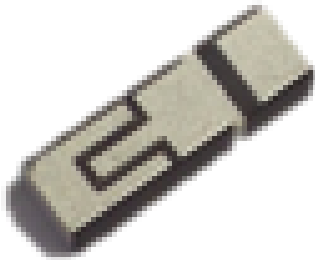


Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

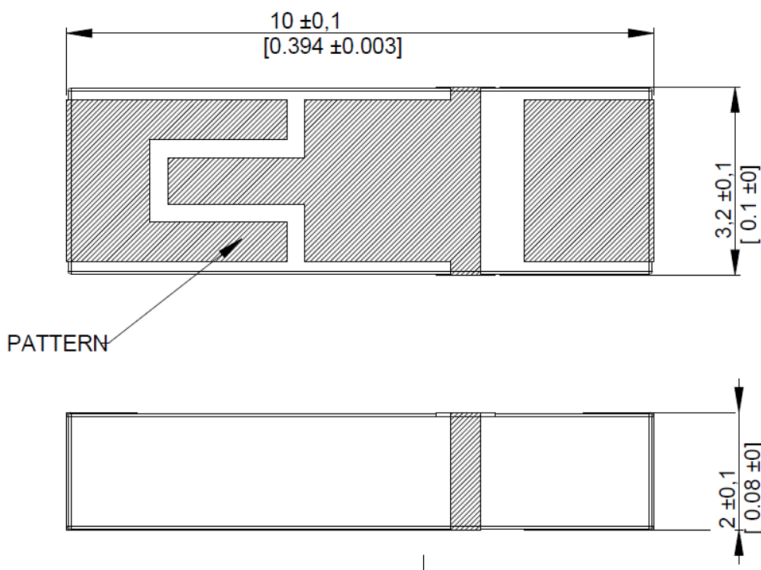


**Features:**

- 3 in1 –combo antenna
  - Port 1: 868/915MHz
  - Port 2: 2.4GHz
- Compact size 3.2x10x2mm
- SMT mounting on PCB
- Tape & Reel packing
- High isolation between ports >20dB

**Applications:**

- ISM band radios
- 868MHz, 915MHz, 2.4GHz
- IoT, M2M, set top boxes, devices requiring small embedded multiband ISM antenna



All dimensions are in mm / inches

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Tel: 1-360-944-7551

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Pulse GmbH & Do, KG  
Zeppelinstrasse 15  
Herrenberg, Germany  
Tel: 49 7032 7806 0

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



**Description:** ISM868/915, ISM2.4G**Series:** Ceramic antenna**PART NUMBER:** W3320**ELECTRICAL SPECIFICATIONS**

Frequency	ISM868/915MHz, ISM2.4GHz
Nominal Impedance	50Ω
Return Loss	<-7dB @868/915MHz <-5dB@2.4
Gain	1dBi +/- 1 dB@868/915MHz 3dBi +/- 1 dB@2.4GHz
Radiation Pattern	Omni
Polarization:	Vertical
Power withstanding	2W

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**Description:** ISM868/915, ISM2.4G**Series:** Ceramic antenna**PART NUMBER:** W3320**MECHANICAL SPECIFICATIONS**

Weight	0.3 g
Overall Length	10[0.39] MM[INCHES]
Over all width	3.2[0.12] MM[INCHES]
Over all thickness	2[0.08] MM[INCHES]

**ENVIRONMENTAL SPECIFICATIONS**

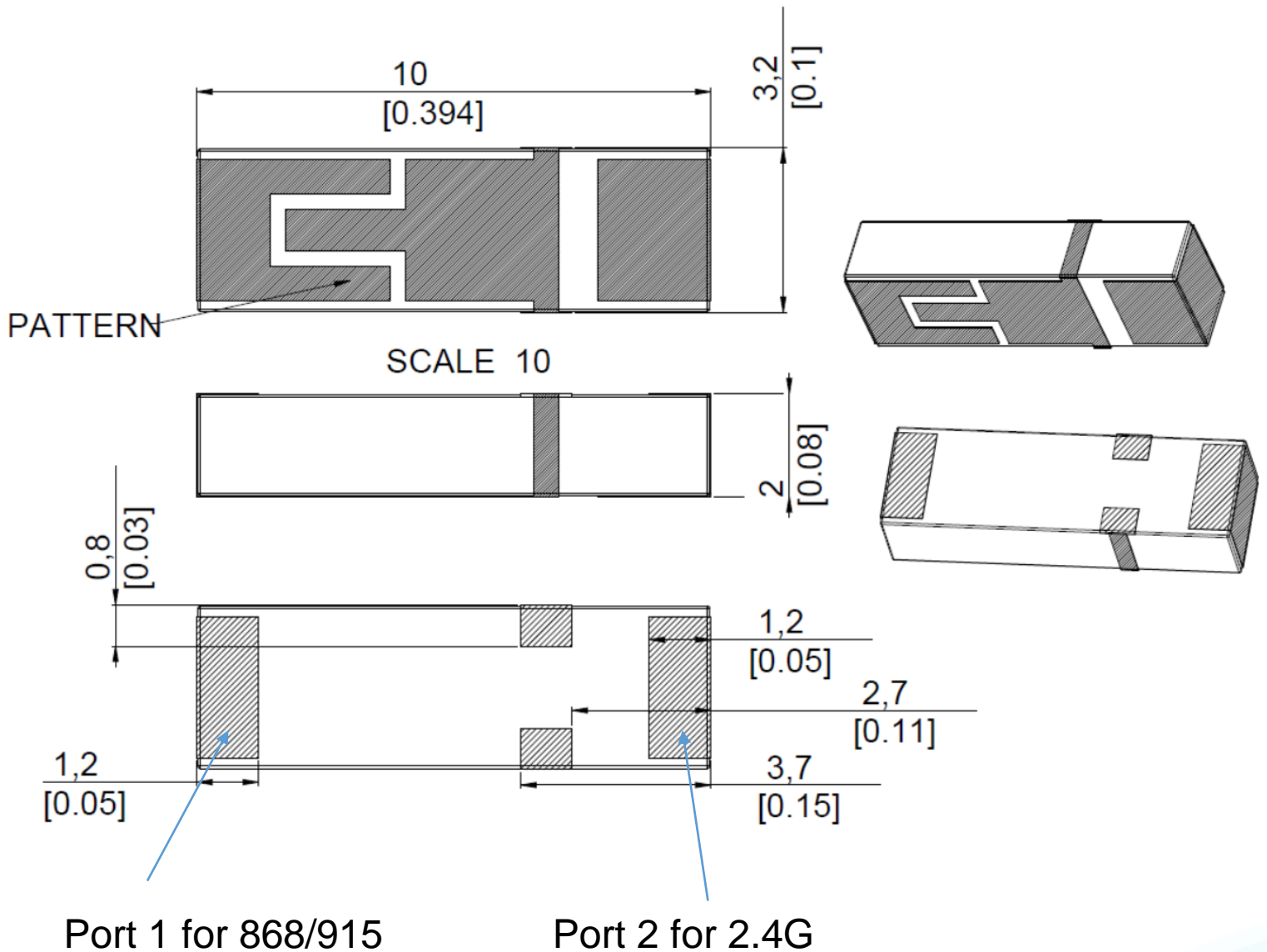
Operating temperature	-40/+85° C
-----------------------	------------

Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

MECHANICAL DRAWING



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Description: ISM868/915, ISM2.4G

