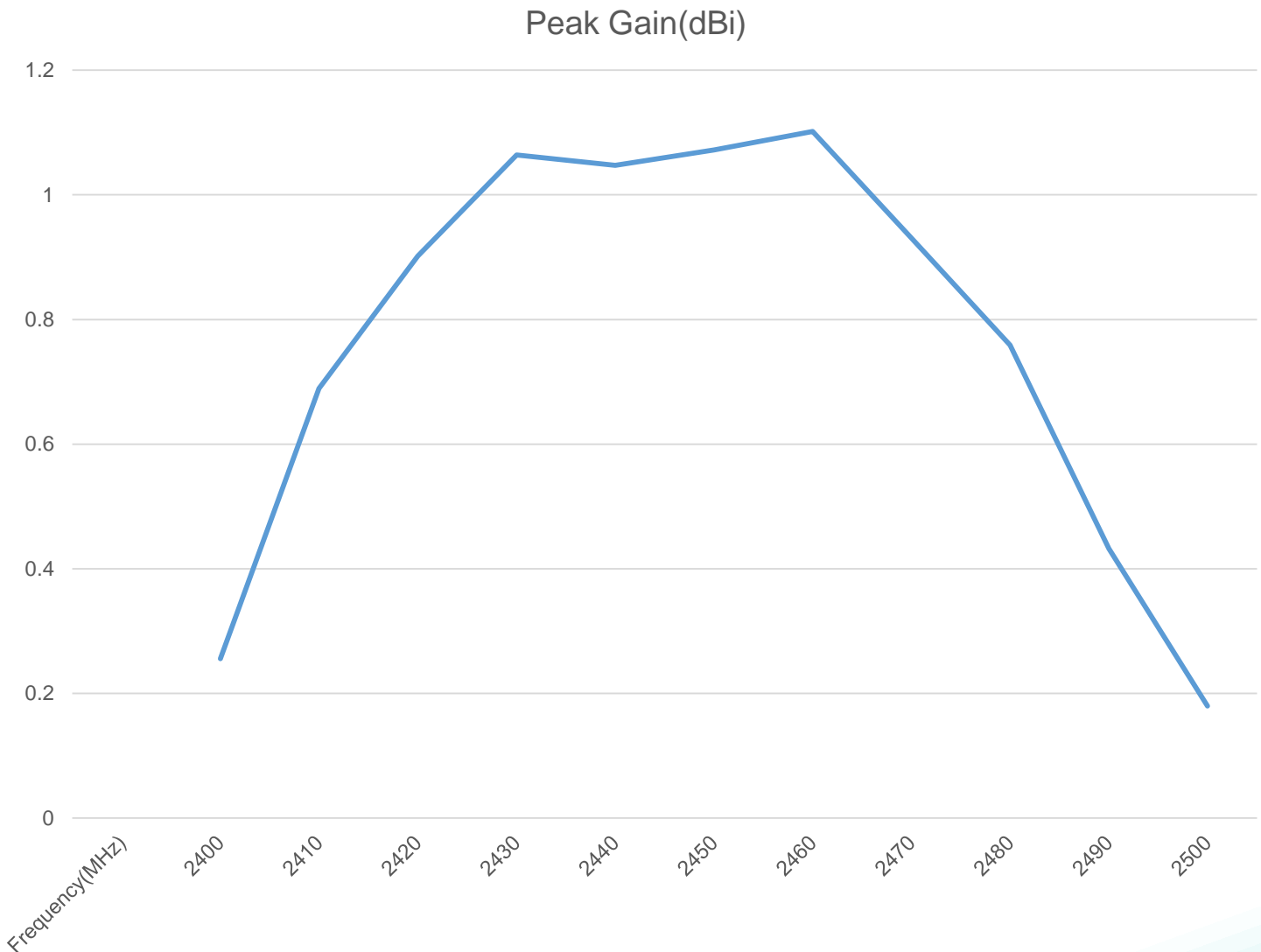
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## CHARTS

