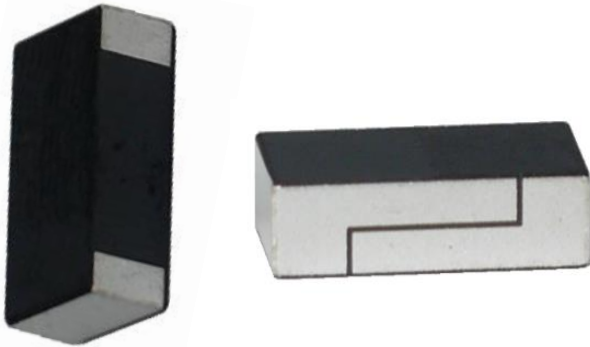


### Features:

- Frequency: 902-928MHz
- Size: 10 x 3.2 x 5 mm
- Gain: 1.35 dBi
- Type: On Ground
- SMD Compatible
- RoHS Compliant
- MSL level 3

### Applications:

- ISM 915MHz radios
- Sensors
- IoT
- Transportation
- Industry automation



All dimensions are in mm / inches

Issue: 1834

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For more information:

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



Series: Chip Antenna

Description: 902-928MHz Ceramic On Ground Antenna

PART NUMBER: W3211

**ELECTRICAL SPECIFICATIONS**

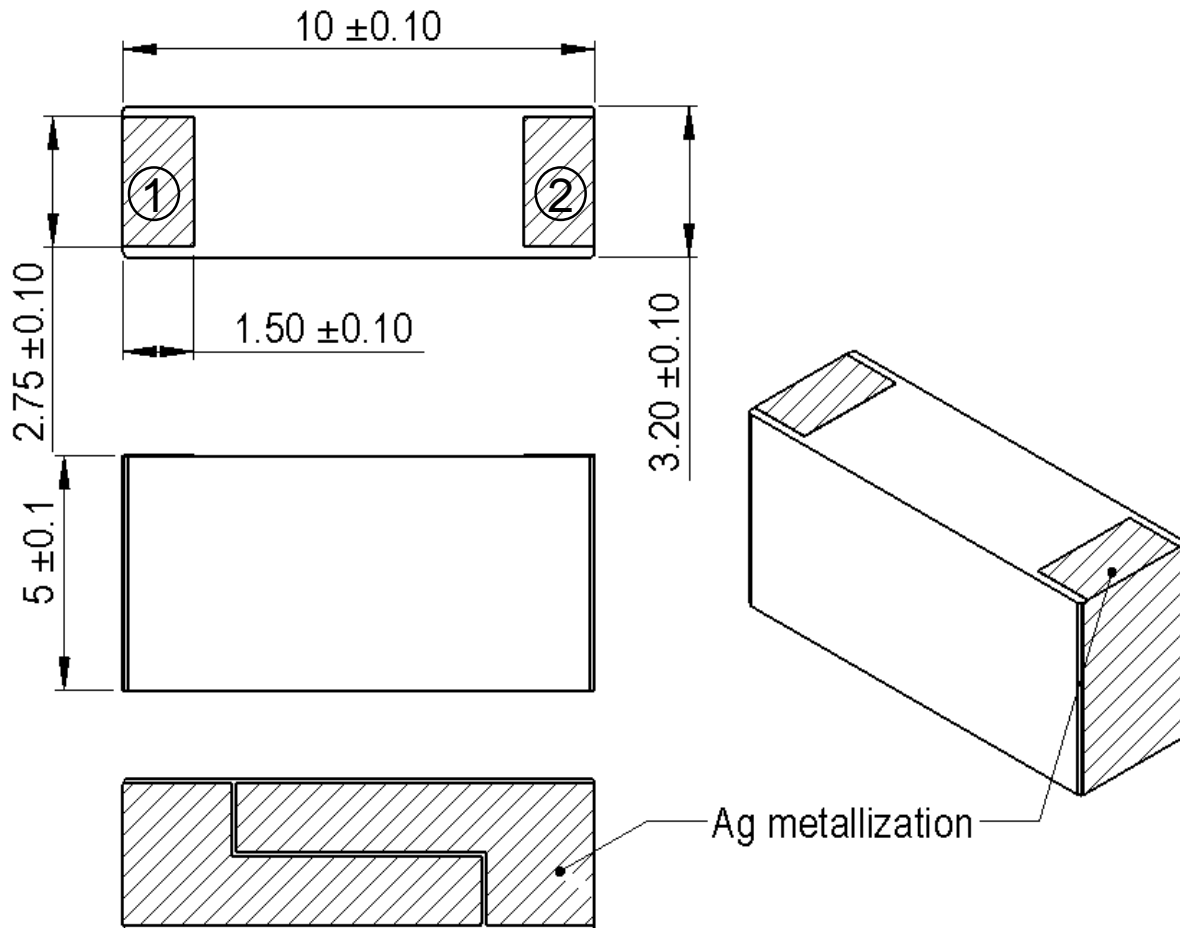
Frequency	902-928MHz
Nominal Impedance	50 $\Omega$
Return Loss Peak	-10dB
Return Loss Band edges	-3dB
Radiation Pattern	Omni
Peak Gain	1.35dBi
Efficiency	43%
Polarization	Linear
Power Withstanding	5W

**MECHANICAL SPECIFICATIONS**

Overall Length	10x3.2x5mm
Weight	0.73g
Antenna Color / Material	Ceramic

**ENVIRONMENTAL SPECIFICATIONS**

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

**Series: Chip Antenna**
**Description: 902-928MHz Ceramic On Ground Antenna**
**PART NUMBER: W3211**
**MECHANICAL DRAWING**


No.	Terminal Name	Terminal Dimensions
1	Feed / GND	1.5 x 2.75 mm
2	Feed / GND	1.5 x 2.75 mm
Antenna is symmetrical. Either of terminals 1 or 2 can be Feed / GND		

