



**Series: Internal Antenna** 

**Description: 2.4/5GHz FPC antenna** 

PART NUMBER: W3917XXXX



### Features:

- 2400-2500 / 4900-5925 MHz
- Size 42.6 X 8.6 X 0.15 mm
- Efficiency 60/70%
- VSWR < 2</li>
- Nominal impedance 50  $\Omega$
- Cable and connector can be customized

## **Applications:**

- WiFi, Bluetooth, BLE, ZigBee
- DSRC
- ISM band radios
- IoT, M2M

All dimensions are in mm / inches

Issue: 1714

In the effort to improve our products, we reserve the right to make changes judged to be necessary. CONFIDENTIAL AND PROPRIETARY INFORMATION

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#### **TECHNICAL DATA SHEET**

**Description: 2.4/5GHz FPC antenna** 

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**PART NUMBER: W3917XXXX** 

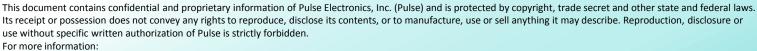
## This document covers all product variants of the following product family:

W3917B0050 50mm 1.13mm OD cable U.FL compatible connector

W3917B0100 100mm 1.13mm OD cable U.FL compatible connector

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### **ELECTRICAL SPECIFICATIONS**

Frequency 2400-2500, 4900-5925MHz

Nominal Impedance  $50\Omega$ 

VSWR <2

Peak Gain 2dBi+/- 1dB@ 2.4GHz

4dBi+/-1dB@5GHz

Efficiency(%) 60 / 70 %

Radiation Pattern Omni

Polarization: Linear

Power withstanding 2 W

Connector U.FL compatible connector

Cable type 1.13mm coaxial cable black

Cable length Optional

# (\*) All RF parameters measured on 2mm thick PC plate



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### **MECHANICAL SPECIFICATIONS**

Radiator material FPC

Color Black

Adhesive 3M467

Thickness(with adhesive, no liner) 0.15 mm

Weight 0.32 g

FPC size(L X W X T) 42.6 X 8.6 X 0.15 mm

### **ENVIRONMENTAL SPECIFICATIONS**

Operating temperature

-40/+85 ° C



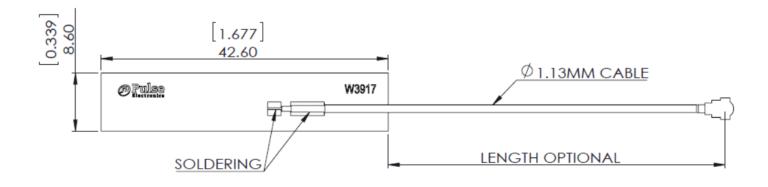


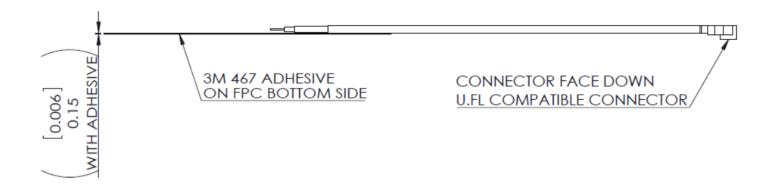


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### **MECHANICAL DRAWING**









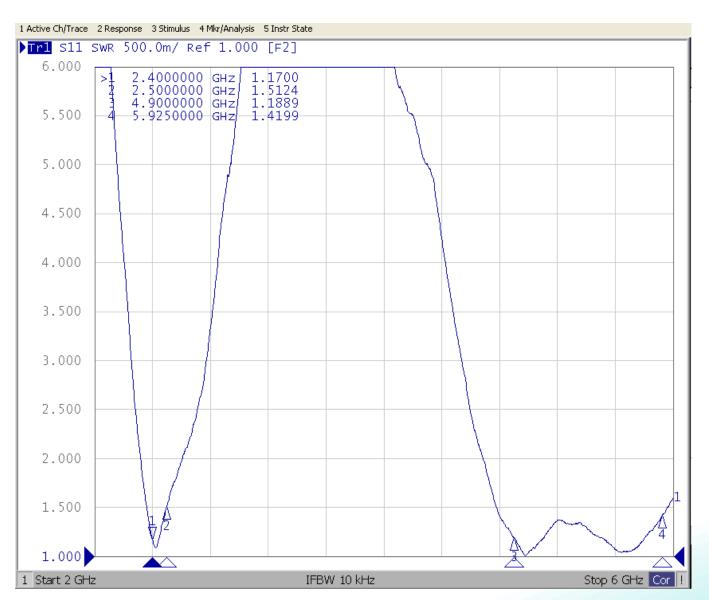
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#### **CHARTS**