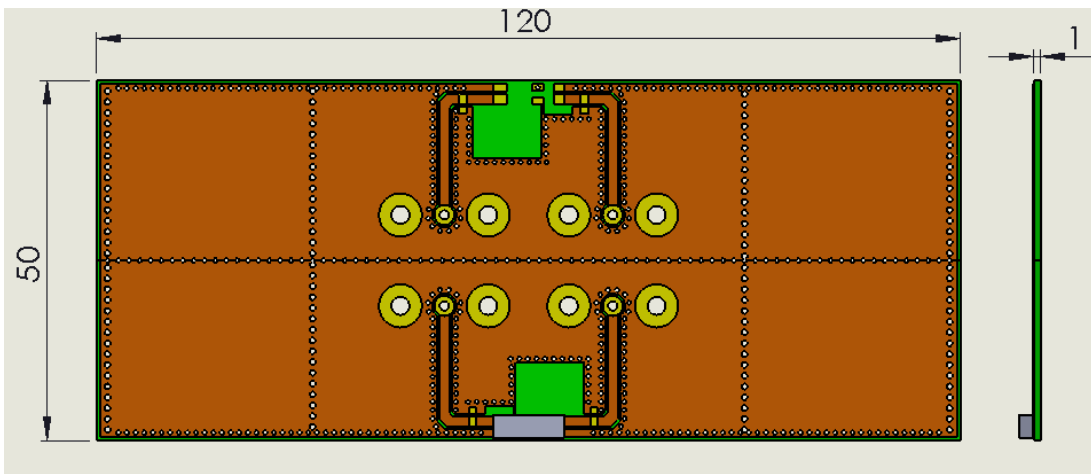
Series: Ceramic antenna

PART NUMBER: W3320

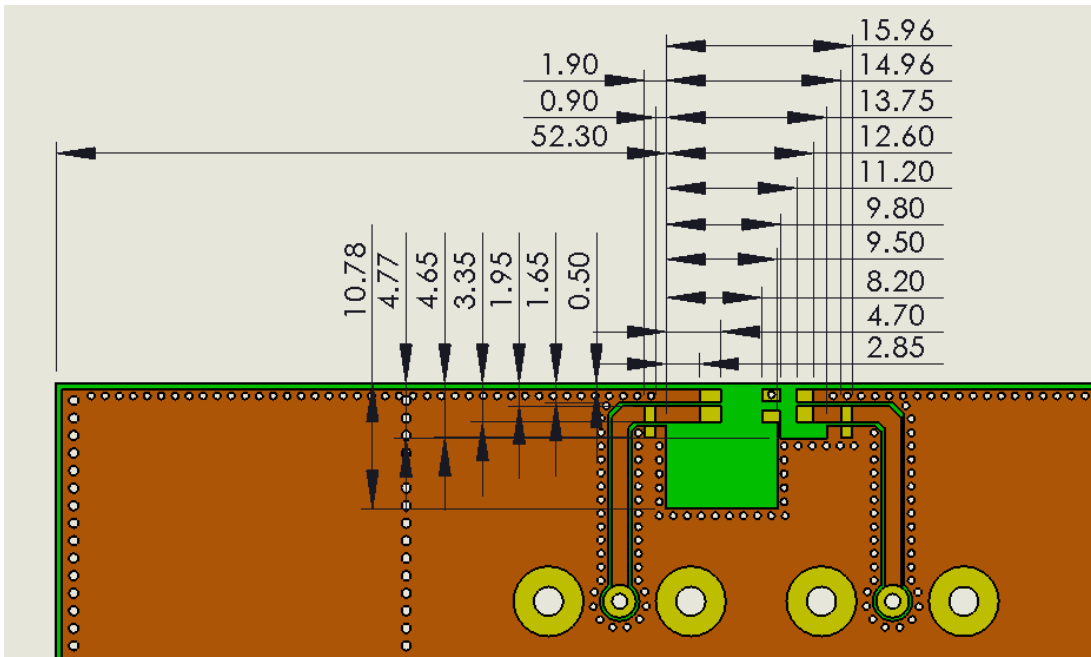
OTHER SPECIFICATIONS

PCB LAYOUT

1, PCB material, FR4, size, 120X50X1mm



2, Clearance area (Top)



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Description: ISM868/915, ISM2.4G

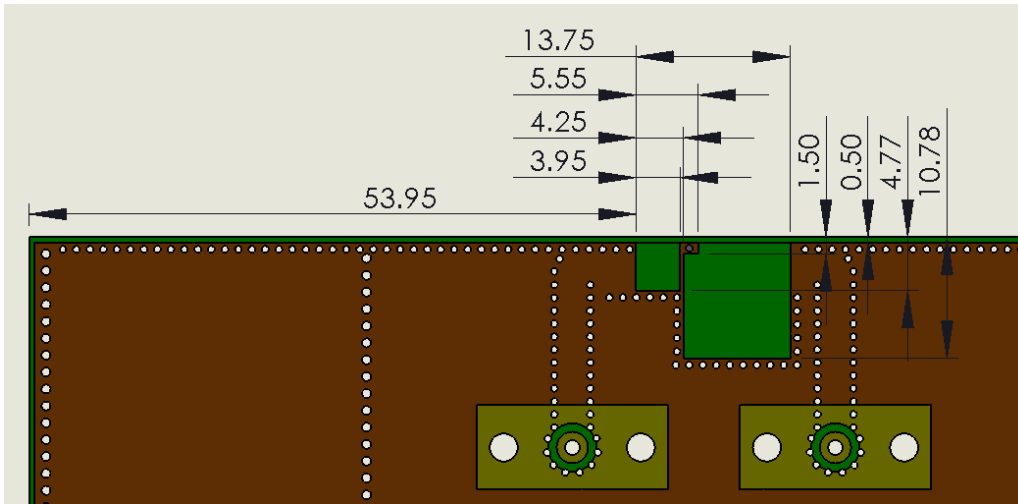
Series: Ceramic antenna

PART NUMBER: W3320

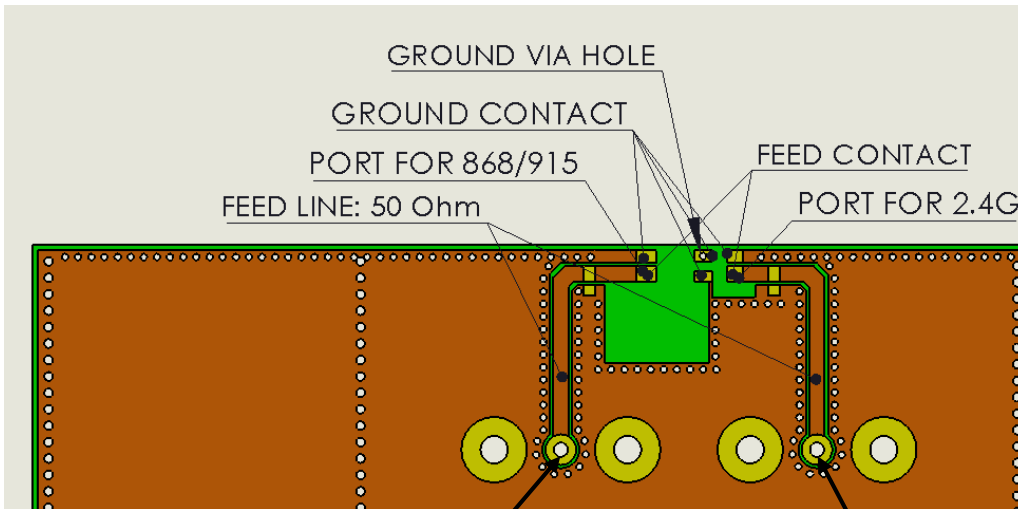
OTHER SPECIFICATIONS

PCB LAYOUT

3, Clearance area (Bottom)



