

Description: ISM868/915MHz, 2.4GHz Ant

PART NUMBER: W3331





# 

# Features:

- Small clearance needed (about 4mm)
- Test PCB size 118.5\*102mm
- High efficiency
- Small compact form factor
- Low profile
- Multi-band (ISM and 2.4 GHz)
- Board Mountable
- 2 connection points
- Lead free materials
- RoHS Compliant Product

# **Applications:**

- Data transmission for IoT applications
- High speed data terminals
- Routers using ISM frequencies
- · ISM and WiFi dual applications
- Hot Spots
- Radio modules
- WiFi / BLE / Zigbee

All dimensions are in mm / inches

Issue: 1612

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# Series: PCB Embedded

### **ELECTRICAL SPECIFICATIONS**

Frequency port1 863-928MHz

Frequency port2 2400-2500MHz

Nominal Impedance  $50\Omega$ 

Return Loss -6dB max@ISM868/915MHz

-12dB max@ISM2.4GHz

Isolation between port1& port2 -15dB

Average efficiency 65% @ISM868/915MHz

75%@ISM2.4GHz

Gain 2 +/- 1 dBi@ISM868/915MHz

3.5 +/- 1 dBi@ISM2.4GHz

Radiation Pattern Omni

Polarization: linear

Power withstanding 3W



#### **TECHNICAL DATA SHEET**

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MECHANICAL SPECIFICATIONS	
PCB material	FR4
Color	Black
Weight	0.75g
Overall Length	1.77 INCHES
Overall width	0.47 INCHES

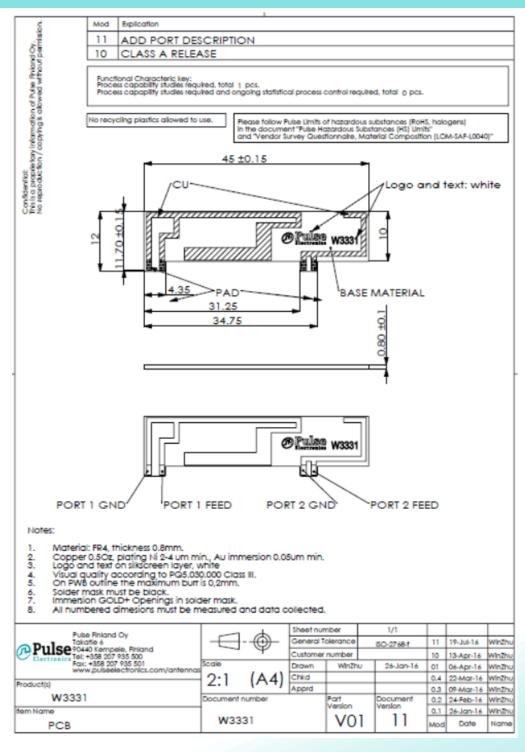


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### **MECHANICAL DRAWING**



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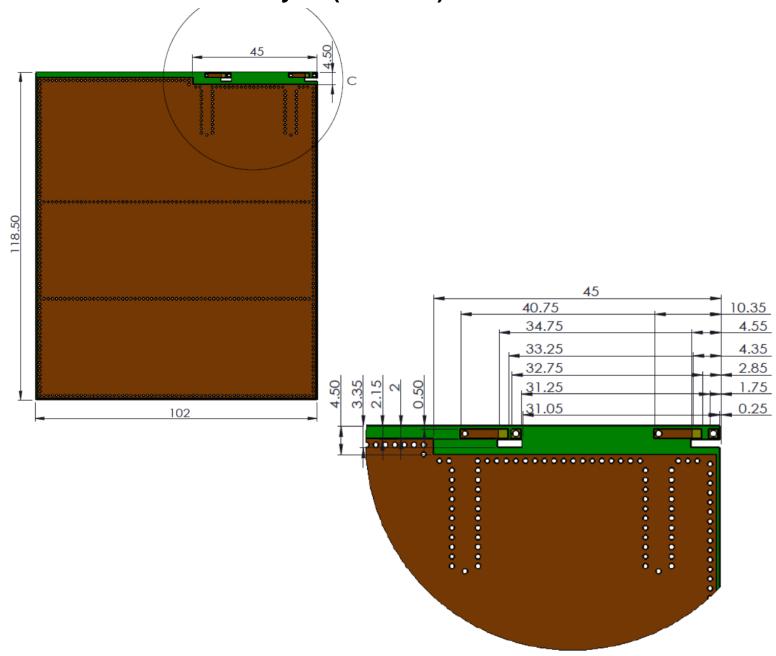