**Issue: 1834**

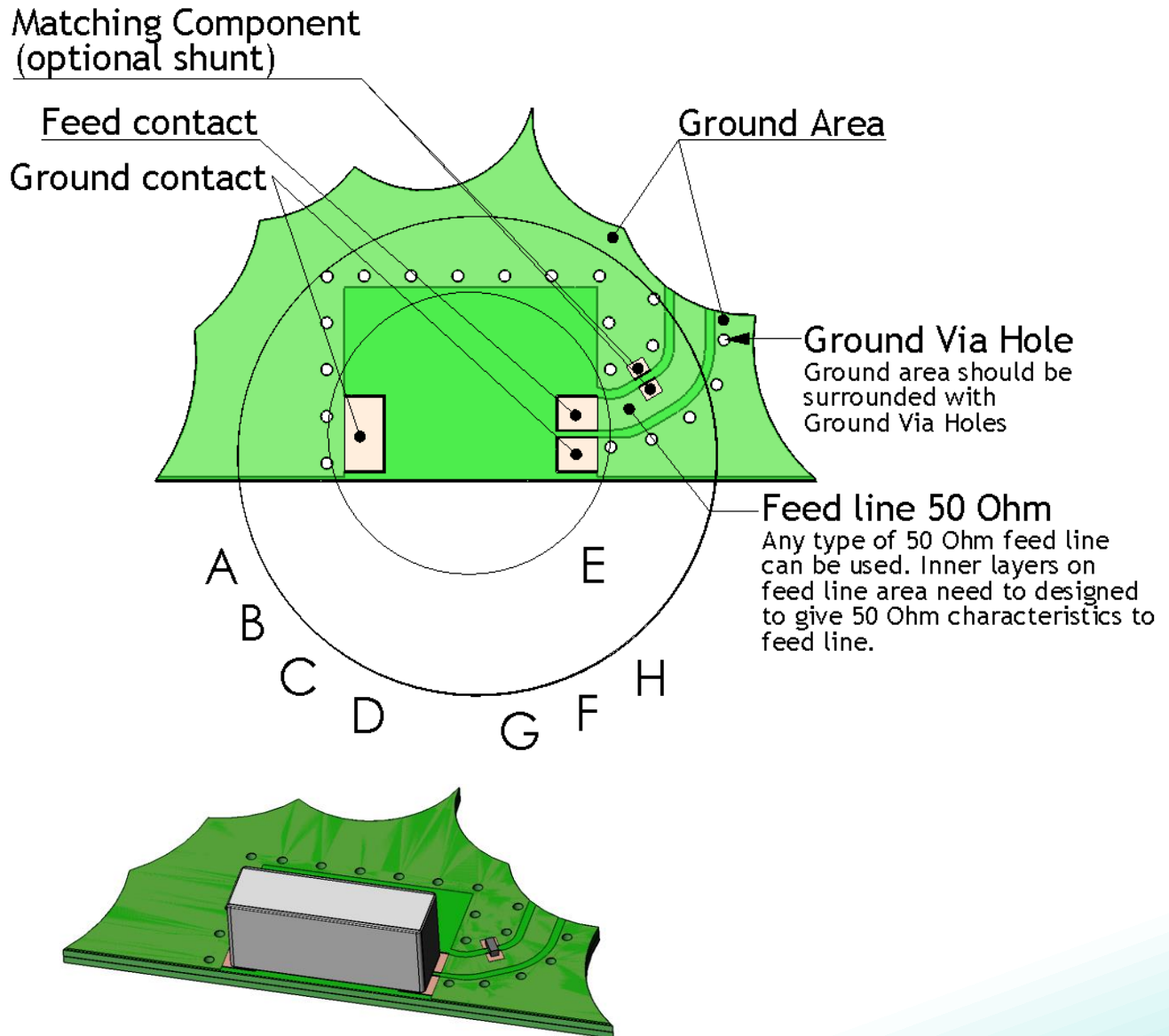
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## MECHANICAL DRAWING AND TERMINAL CONFIGURATION