4, PCB Features



Port for ISM868/915MHz

Port for 2.4G

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Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

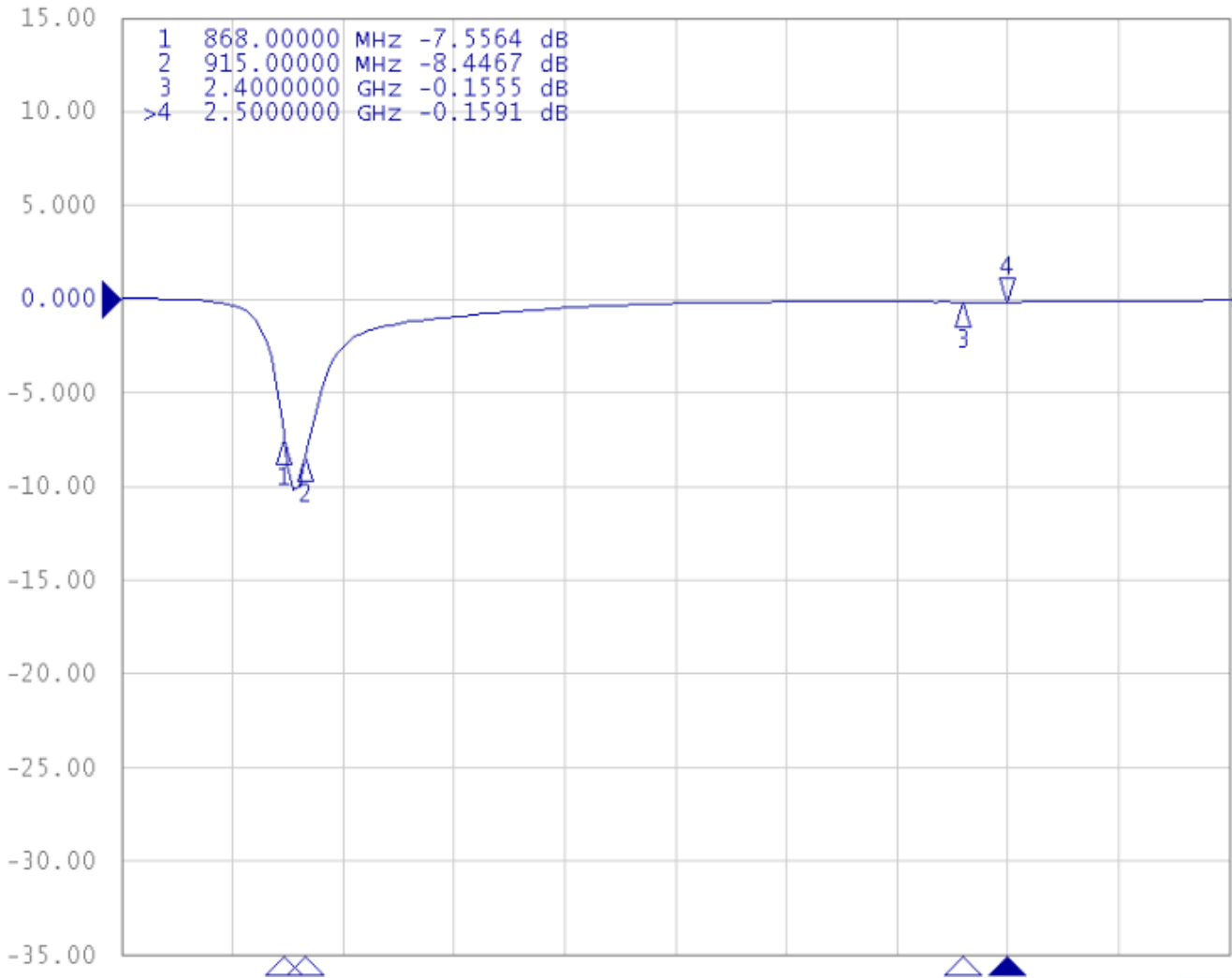
PART NUMBER: W3320

CHARTS

Return Loss

ISM868/915MHz

▶ Tr1 S11 Log Mag 5.000dB/ Ref 0.000dB [F1 Smo]



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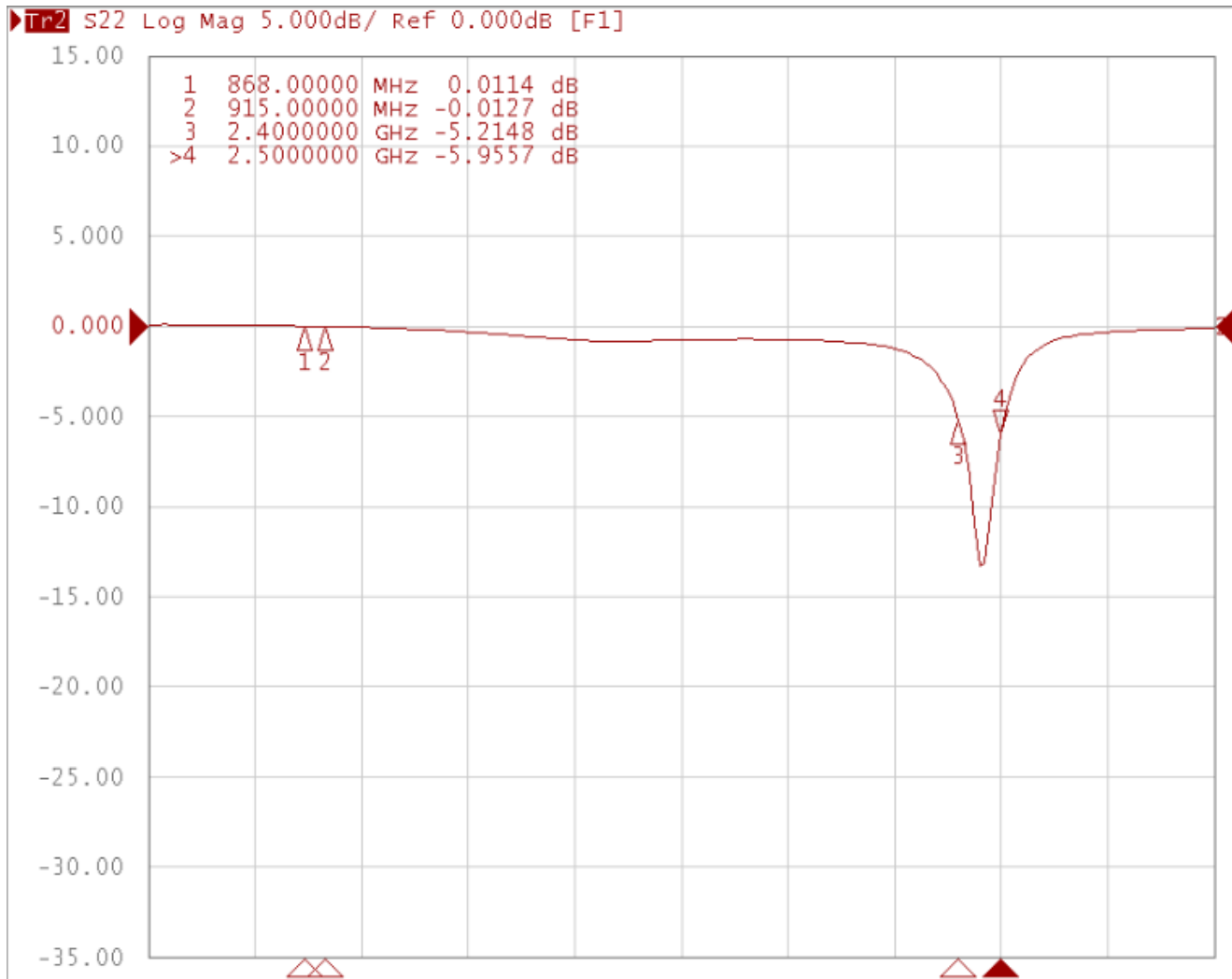
Series: Ceramic antenna

