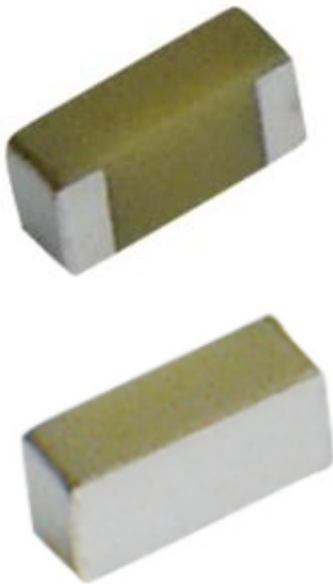


Description: **5150-5950 3.2x1.6x1.1mm**
SMT Ceramic Antenna

Series: **Chip Antenna**

PART NUMBER: W3004



Features:

- Frequency 5150-5950MHz
- Size 3.2 x 1.6 x 1.1 mm
- Efficiency 71 %
- Gain 3.2 dBi
- SMD compatible
- RoHS compliant
- Moisture Sensitivity level: MSL1

Applications:

- WiFi 5GHz
- 5GHz ISM band Radios
- LAA
- DSRC

All dimensions are in mm / inches

Issue: 1919

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Pulse (Suzhou) Wireless Products Co, Inc.
99 Huo Ju Road(#29 Bldg,4th Phase
Suzhou New District
Jiangsu Province, Suzhou 215009 PR China
Tel: 86 512 6807 9998



Description: **5150-5950 3.2x1.6x1.1mm**
SMT Ceramic Antenna

Series: **Chip Antenna**

PART NUMBER: W3004

ELECTRICAL SPECIFICATIONS

Frequency	5150-5950MHz
Nominal Impedance	50 Ω
Return Loss	-10dB
Radiation Pattern	Omni
Gain	3.2dBi
Efficiency	71%
Polarization	linear
Power Withstanding	5W

MECHANICAL SPECIFICATIONS

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

ENVIRONMENTAL SPECIFICATIONS

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

Typical free space performance measured on 80*37mm test board, Ground clearance area 5.25*4.25mm

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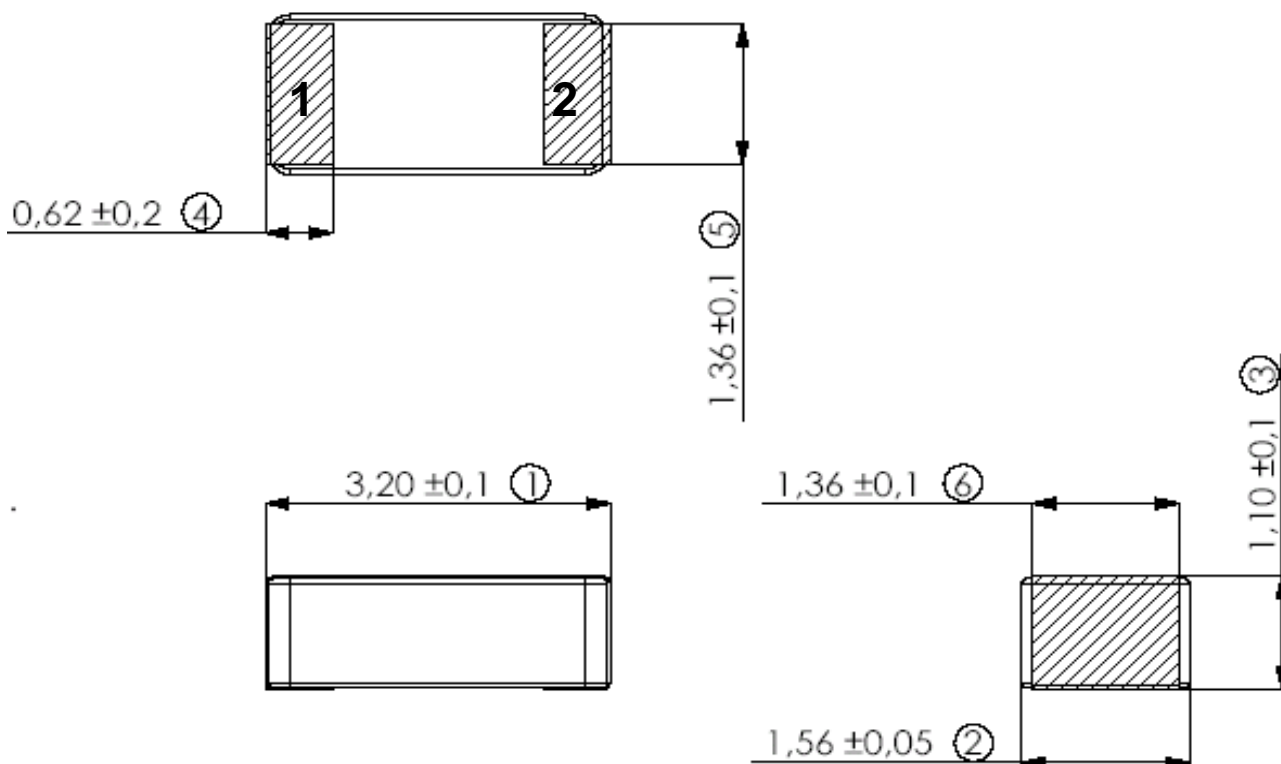
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Description: 5150-5950 3.2x1.6x1.1mm
SMT Ceramic Antenna