**Ground cleared under antenna TOP and MIDDLE layers, clearance area 10.8 mm x 8.25mm (BOTTOM layer solid ground)**



Description: 902-928MHz Ceramic On Ground Antenna

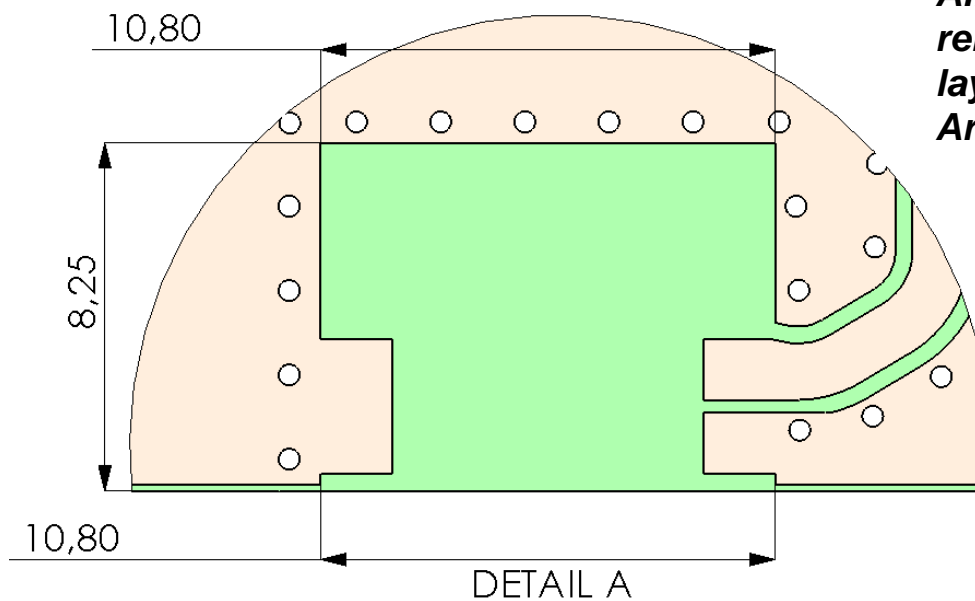
Series: Chip Antenna

PART NUMBER: W3211

## MECHANICAL DRAWING AND TERMINAL CONFIGURATION

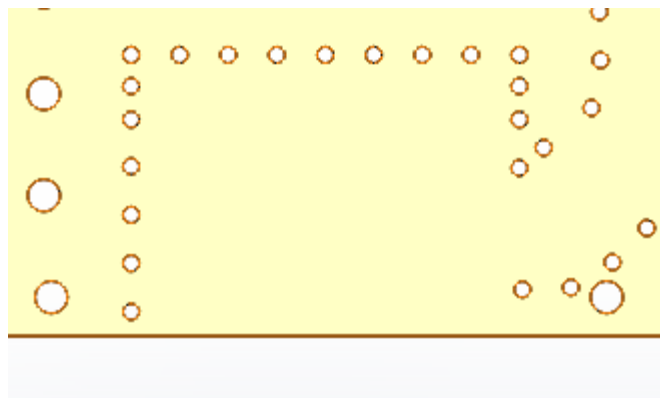
**Recommended Antenna Pad Dimensions on PCB Layout (top surface)**  
**Ground cleared under antenna on top and inner layers,**  
**clearance area 10.8 mm x 8.25 mm**

Ground clearance area (10.80 x 8.25 mm)



**All metallization must be removed from top and inner layers, clearance Area ( 10.8 x 8.25 mm )**

**Bottom solid ground layer**



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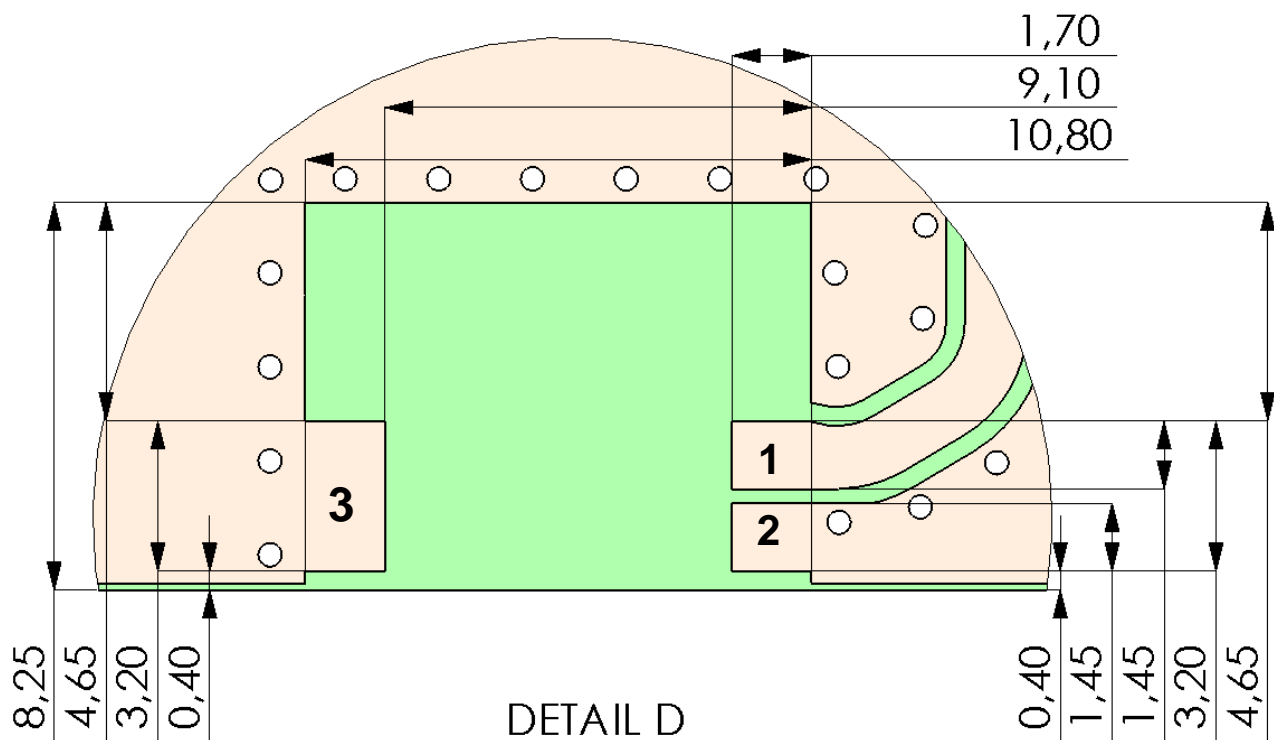
Description: 902-928MHz Ceramic On Ground Antenna

Series: Chip Antenna

PART NUMBER: W3211

## MECHANICAL DRAWING AND TERMINAL CONFIGURATION

*Recommended Antenna Pad Dimensions on PWB Layout (top surface)*



PCB contact pads		
No.	Terminal Name	Terminal Dimensions
1	Feed	1.70 x 1.45 mm
2	GND	1.70 x 1.45 mm
3	GND	1.70 x 3.20 mm

