

**TECHNICAL DATA SHEET Description**: 2.4-2.5GHz PCB Antenna with coax feed

#### PART NUMBER:W3525BXXX



#### Features:

- 2400-2500 MHz
- Size: 10.7 x 47.7 x 0.8 mm
- Gain 1.5dBi
- Radiation pattern Omni
- Cable length, see page 2
- Connector U.FL compatible
- RoHS Compliant

### **Applications:**

- 2.4GHz ISM band radios
- WiFi, Bluetooth, BLE, ZigBee
- Devices requiring internal antenna
- Security, IoT, Monitoring, Industrial applications

#### All dimensions are in mm / inches

#### Issue: 2105

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Pulse Worldwide Headquarters 15255 Innovation Drive #100 San Diego, CA 92128 USA Tel:1-858-674-8100 Pulse/Larsen Antennas 18110 SE 34<sup>th</sup> St Bldg 2 Suite 250 Vancouver, WA 98683 USA Tel: 1-360-944-7551 Europe Headquarters 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



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**TECHNICAL DATA SHEET Description**: 2.4-2.5GHz PCB Antenna with coax feed

**Series: Internal PCB** 

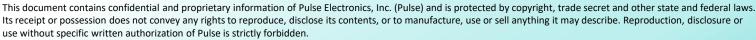
PART NUMBER:W3525BXXX

#### This document covers all product variants of the following product family

Part Number	Cable Length	Adhesive Tape	Cable type	Connector type	Frequency	Max Gain
W3525B039	3.9" / 100 mm	N.A.		I-PEX MHF or euivalent, Compatible with U.FL	2.4 GHz	2 dBi
W3525B052	5.2" / 132.1 mm	N.A.				
W3525B100	10" / 254 mm	N.A.	-			
W3525B039T	3.9" / 100 mm	3M 467 (T=0.05mm)	Ø1.13mm Coax Cable,			
W3525B0150T	150 mm	3M 467 (T=0.05mm)	Gray color			
W3525B0250	250 mm	N.A.	-			
W3525B0250T	250 mm	3M 467 (T=0.05mm)				
W3525B254T	254 mm	3M 467 (T=0.05mm)				

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TECHNICAL DATA SHEET

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#### **ELECTRICAL SPECIFICATIONS**

Antenna Type	Dipole PCB+Cable
Frequency	2400-2500MHz
Nominal Impedance	50 Ω
VSWR	2.5:1
Radiation Pattern	Omni
Gain	1.5dBi
Efficiency	55%
Polarization	Vertical
Power Withstanding	1W

#### **MECHANICAL SPECIFICATIONS**

Overall Length Antenna Material Connector type Cable type 10.7x47.7x0.8mm PCB I-PEX or equivalent MI-113 Gray

#### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Storage Temperature RoHS Compliant

#### -40° C~+85 ° C -40° C~+85 °C Yes

#### **OTHER SPECIFICATIONS**

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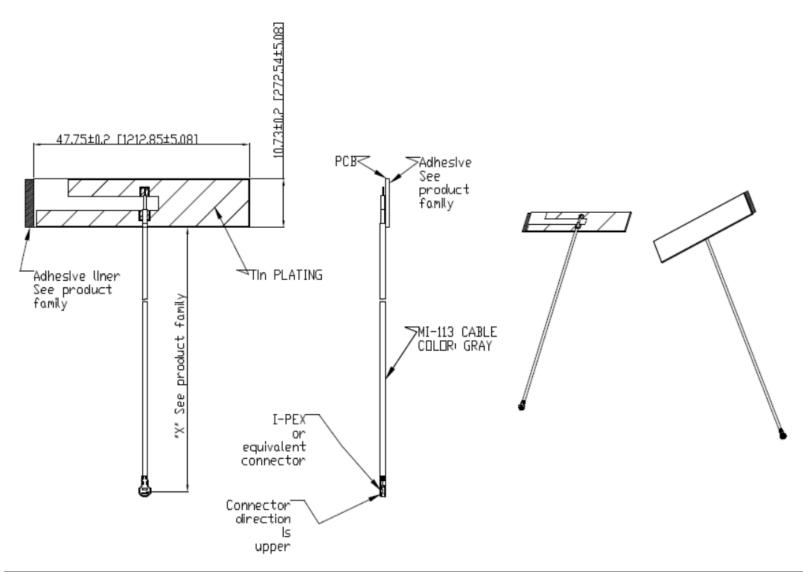
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#### **MECHANICAL DRAWING**



Part Number	Frequency(GHz)	Max Gain(dBi)	Impedance(ohm)	PWB Length(in/mm)	Cable Length(in/mm)	Adhesive Tape
W3525B039	2.4	2	50	1.87/47.7	3.9/100	N/A
W3525B052	2.4	2	50	1.87/47.7	5.2/132.1	N/A
W3525B100	2.4	2	50	1.87/47.7	10/254	N/A
W3525B039T	2.4	2	50	1.87/47.7	3.9/100	Required

## Dimension unit: mm/inch

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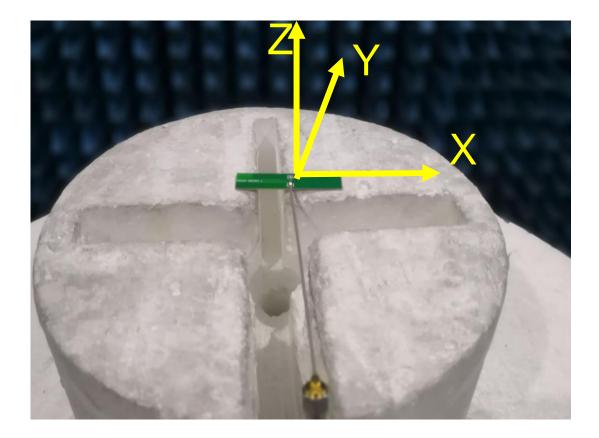