### Peak Gain(dBi)



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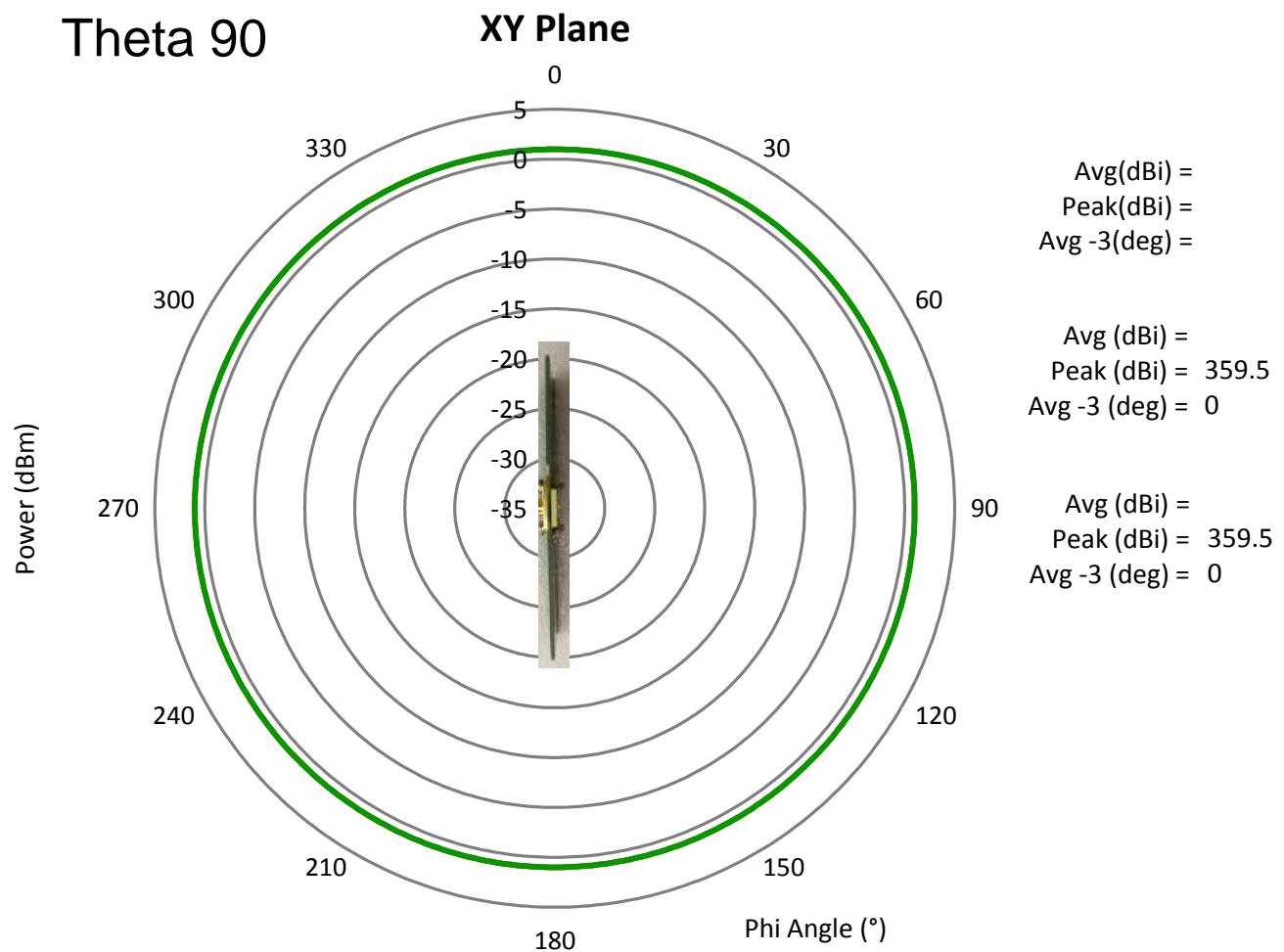
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## CHARTS