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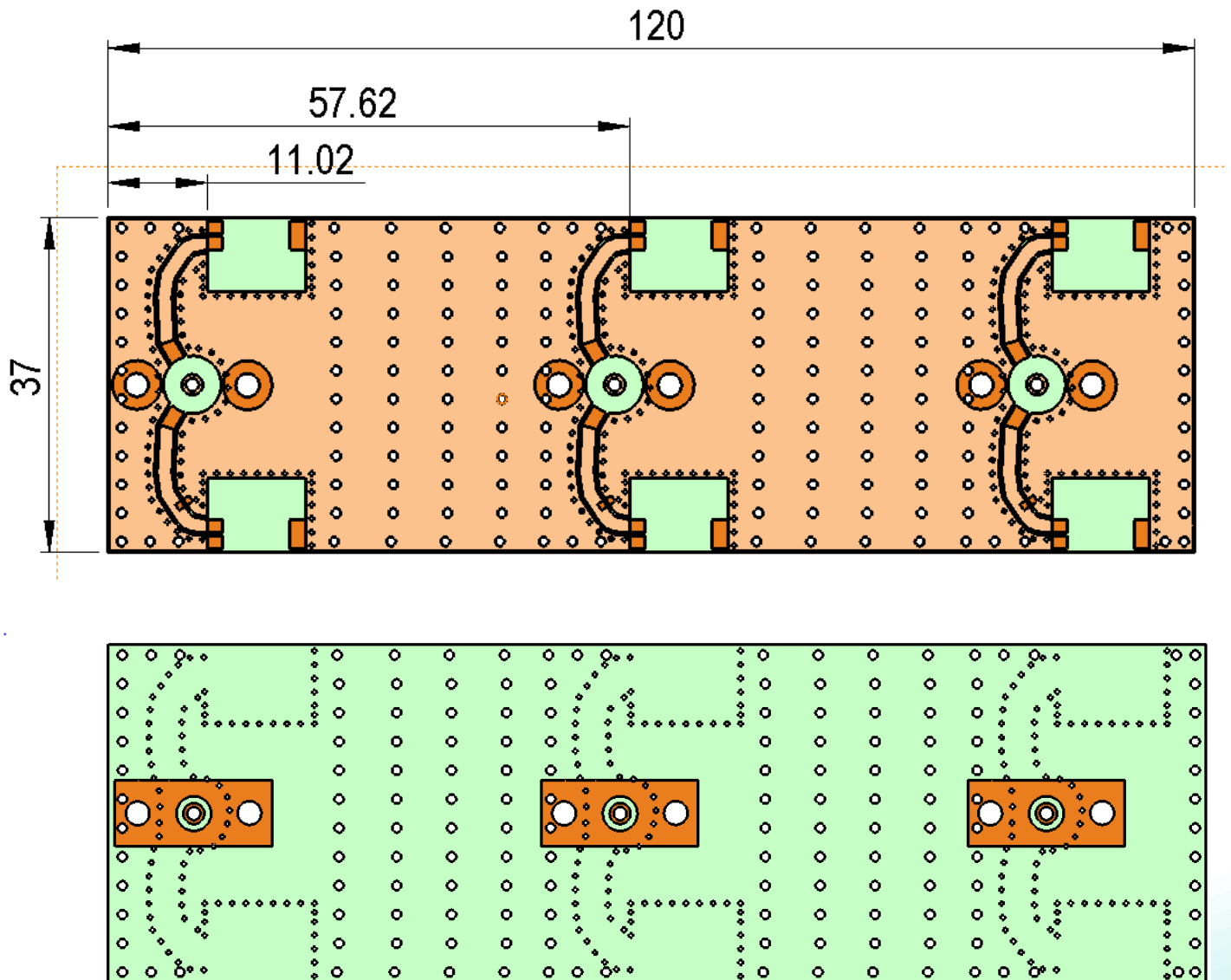
Description: 902-928MHz Ceramic On Ground Antenna

Series: Chip Antenna

PART NUMBER: W3211

## MECHANICAL DRAWING AND TERMINAL CONFIGURATION

*Recommended test board layout for electrical characteristic measurement, test board outline size 120 x 37mm*



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Series: Chip Antenna

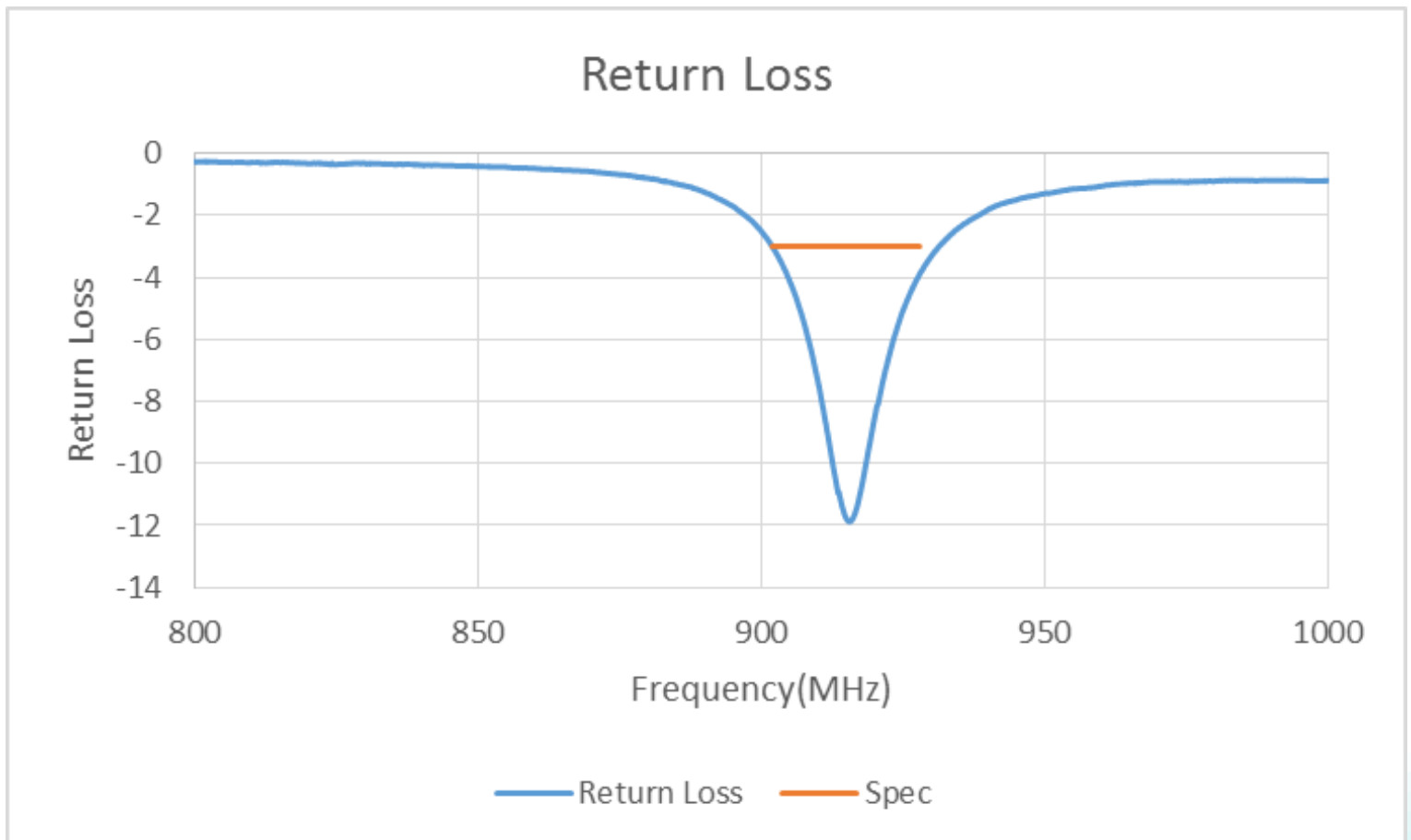
Description: 902-928MHz Ceramic On Ground Antenna