Series: Chip Antenna

PART NUMBER: W3004

MECHANICAL DRAWING AND TERMINAL CONFIGURATION



Antenna features		
No.	Terminal Name	Terminal Dimensions
1	Feed / Support	0.62 x 1.36mm
2	Feed / Support	0.62 x 1.36 mm
Antenna is symmetrical. Either of terminals 1 or 2 can be Feed / Support		

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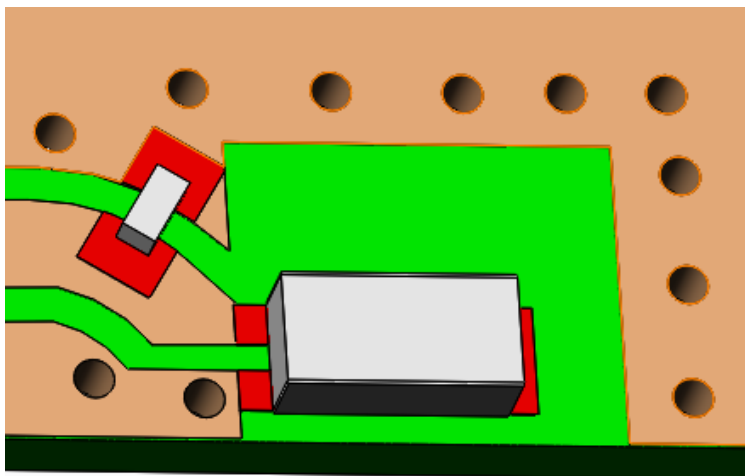
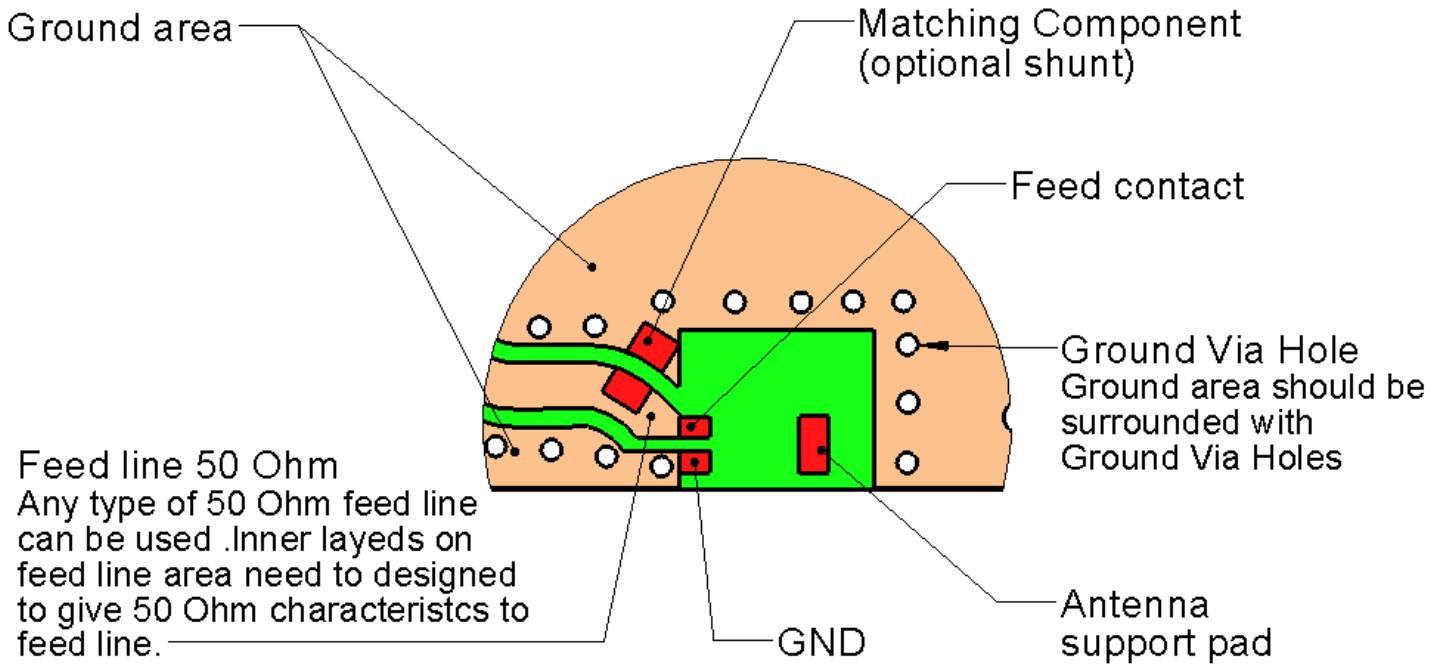
Description: 5150-5950 3.2x1.6x1.1mm
SMT Ceramic Antenna

Series: Chip Antenna

PART NUMBER: W3004

MECHANICAL DRAWING AND TERMINAL CONFIGURATION

Ground cleared under antenna, clearance area 5.25 mm x 4.25 mm



Shunt matching capacitance, 0.3 pF with presented setup.
Exact capacitance value depends on specific application.