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### **OTHER SPECIFICATIONS**

# Recommended PCB layout(Unit:mm)









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# **OTHER SPECIFICATIONS** 118.50 45 10.35 40.75 4.55 34.75 4.35 33.25 102 2.85 32.75 50 1.75 <u>3</u>1.25 31.05 0.25 0

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KOH5



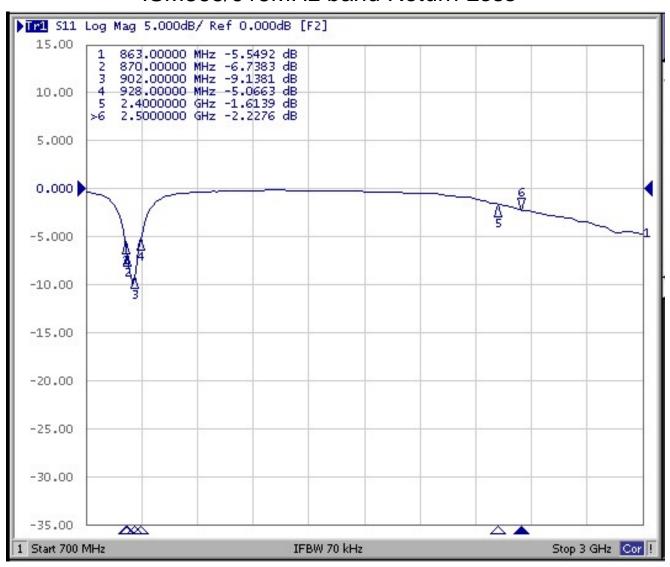
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# **CHARTS**

# ISM868/915MHz band Return Loss









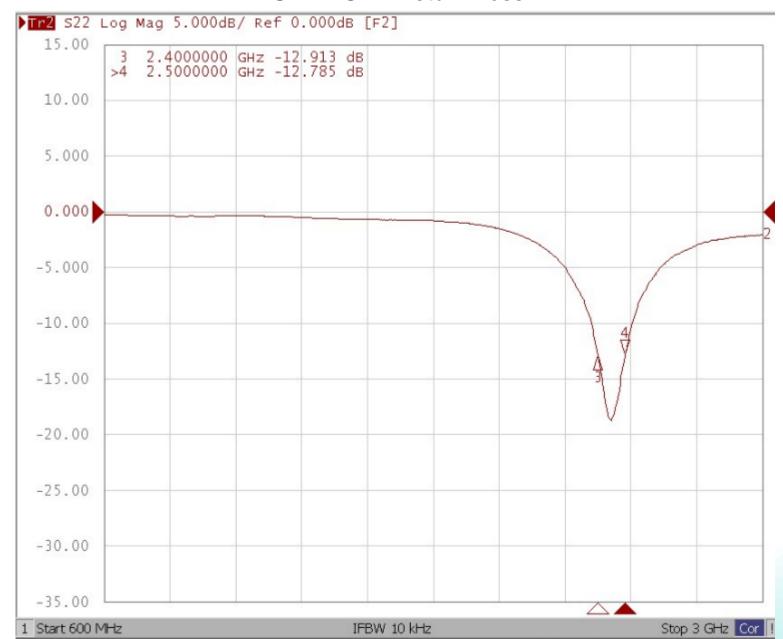
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#### **CHARTS**