PART NUMBER: W3211

## CHARTS

Measured on the 120x37mm test board with matching circuit, 10pF shunt capacitor, position center location of test board edge.

Ground cleared under antenna, clearance area 10.80 mm x 8.25 mm top and middle layers.



Issue: 1834

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Series: Chip Antenna

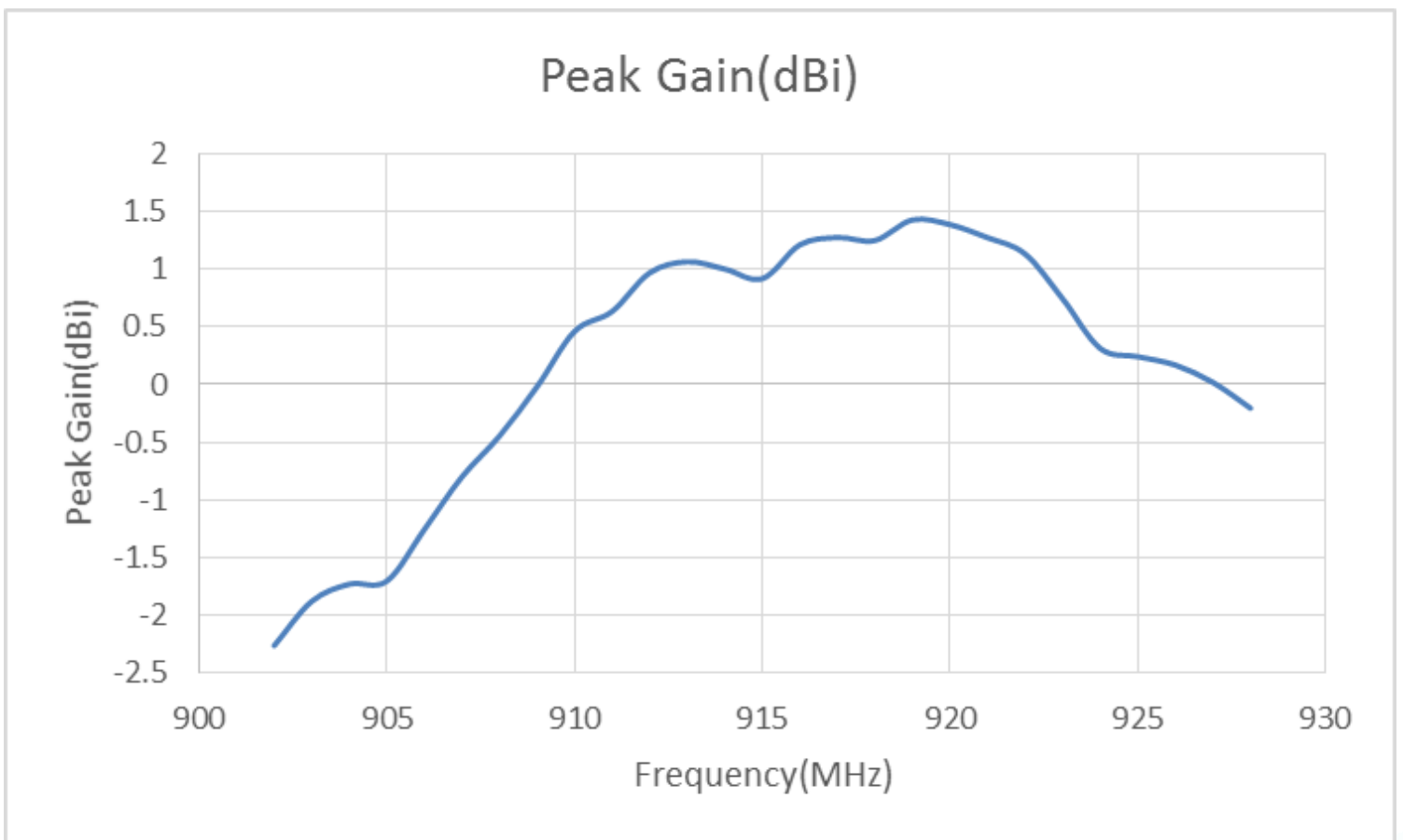
Description: 902-928MHz Ceramic On Ground Antenna

PART NUMBER: W3211

## CHARTS

Measured on the 120x37mm test board with matching circuit, 10pF shunt capacitor, position center location of test board edge.