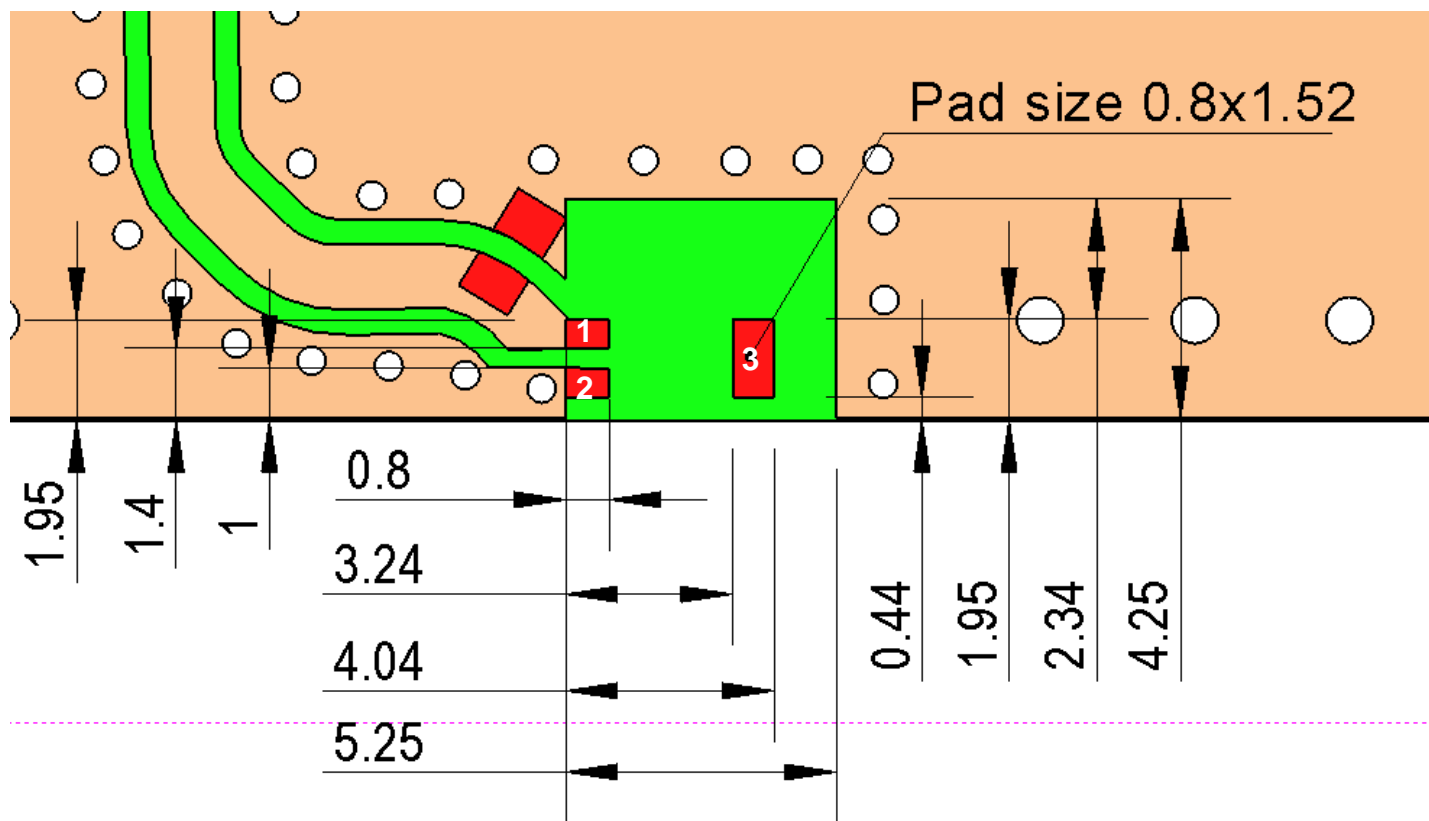
Description: 5150-5950 3.2x1.6x1.1mm
SMT Ceramic Antenna

Series: Chip Antenna

PART NUMBER: W3004

MECHANICAL DRAWING AND TERMINAL CONFIGURATION

Recommended Antenna Pad Dimensions on PCB Layout (top surface)
Ground cleared under antenna, clearance area 5.25 mm x 4.25 mm



PCB contact pads		
No.	Terminal Name	Terminal Dimensions
1	Feed	0,80 x 0,60 mm
2	GND	0,80 x 0,60 mm
3	support pad	0,80 x 1,52 mm