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#### **TEST SETUP**



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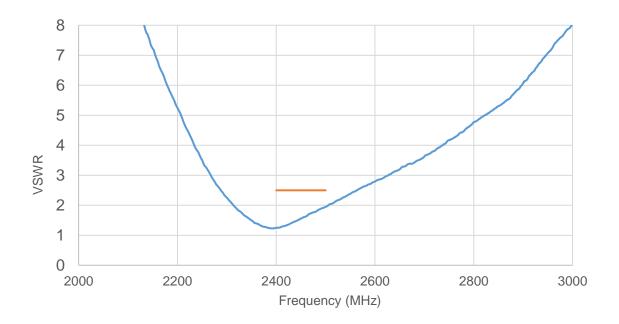
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#### CHARTS

## VSWR



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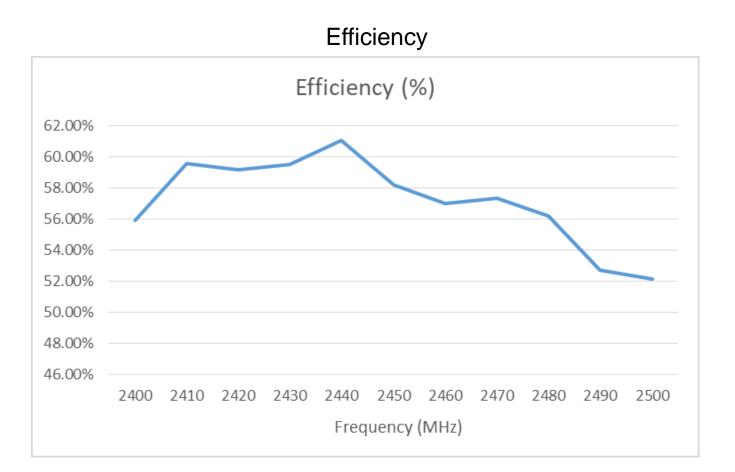


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CHARTS



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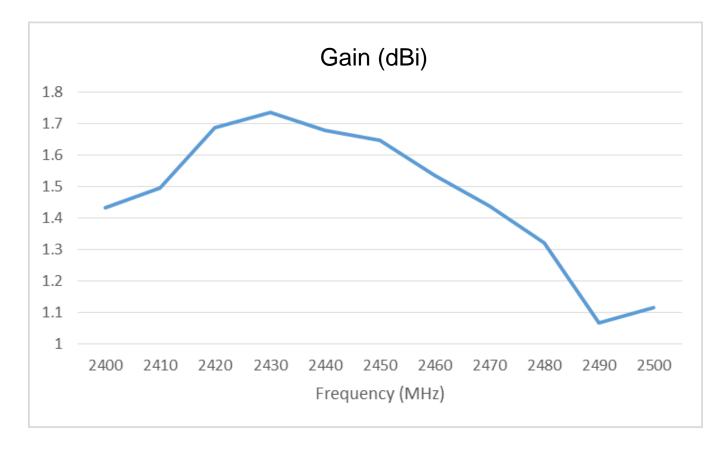
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**CHARTS** 

### Gain



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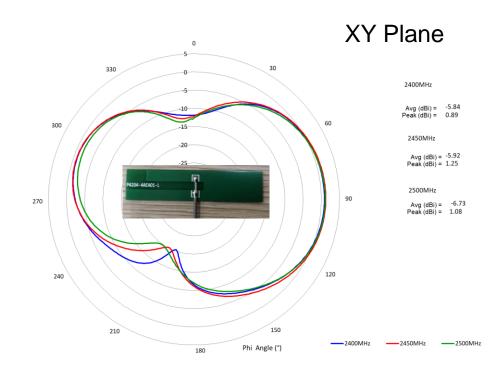
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#### **CHARTS**

## Free Space Radiation Pattern



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TECHNICAL DATA SHEET

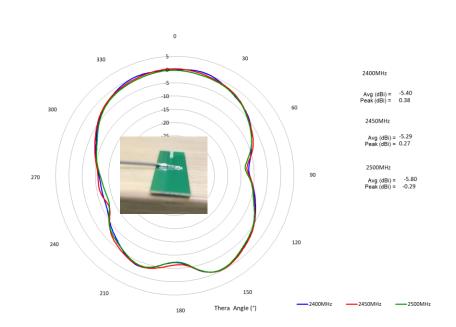
XZ Plane

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#### **CHARTS**

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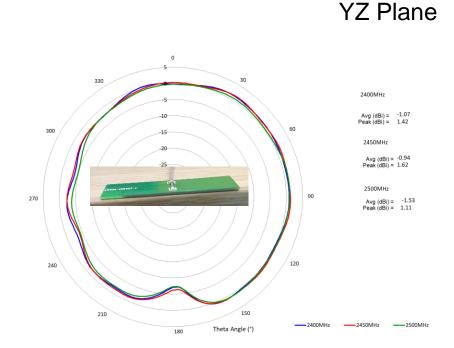
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#### CHARTS

# Free Space Radiation Pattern



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### PACKAGING

For W3525B039 and W3525B039T and W3525B052 10pcs antennas packing packed in 1 sealed bag 10pcs sealed bags (total 100pcs antennas) packed in 1 foam bag 12pcs foam bags (total 1200pcs antennas) packed in 1 carton 460x235x140mm

For W3525B100 5pcs antennas packing packed in 1 sealed bag 20pcs sealed bags (total 100pcs antennas) packed in 1 foam bag 12pcs foam bags (total 1200pcs antennas) packed in 1 carton 460x235x140mm



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Pulse: W3525B039 W3525B100