PART NUMBER: W3320

CHARTS

Return Loss

ISM2.4G



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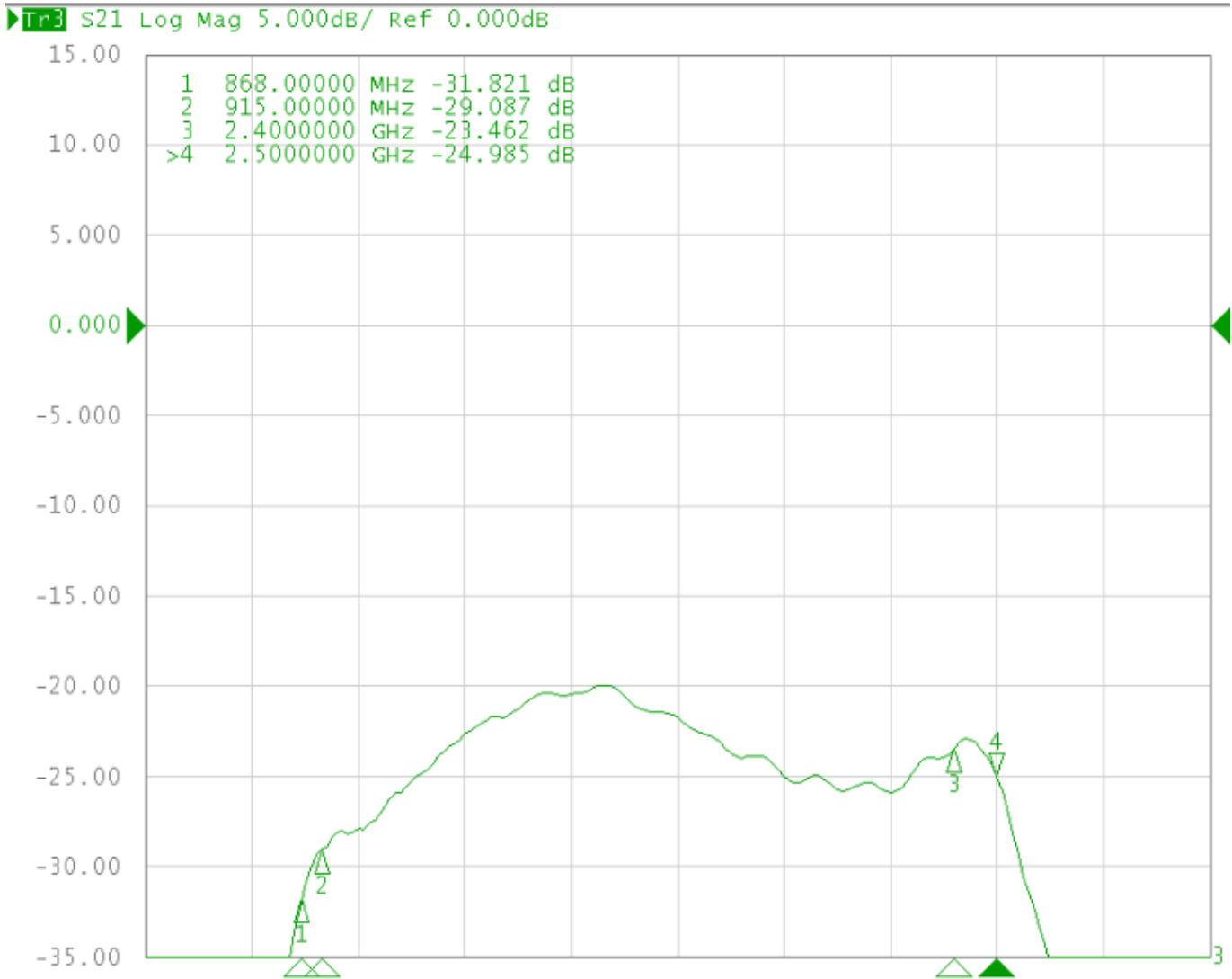
Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

CHARTS

Isolation



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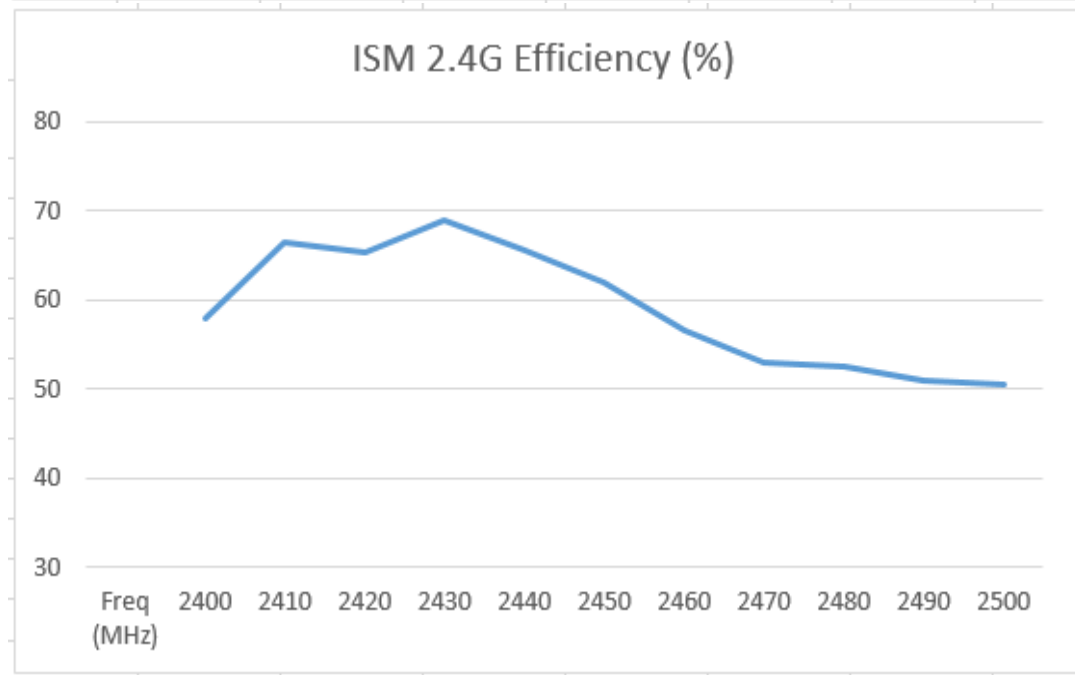
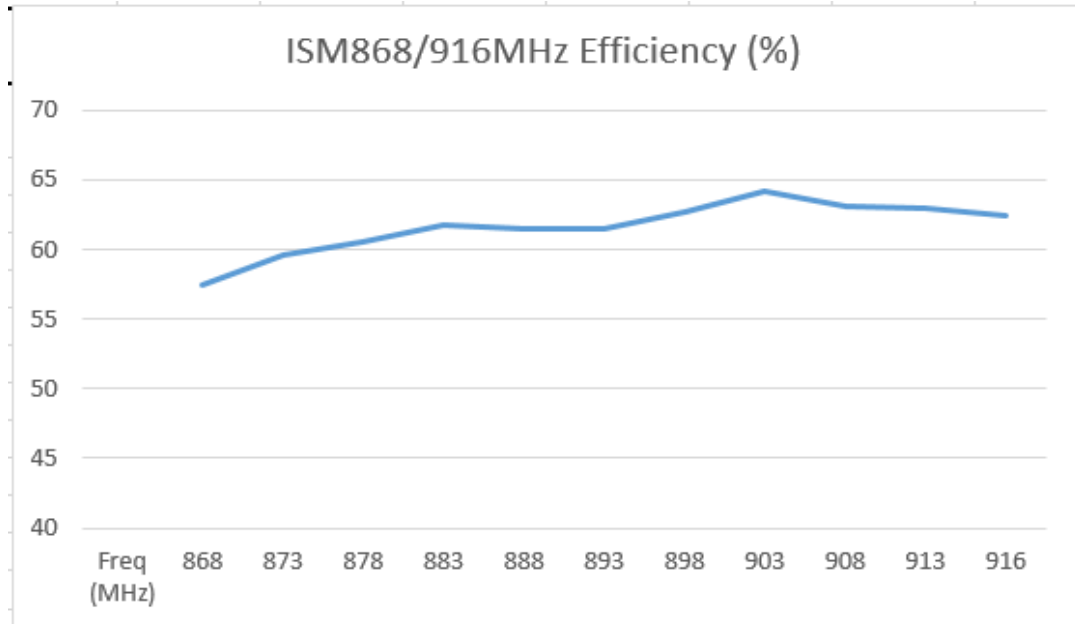
Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