# ISM2.4GHz Return Loss









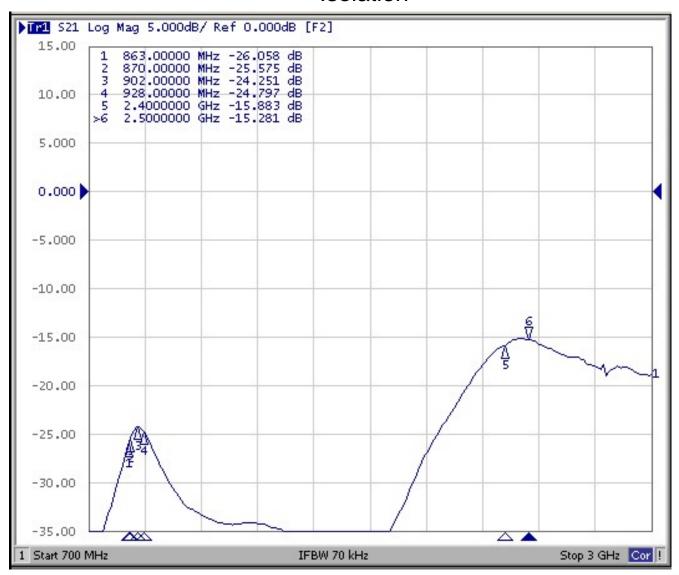
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### **CHARTS**

# Isolation







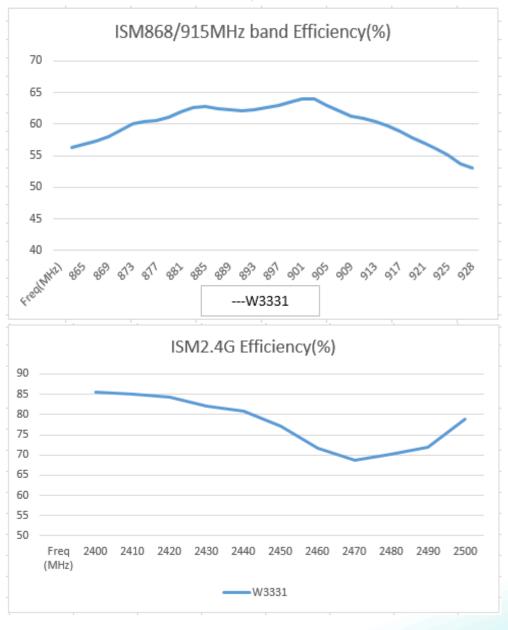
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### **CHARTS**

# Efficiency(%)







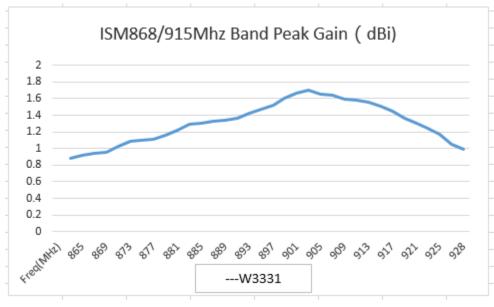
Description: ISM868/915MHz, 2.4GHz Ant

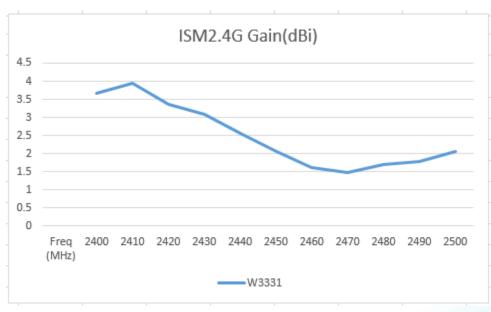
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#### **CHARTS**