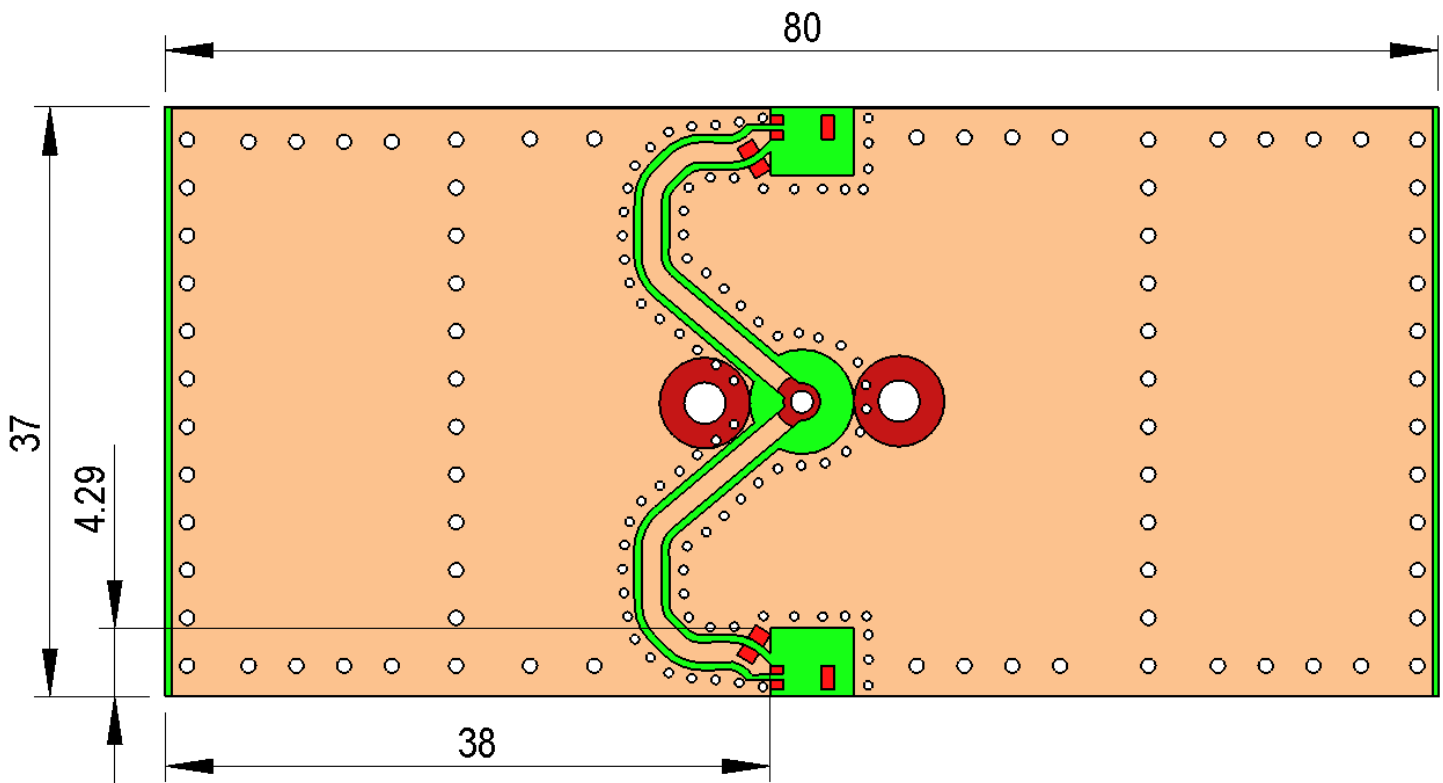
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SMT Ceramic Antenna

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PART NUMBER: W3004

MECHANICAL DRAWING AND TERMINAL CONFIGURATION

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



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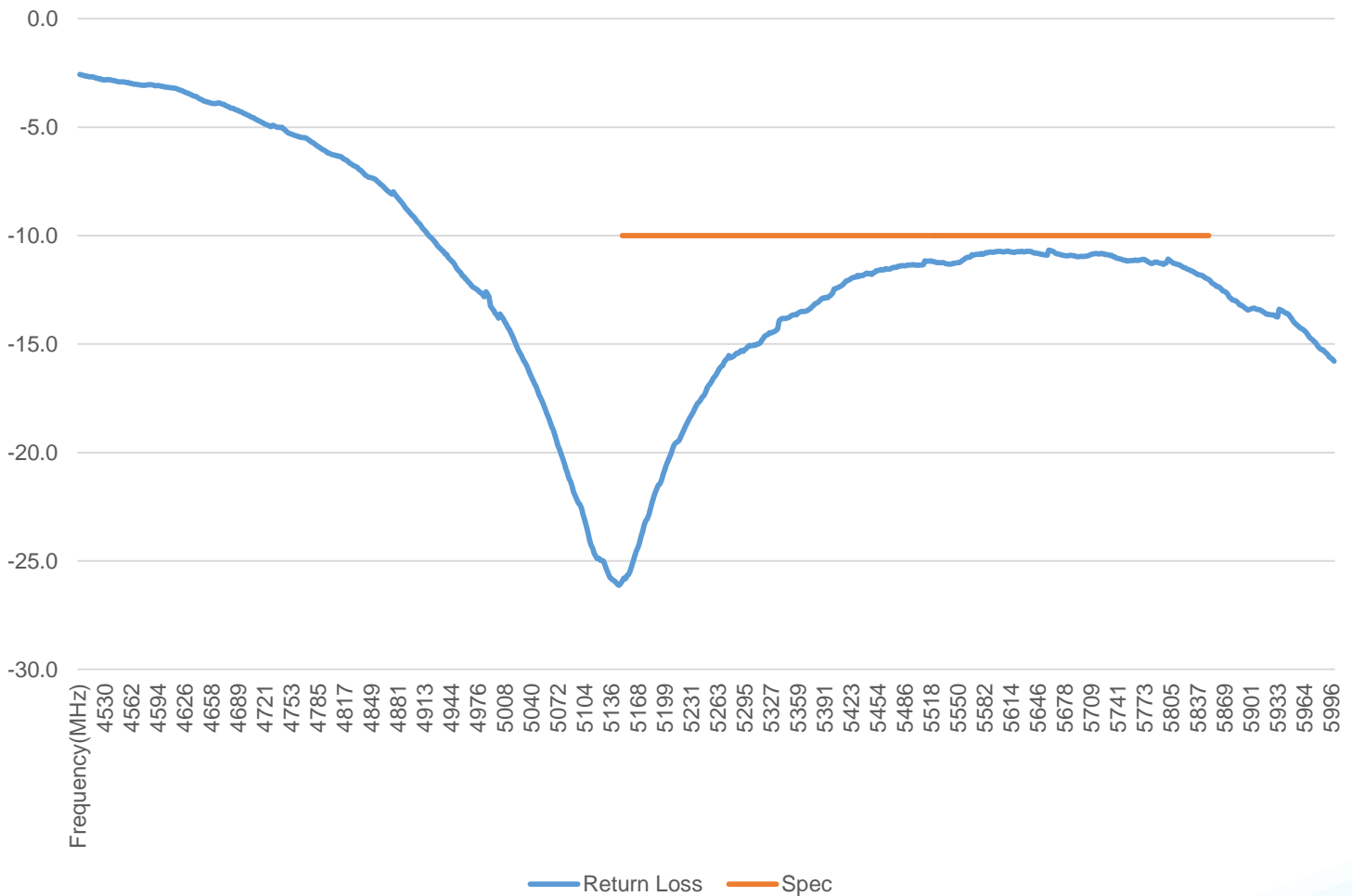
Series: Chip Antenna