CHARTS

Efficiency(%)



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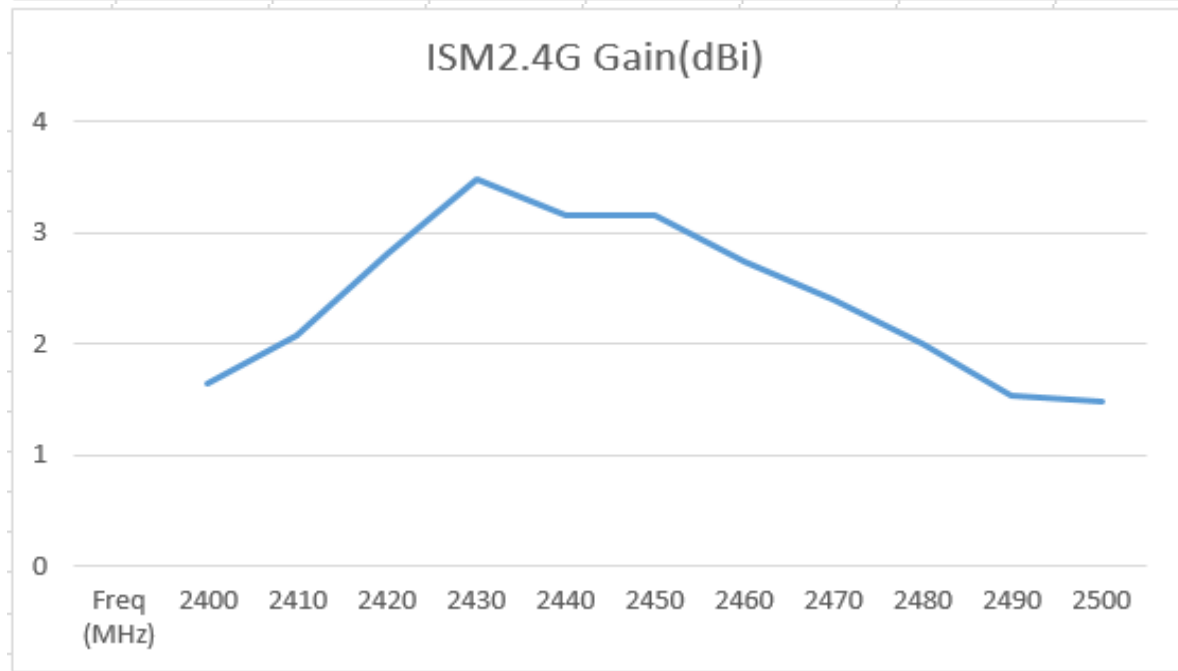
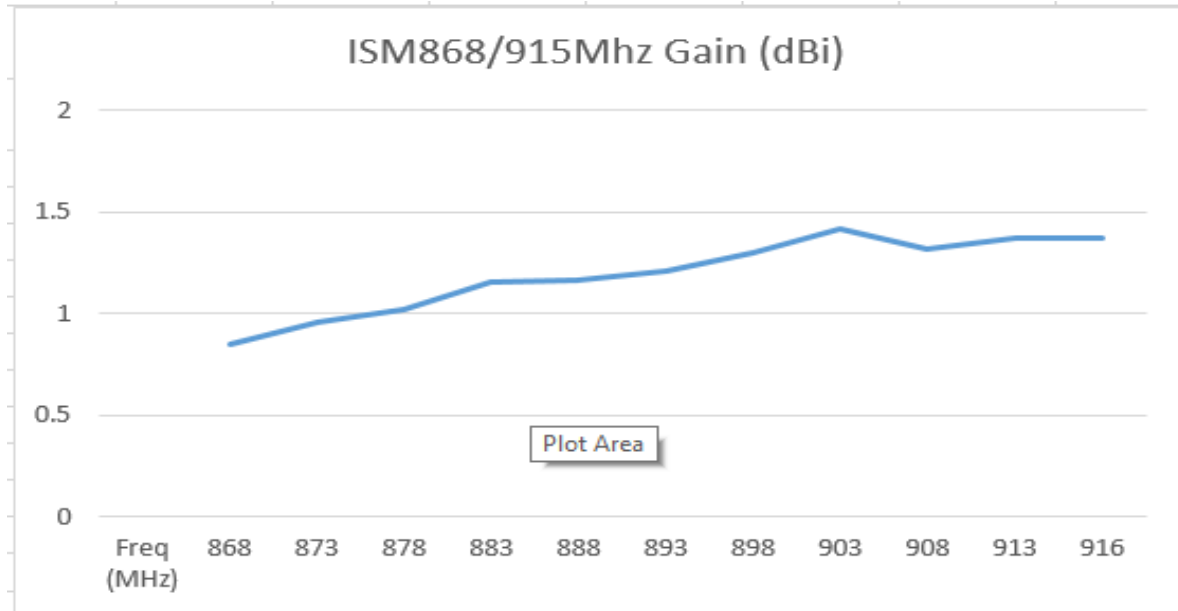
Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

CHARTS

Gain ( dBi )