# Peak Gain (dBi)







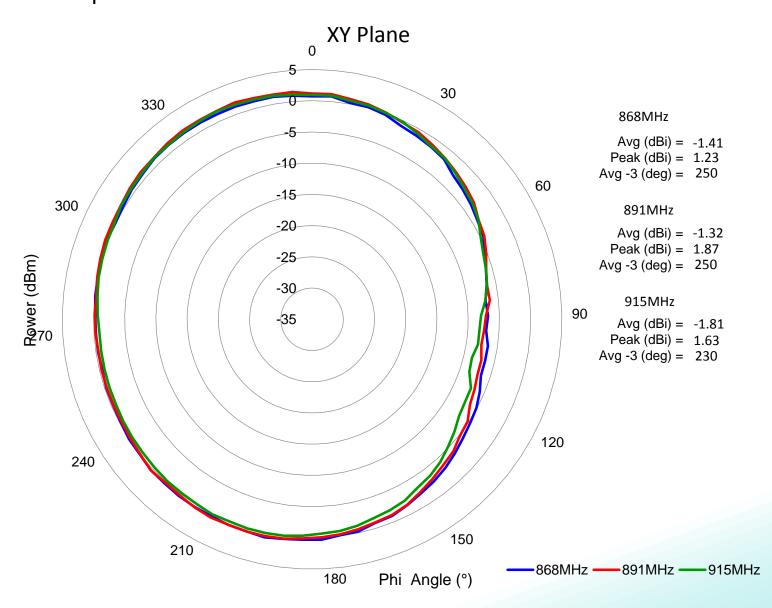
#### **TECHNICAL DATA SHEET**

Description: ISM868/915MHz, 2.4GHz Ant

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# **CHARTS**

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





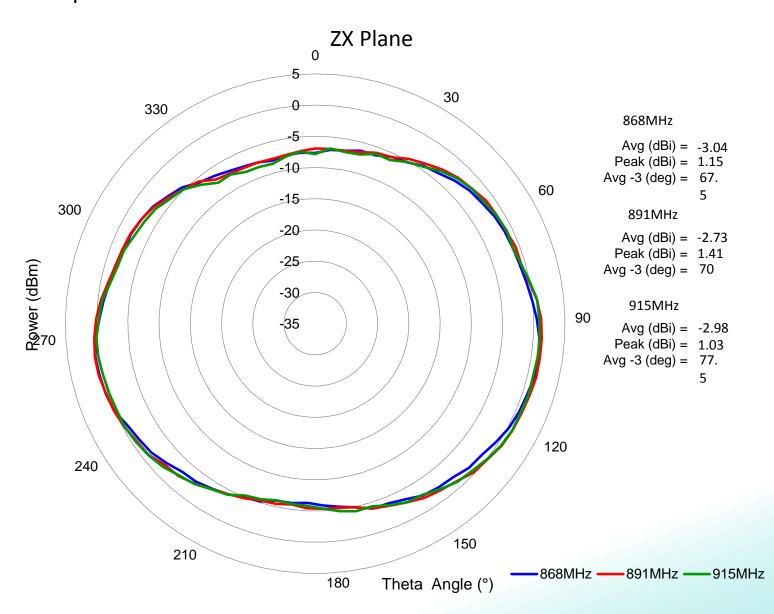
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### **CHARTS**