PART NUMBER: W3004

CHARTS

Return Loss

Return Loss



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SMT Ceramic Antenna

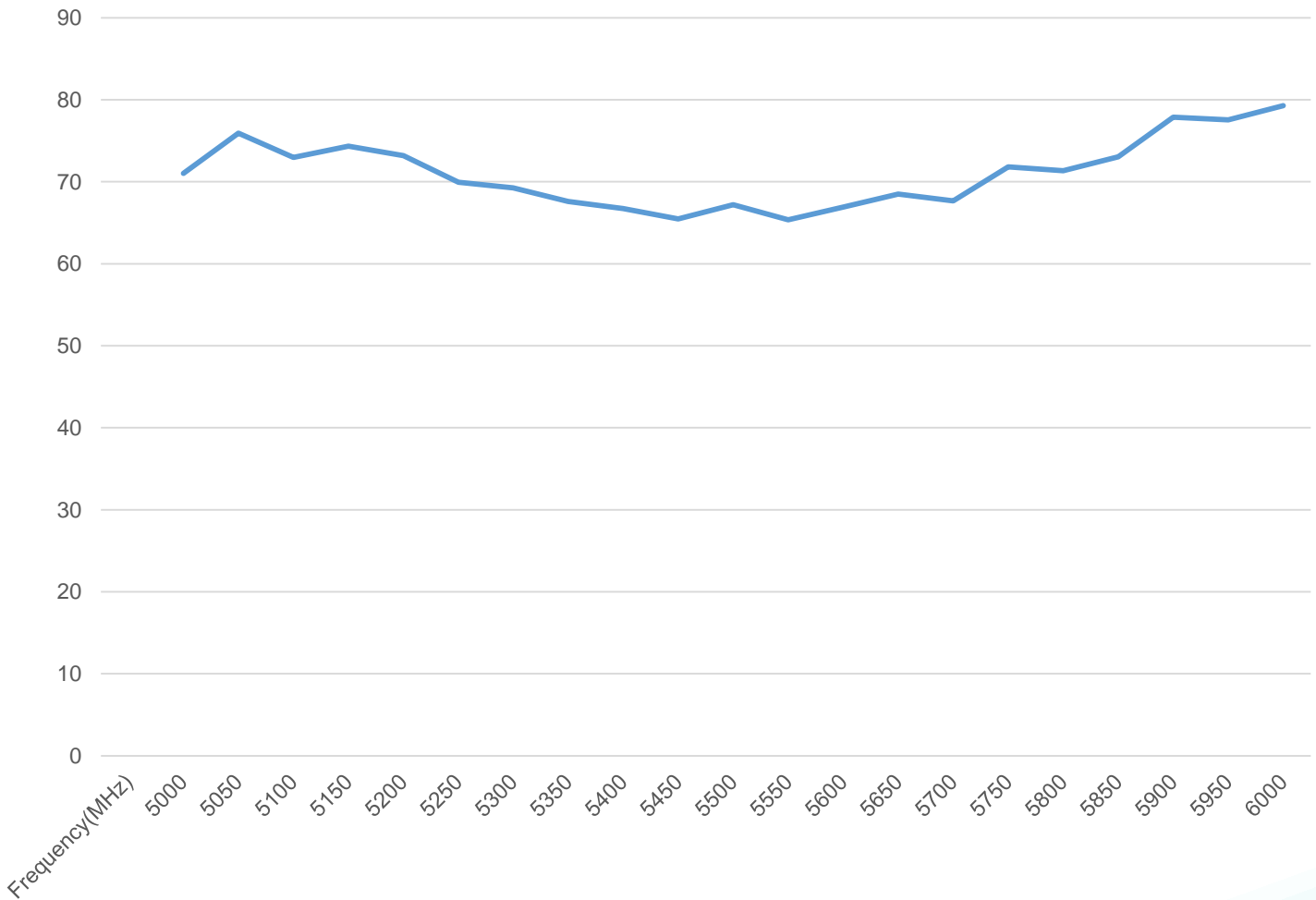
Series: **Chip Antenna**

PART NUMBER: W3004

CHARTS

Efficiency

Efficiency(%)