### Free Space Radiation Pattern



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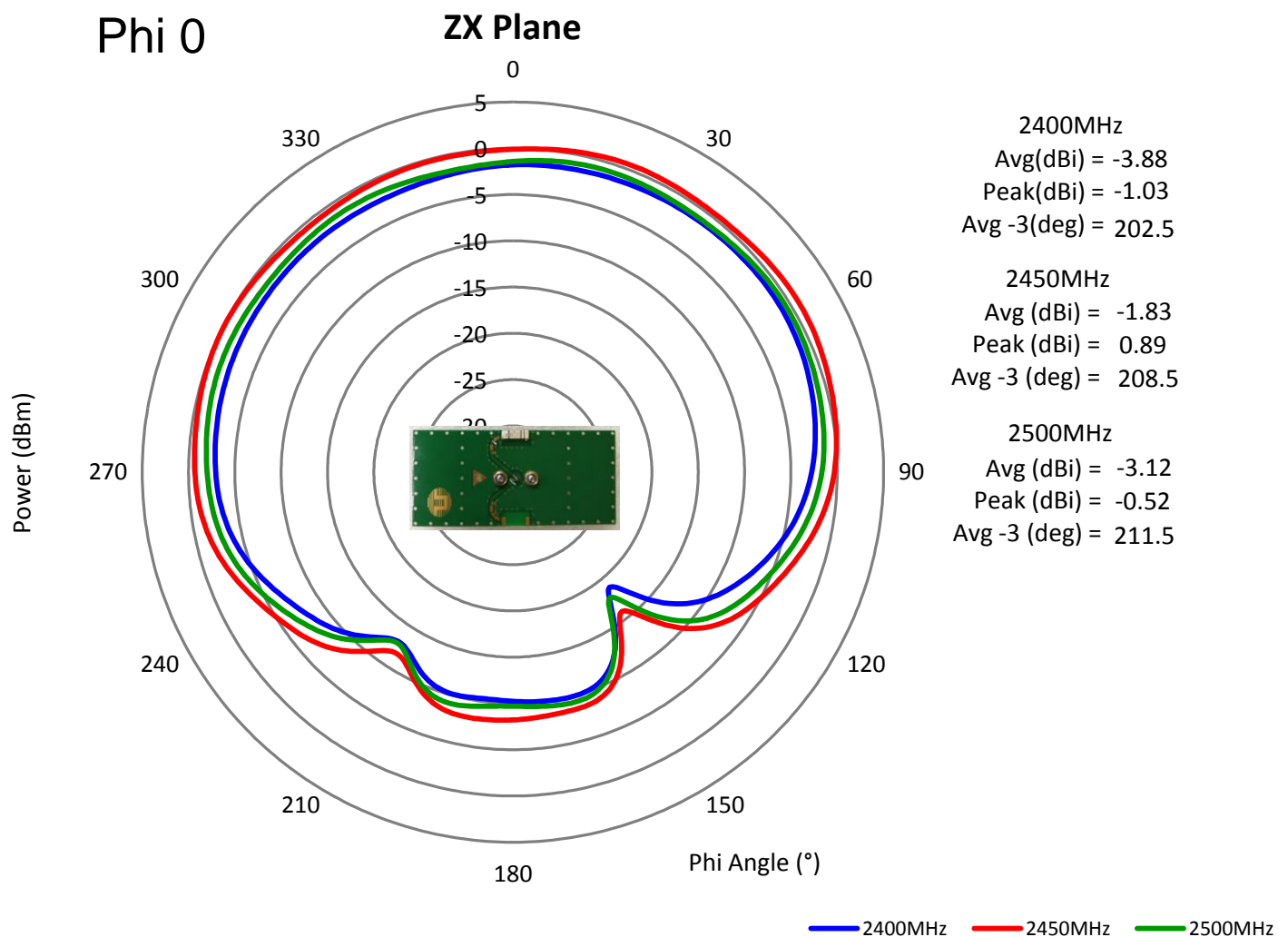
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## CHARTS