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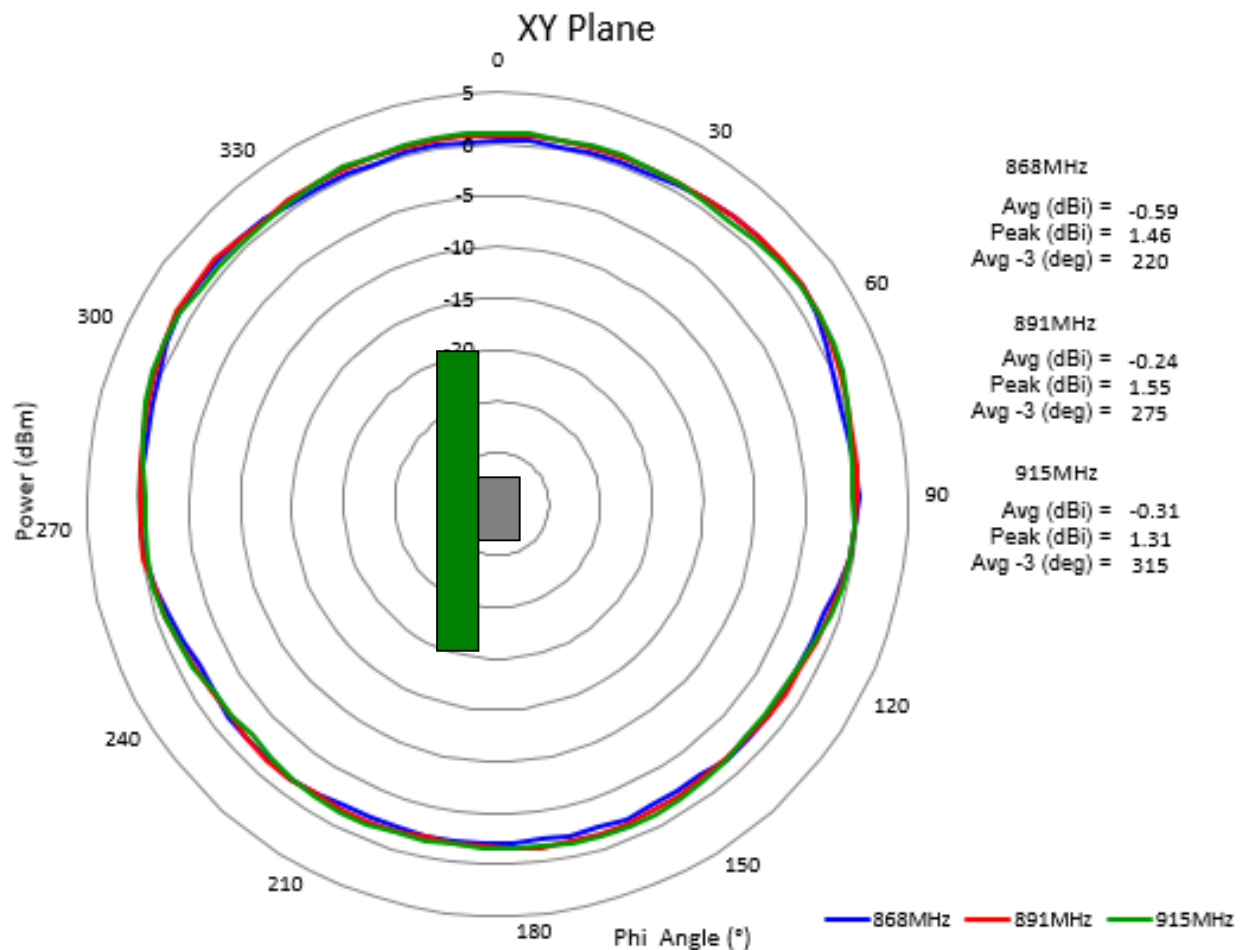
Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

CHARTS

Typical free space radiation pattern  
ISM868/915MHz  
X-Y plane



Issue: 1612

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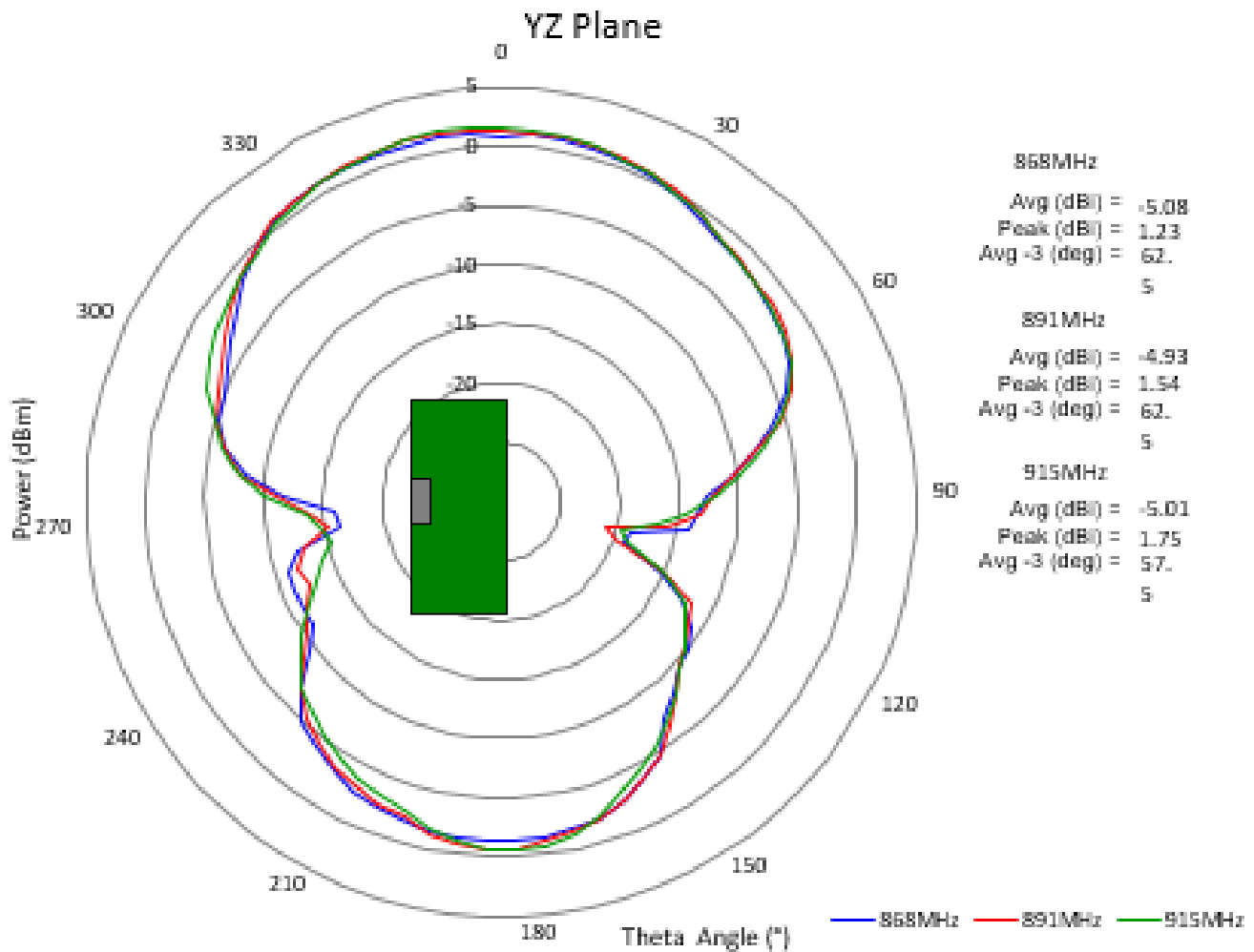
Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