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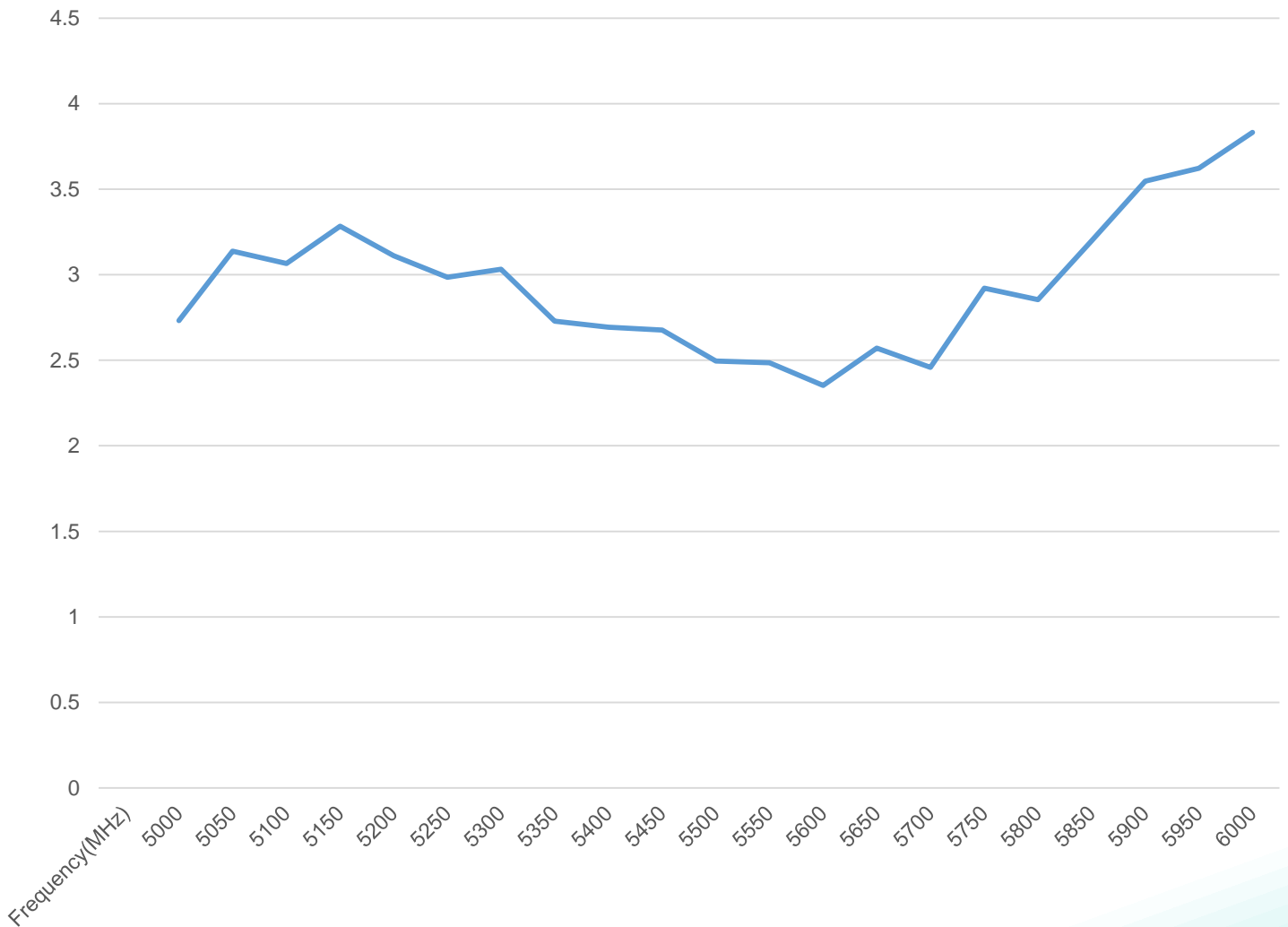
Series: Chip Antenna

PART NUMBER: W3004

CHARTS

Peak Gain

Peak Gain(dBi)