### Free Space Radiation Pattern



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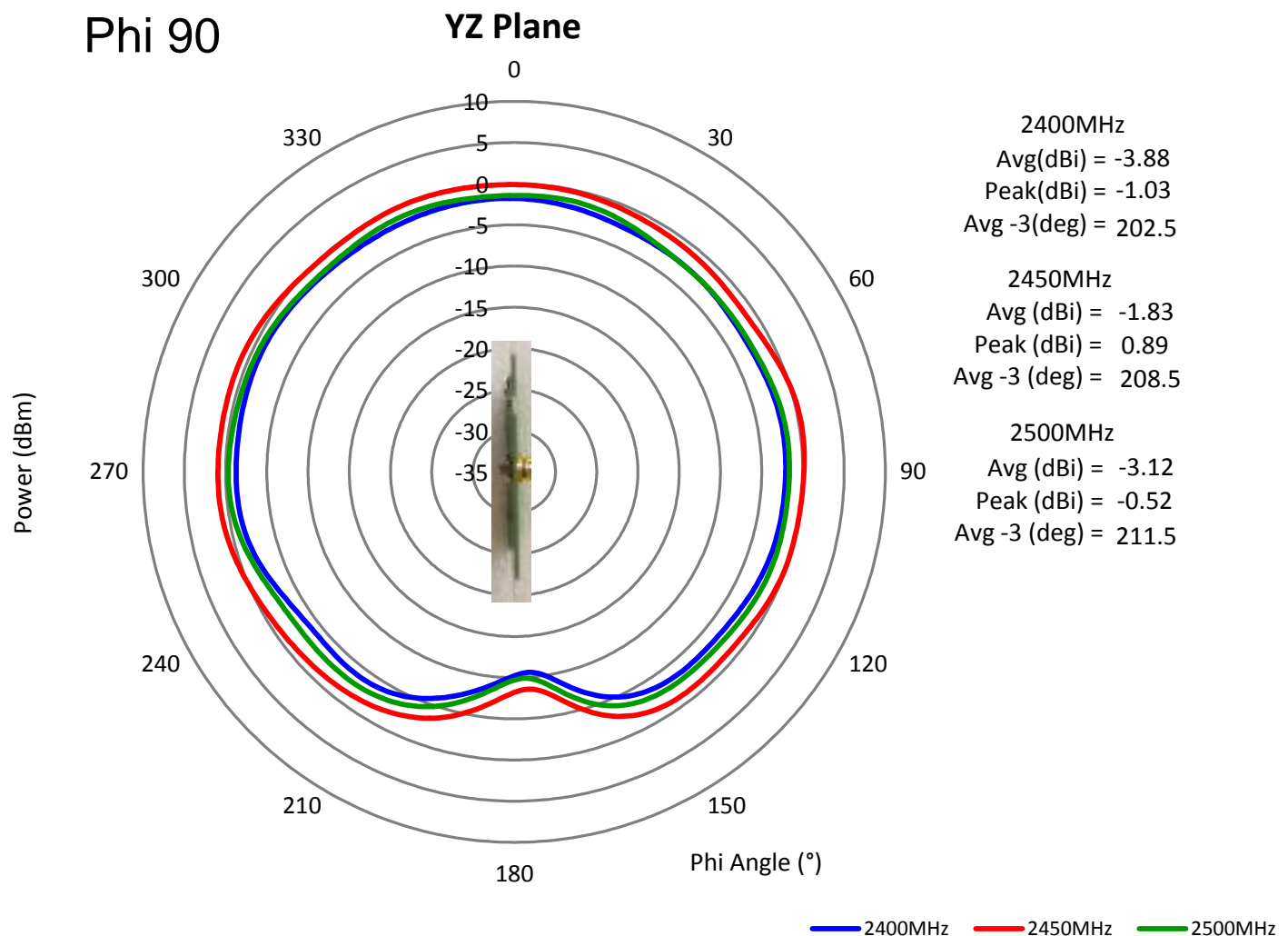
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## CHARTS

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## PACKAGING

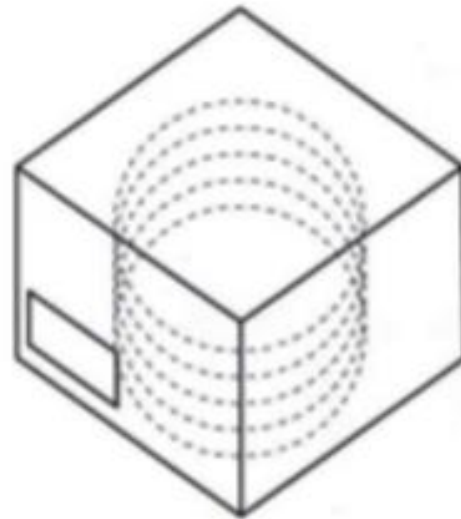
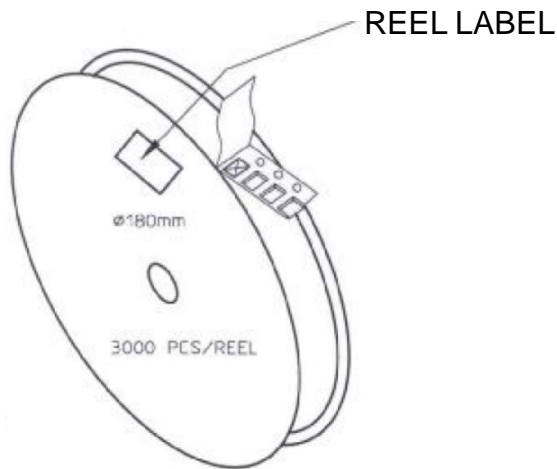
3000pcs antennas per 7" reel

5pcs 7" reel per inner package box

2pcs inner box per out box

Total 30000pcs antenna per out box

Out box size: 390mmx215mmx165mm



According to MSL3 packing requirement, MBB-Moisture Barrel Bag, Desiccant, HIC-Humidity Indicator Card, MSID Label, Caution Label are required.