CHARTS

ISM868/915MHz  
Y-Z plane



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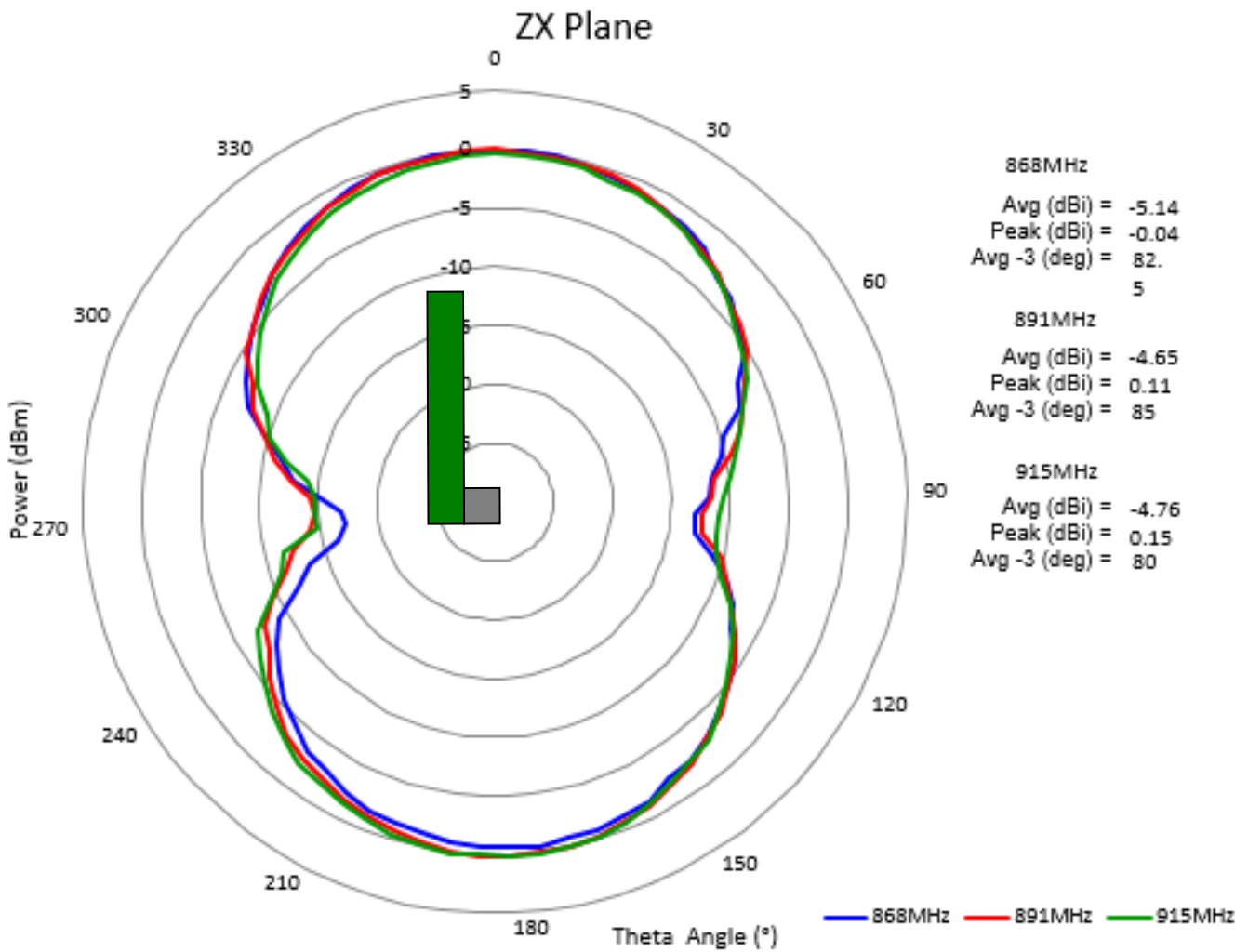
Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

CHARTS

ISM868/915MHz  
X-Z plane



Issue: 1612

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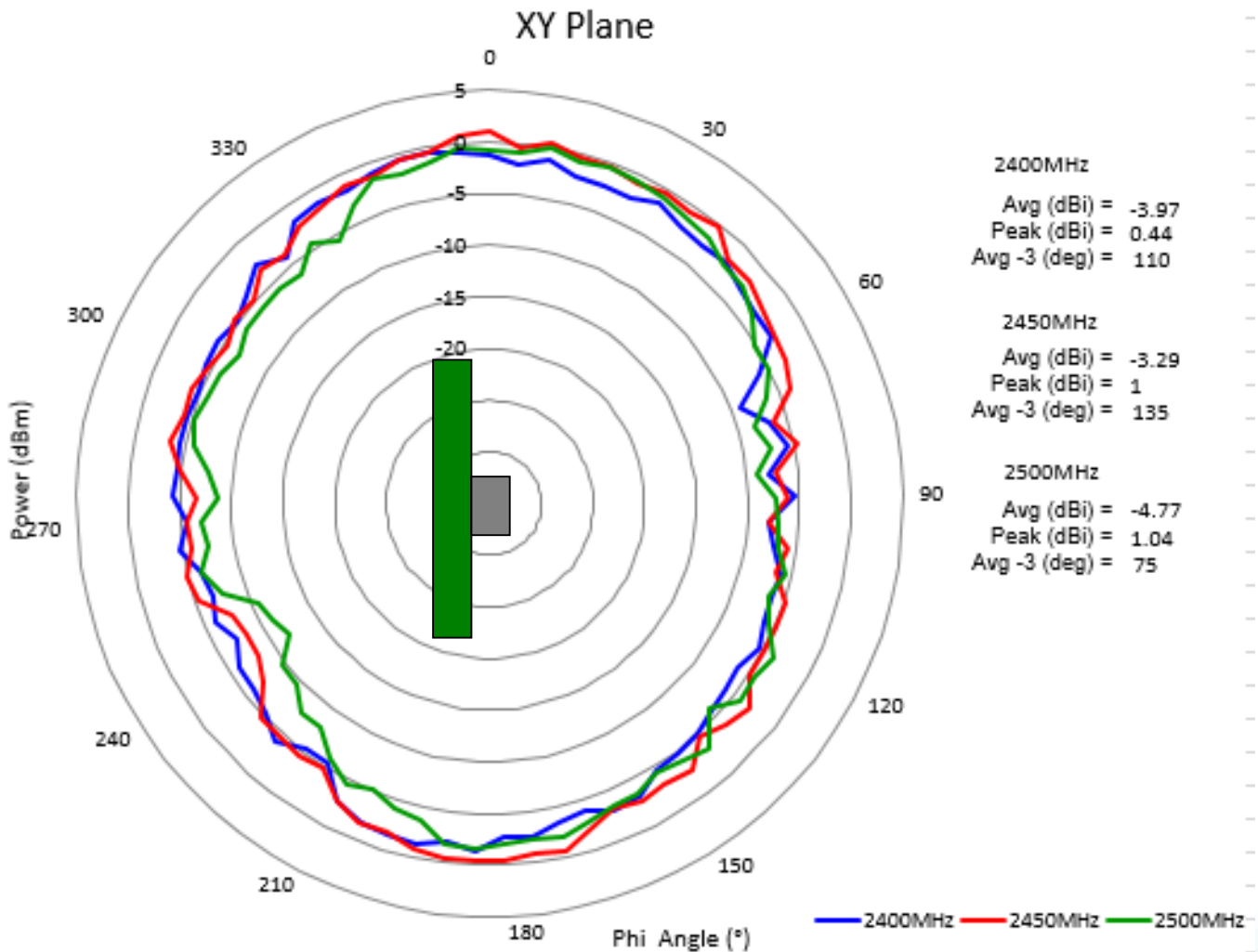
Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