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





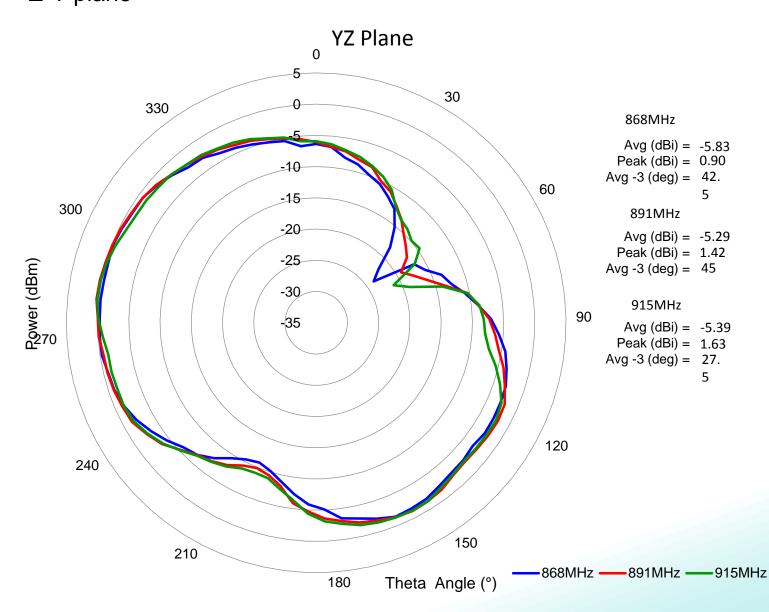
#### **TECHNICAL DATA SHEET**

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# CHARTS

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





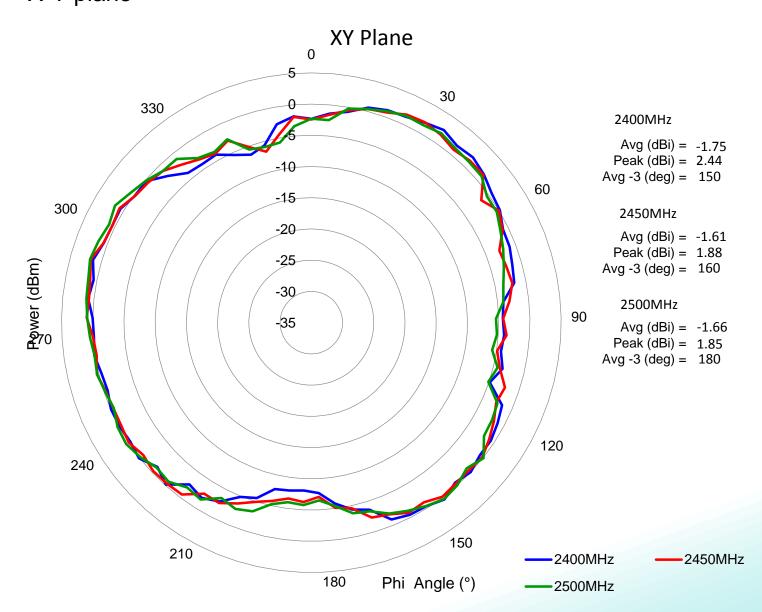
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# CHARTS

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









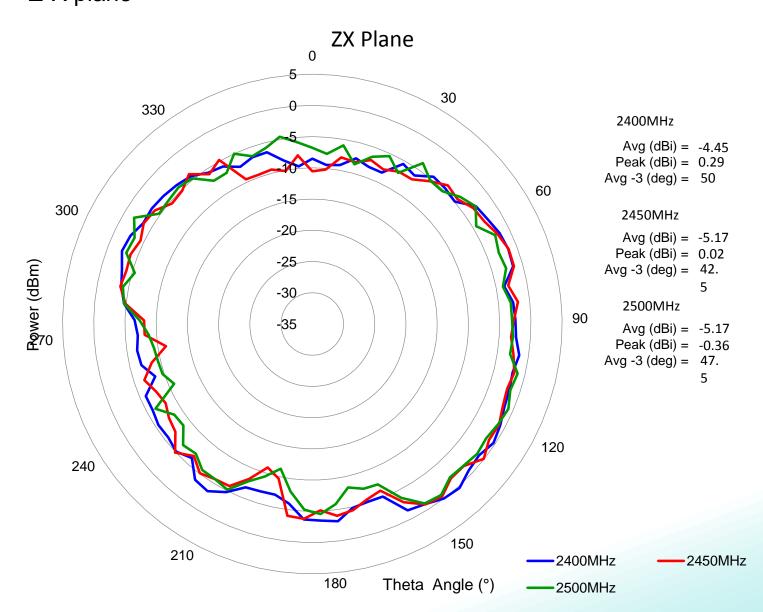
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### **CHARTS**

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









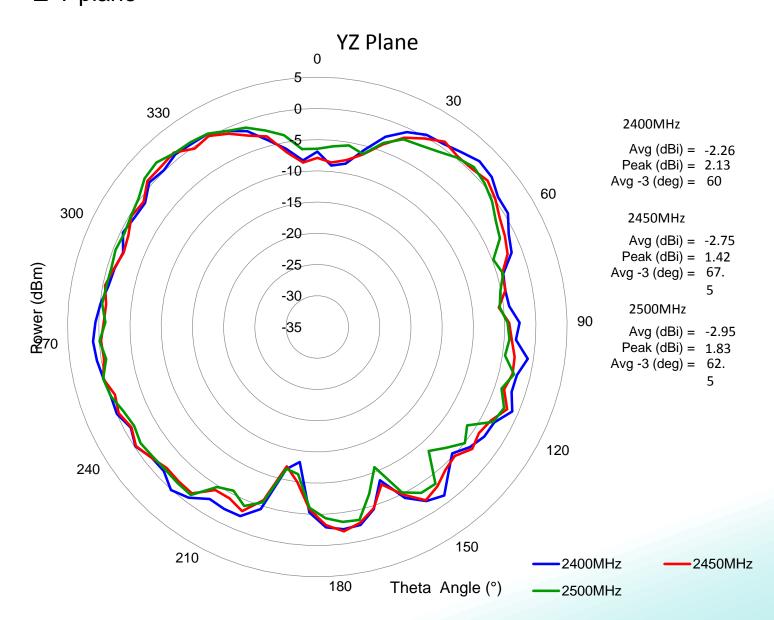
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Typical free space radiation pattern ISM2.4GHz Z-Y plane



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# **PACKAGING**

10PCS/PE bag 1000PCS/box

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