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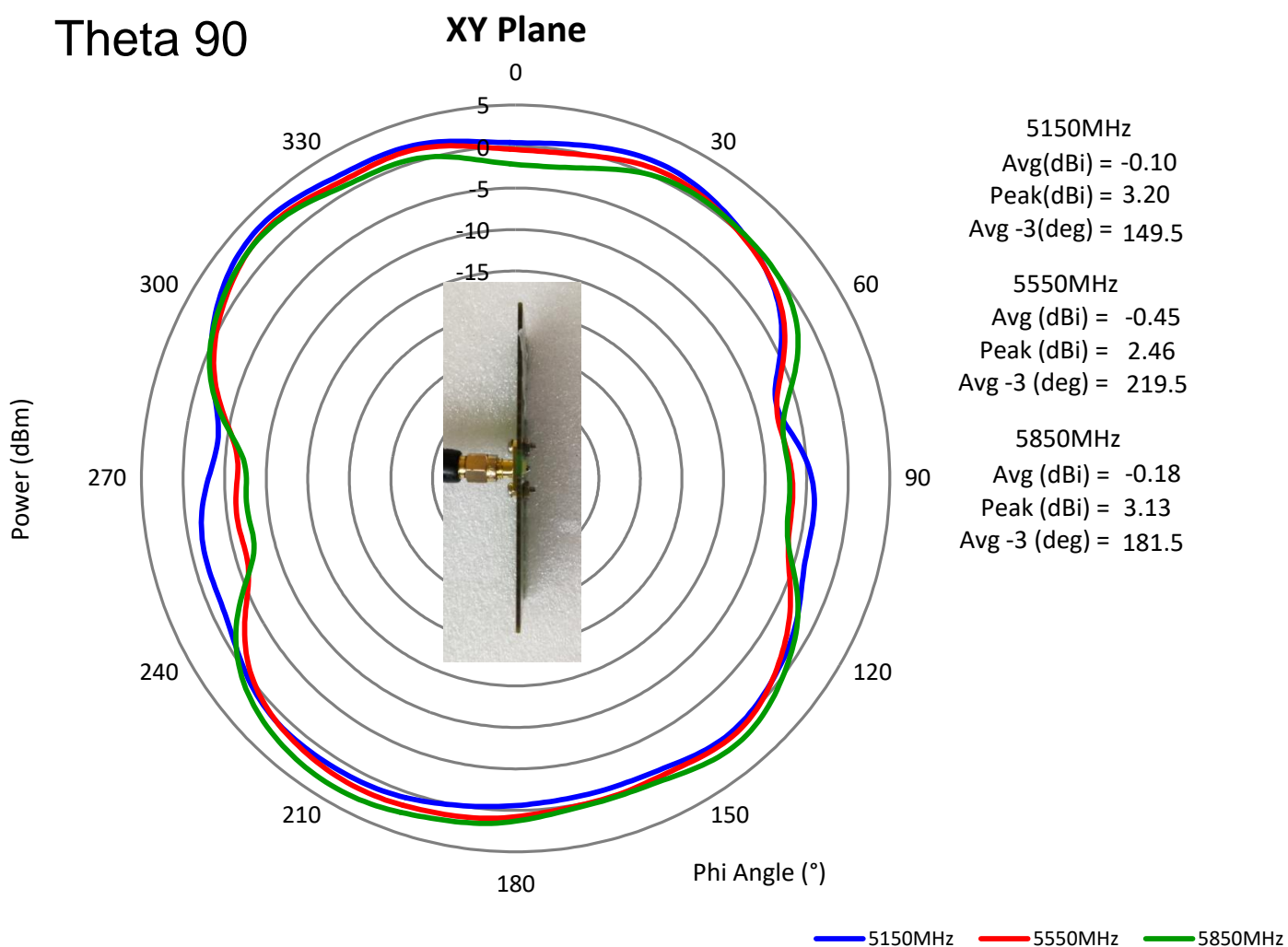
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SMT Ceramic Antenna

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PART NUMBER: W3004

CHARTS

Free Space Radiation Pattern



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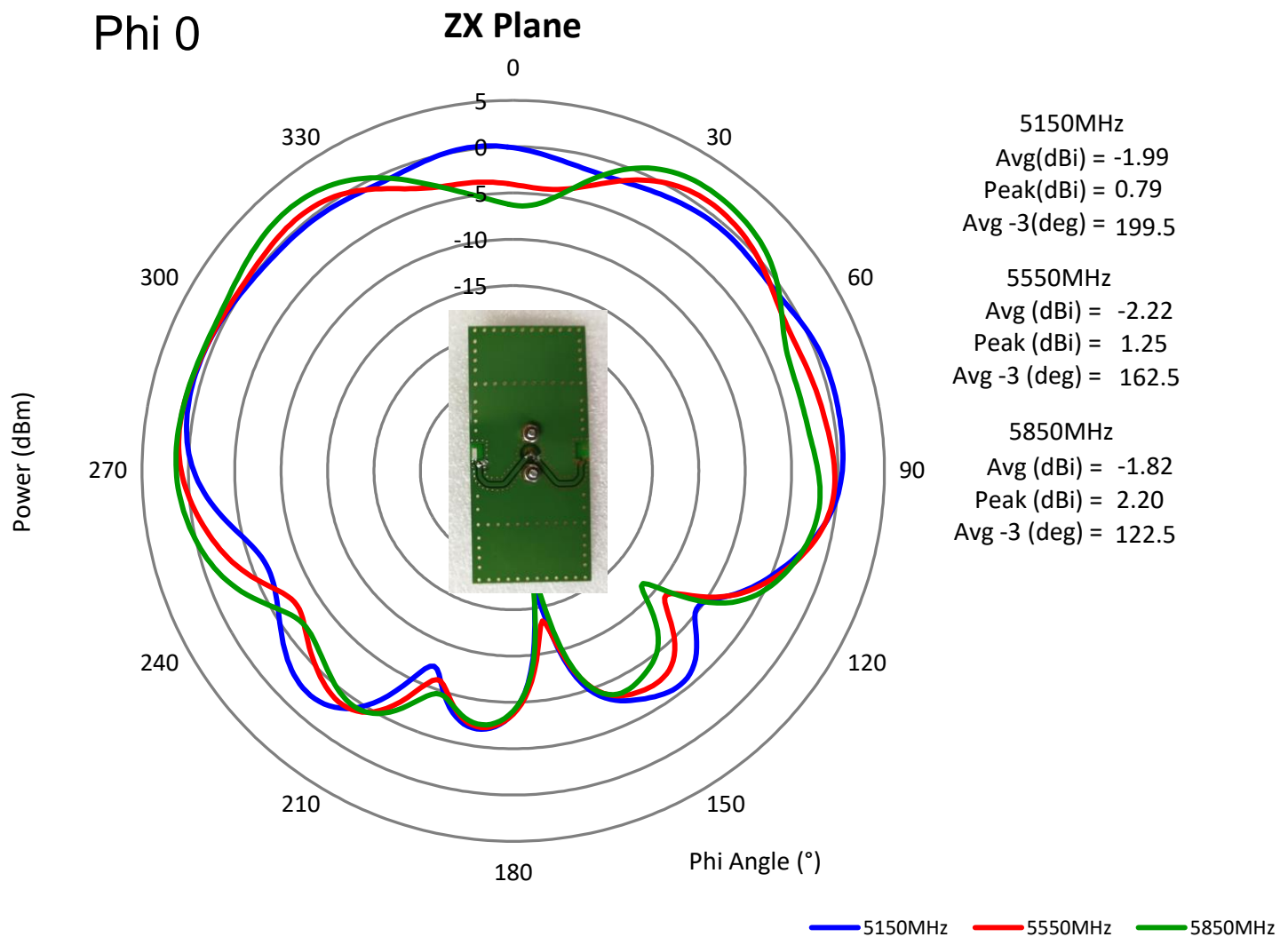
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Free Space Radiation Pattern