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Series: Chip Antenna

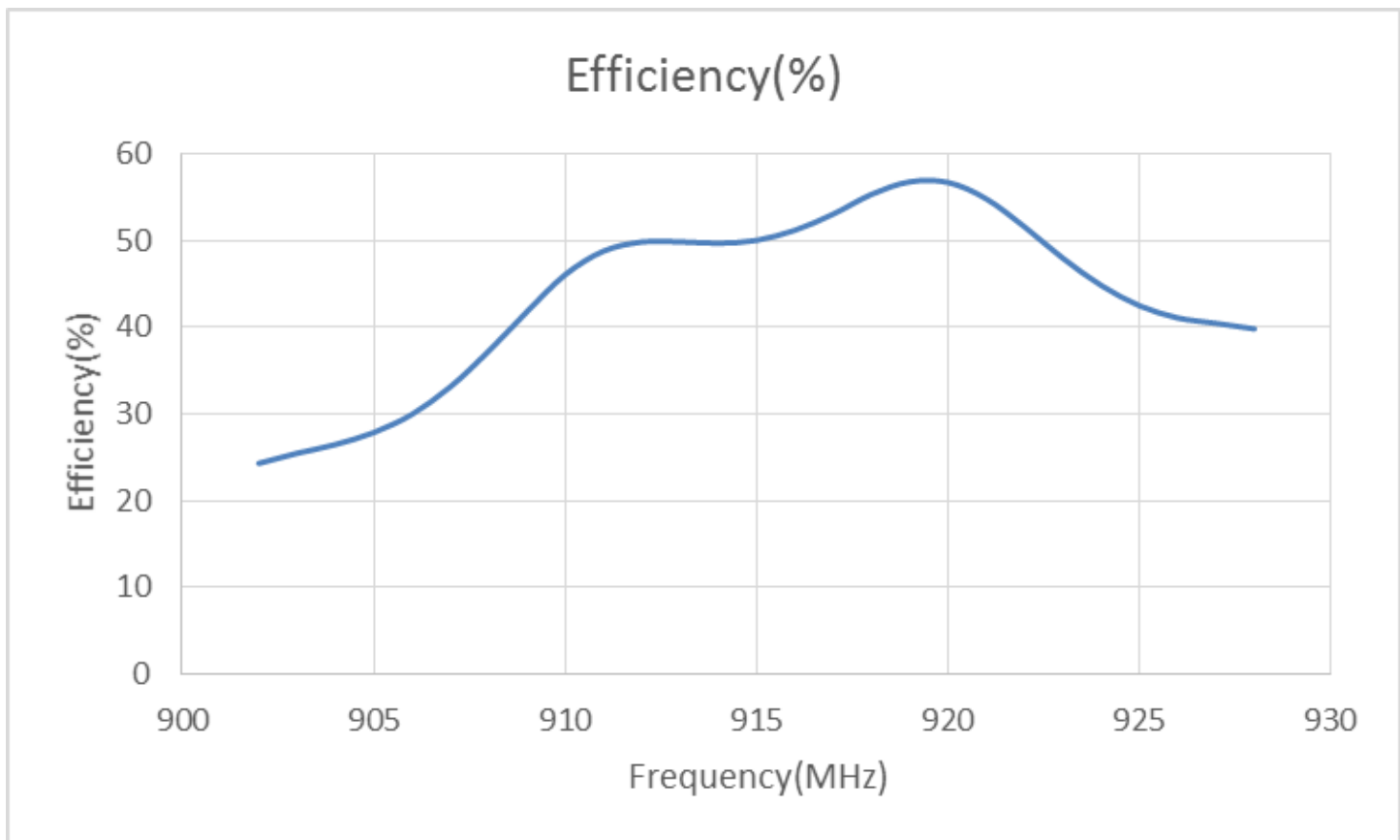
Description: 902-928MHz Ceramic On Ground Antenna