CHARTS

Typical free space radiation pattern  
ISM2.4GHz  
X-Y plane



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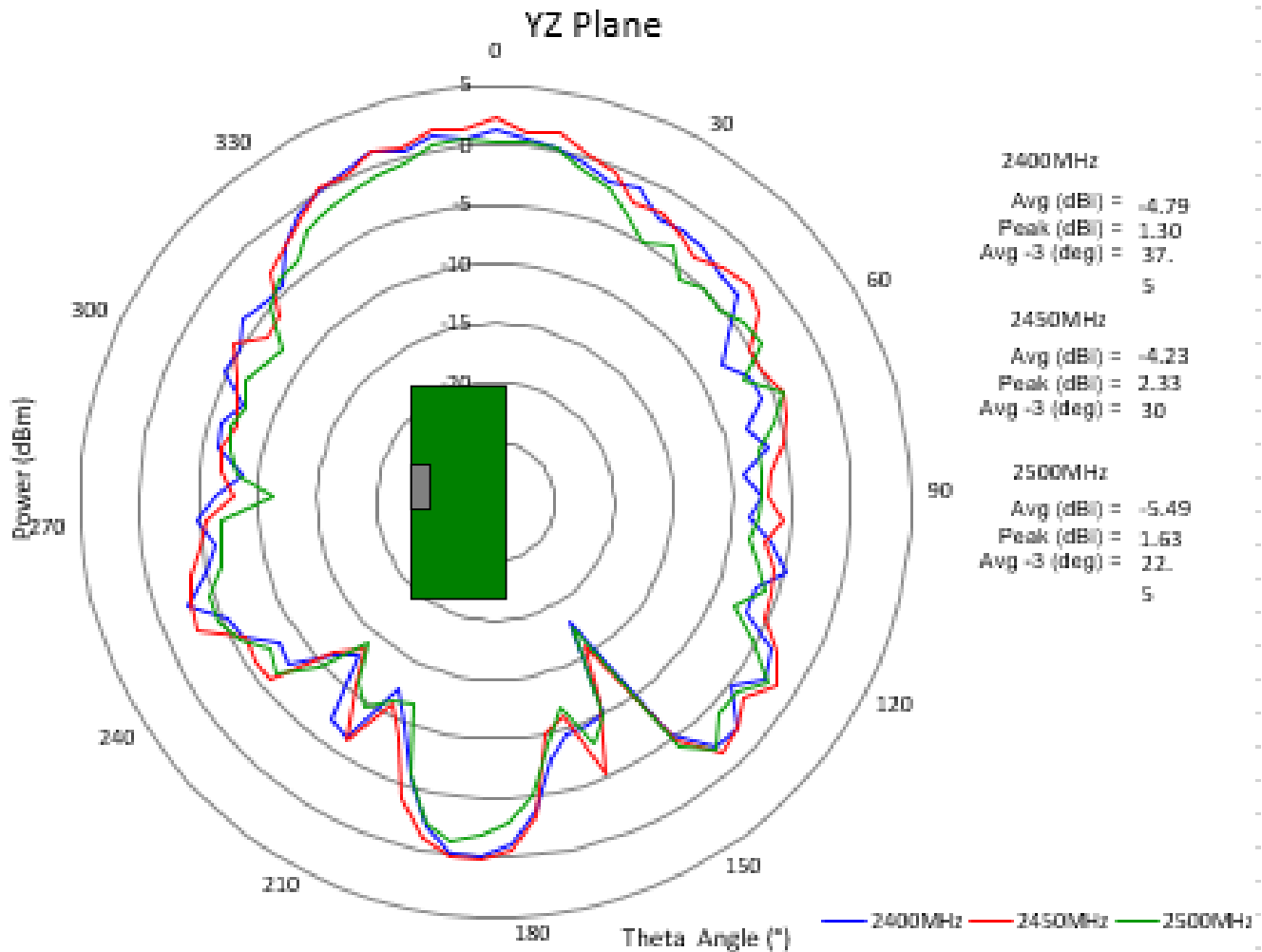
Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

CHARTS

ISM 2.4GHz  
Y-Z Plane



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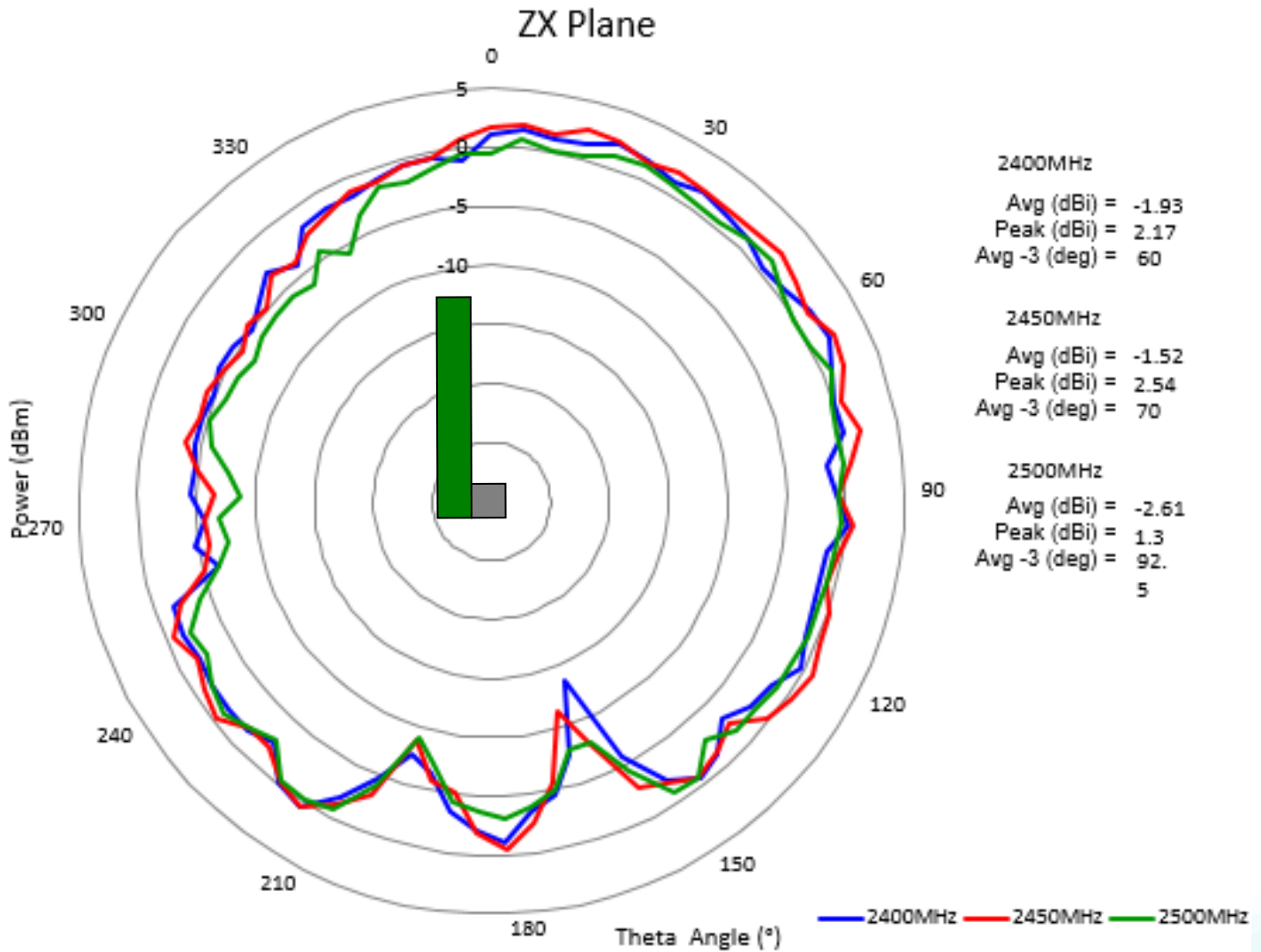
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PART NUMBER: W3320

CHARTS

ISM 2.4GHz  
X-Z Plane



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Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

## PACKAGING

Taping package  
1000PCS/Reel  
3000PCS/Small box  
6000PCS/Carton box



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