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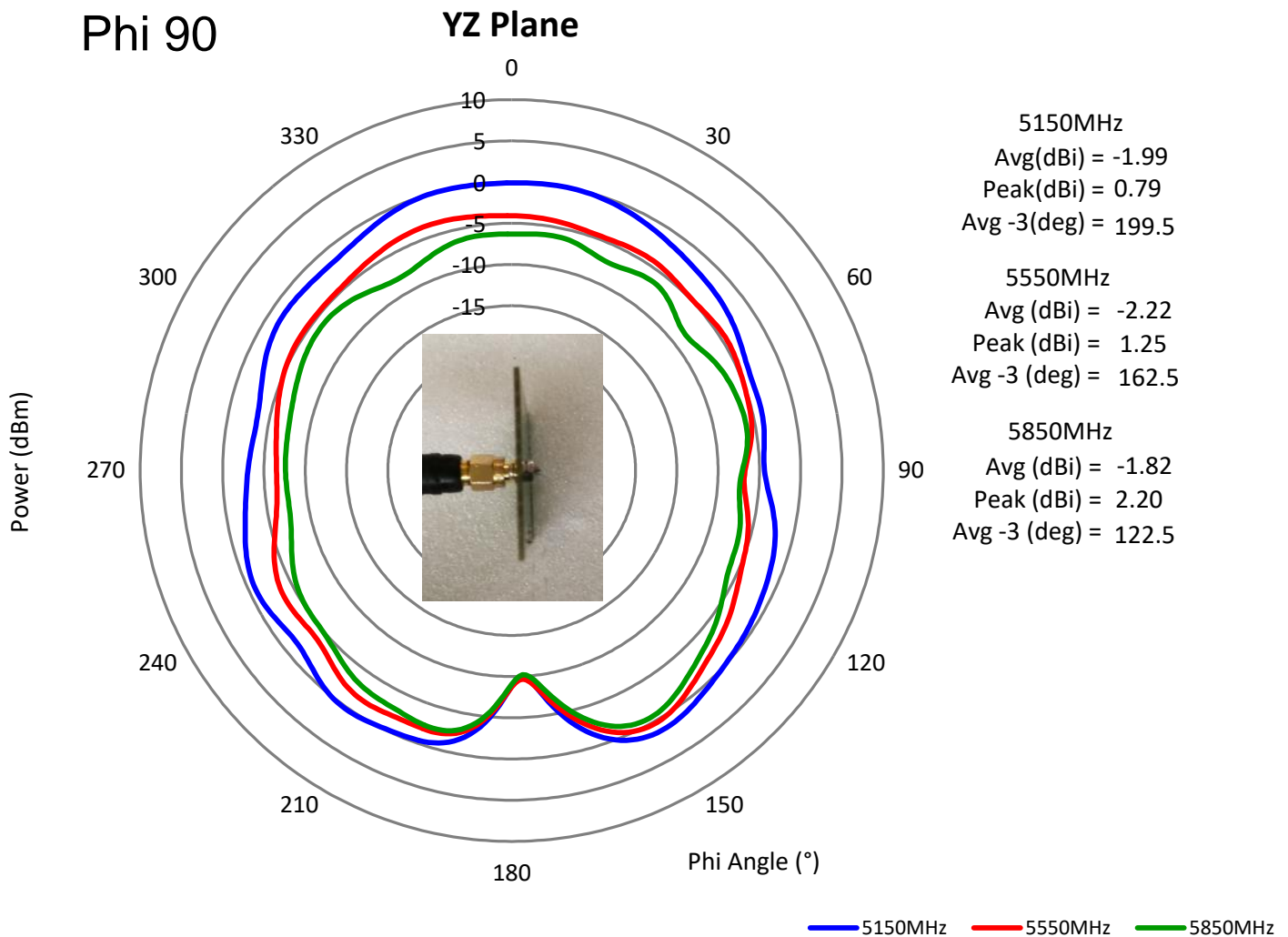
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Free Space Radiation Pattern



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