PART NUMBER: W3211

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Series: Chip Antenna

PART NUMBER: W3211

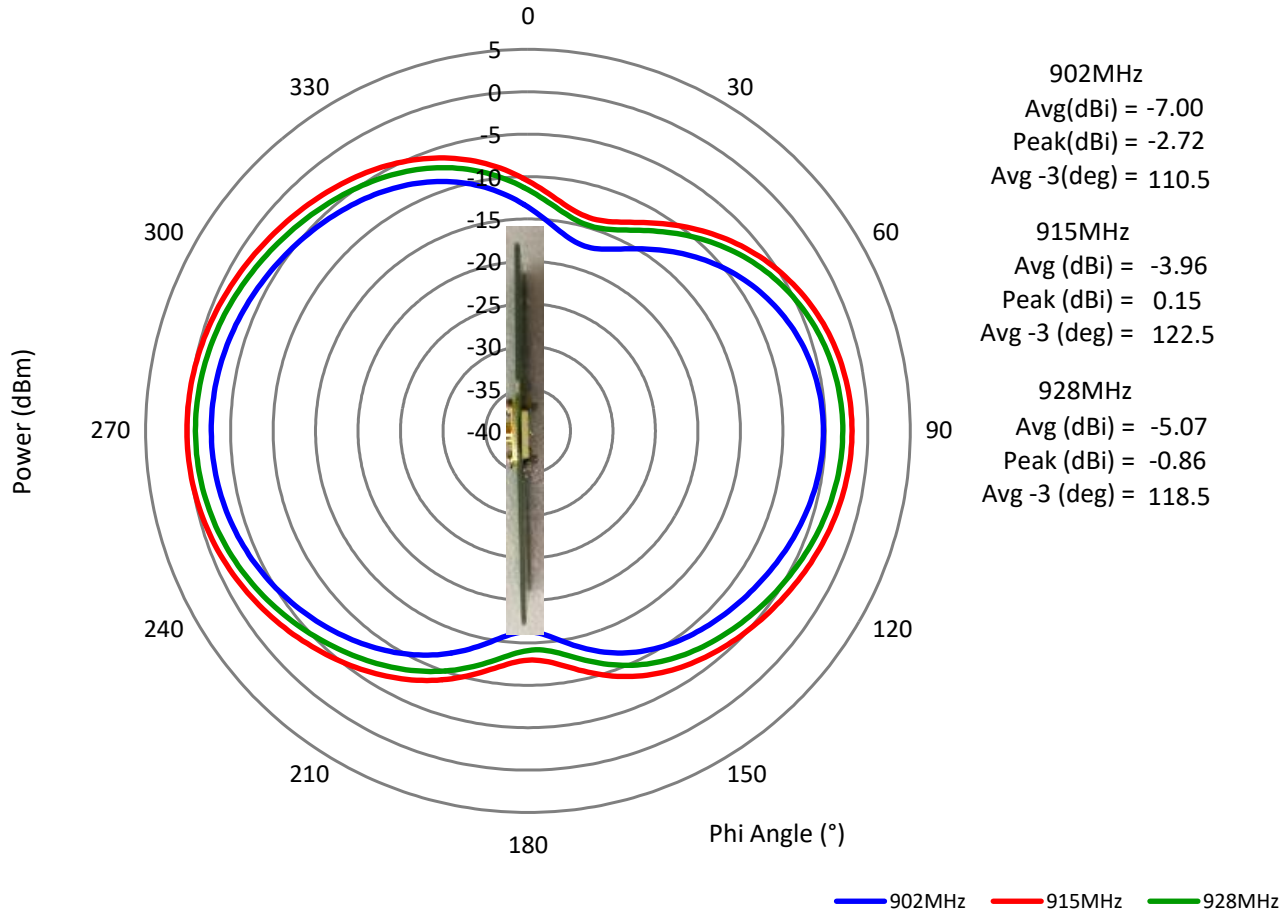
## CHARTS

Measured on the 120x37mm test board with matching circuit, 10pF shunt capacitor, position center location of test board edge.

Ground cleared under antenna, clearance area 10.80 mm x 8.25 mm top and middle layers.

### Radiation Pattern

#### XY Plane



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Description: 902-928MHz Ceramic On Ground Antenna

Series: Chip Antenna

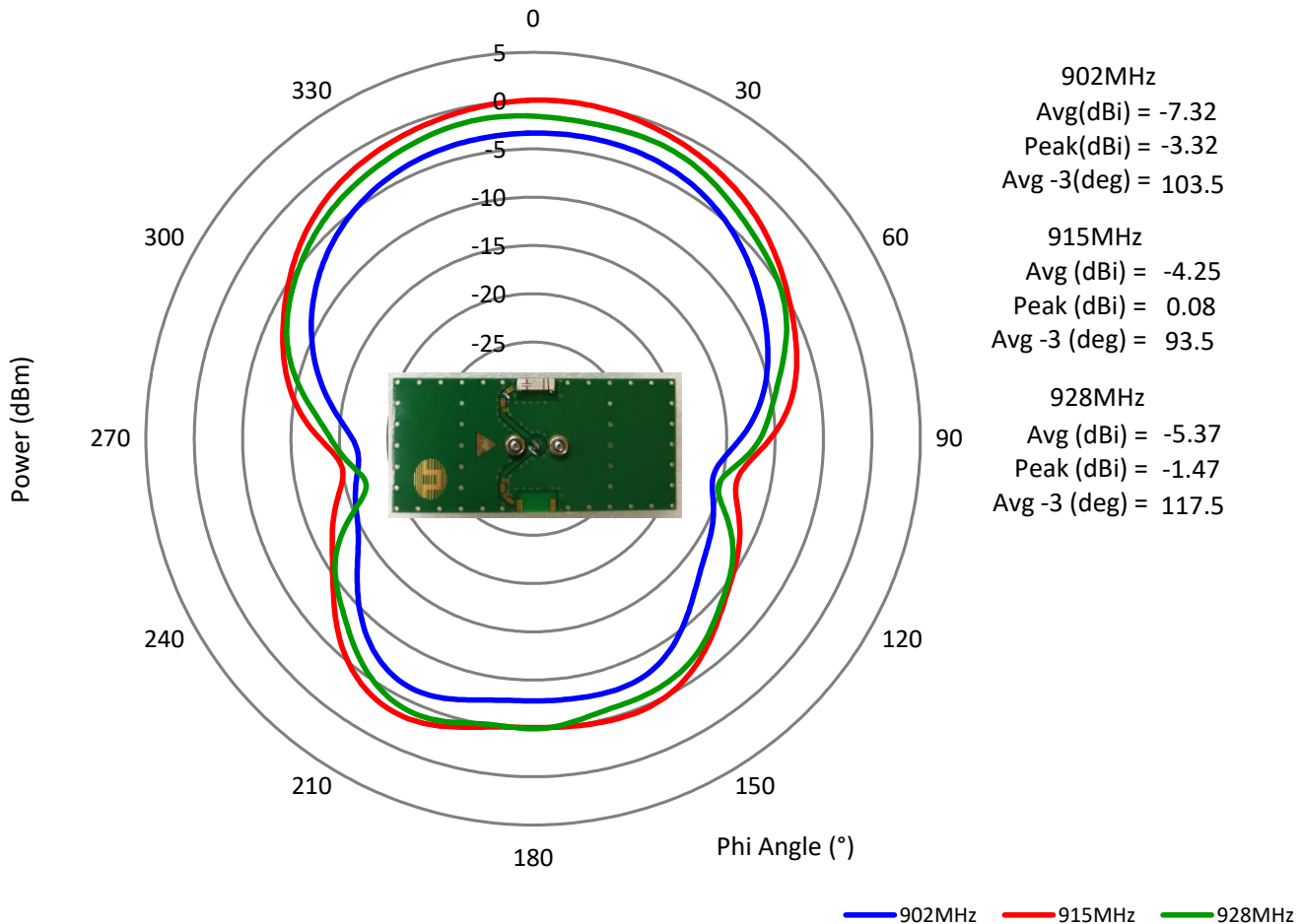
PART NUMBER: W3211

## CHARTS

Measured on the 120x37mm test board with matching circuit, 10pF shunt capacitor, position center location of test board edge.

Ground cleared under antenna, clearance area 10.80 mm x 8.25 mm top and middle layers.

### Radiation Pattern ZX Plane



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Description: 902-928MHz Ceramic On Ground Antenna

Series: Chip Antenna

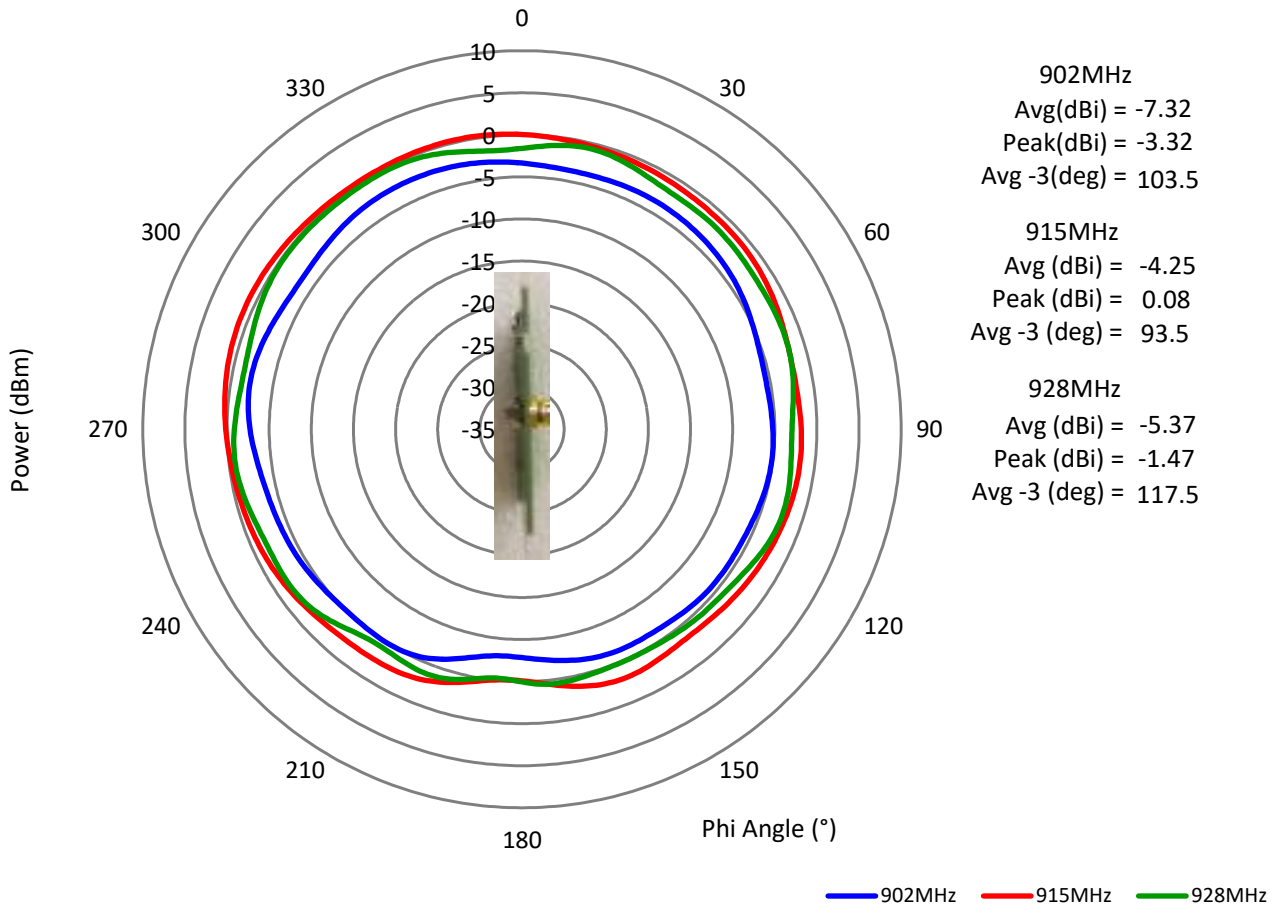
PART NUMBER: W3211

## CHARTS

Measured on the 120x37mm test board with matching circuit, 10pF shunt capacitor, position center location of test board edge.

Ground cleared under antenna, clearance area 10.80 mm x 8.25 mm top and middle layers.

### Radiation Pattern YZ Plane



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Series: Chip Antenna

Description: 902-928MHz Ceramic On Ground Antenna

PART NUMBER: W3211

## PACKAGING

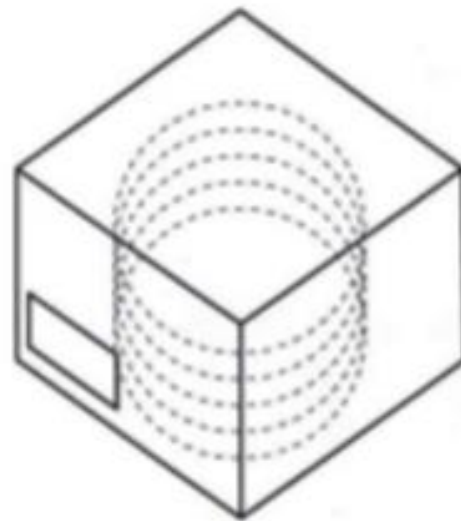
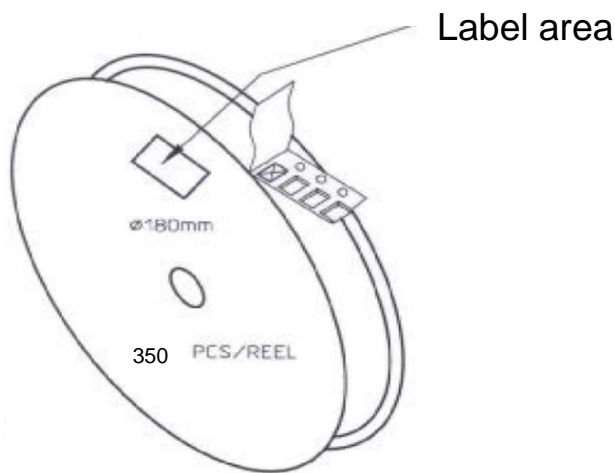
350pcs antennas per 7" reel

3pcs 7" reel per inner package box

2pcs inner box per out box

Total 2100pcs 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.