## (\*) All RF parameters measured on 2mm thick PC plate

# Return Loss



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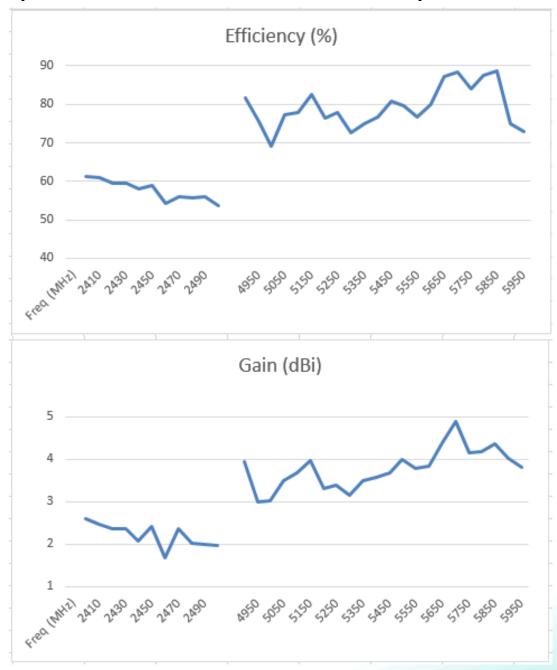


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#### **CHARTS**

## (\*) All RF parameters measured on 2mm thick PC plate







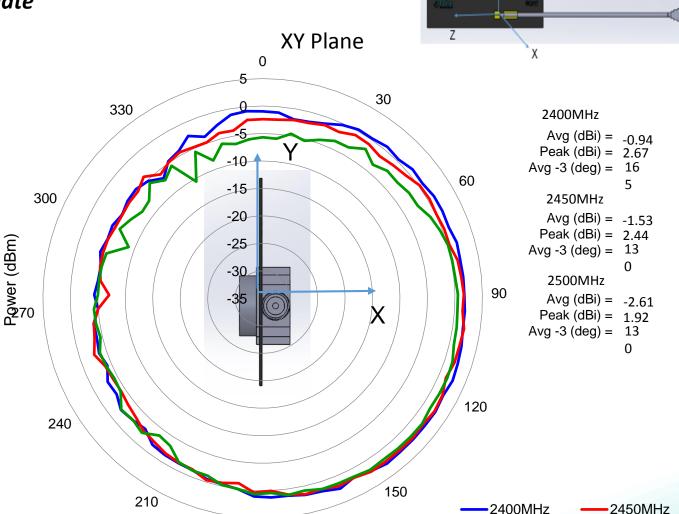
**Series: Internal Antenna** 

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### **CHARTS**

Typical free space radiation pattern WIFI2.4GHz

(\*) All RF parameters measured on 2mm thick PC plate



2500MHz

Phi Angle

180



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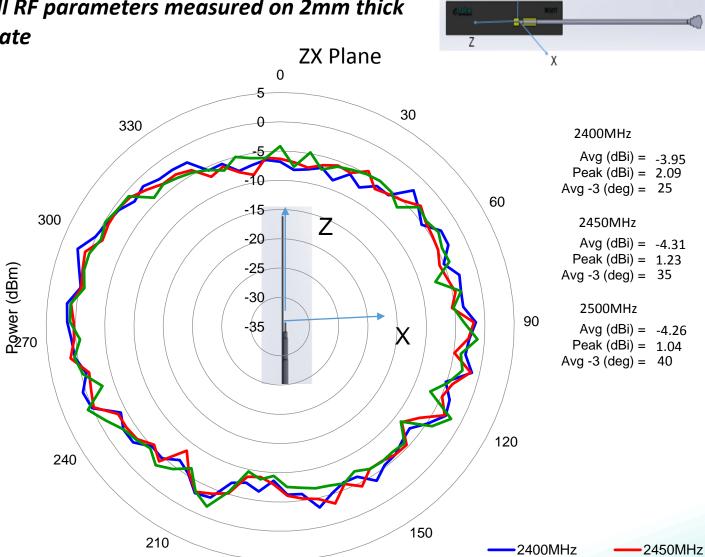
PART NUMBER: W3917XXXX

### **CHARTS**

Typical free space radiation pattern WIFI2.4GHz

(\*) All RF parameters measured on 2mm thick

PC plate



2500MHz

Theta Angle

180



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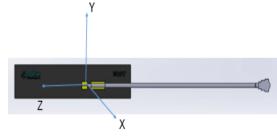
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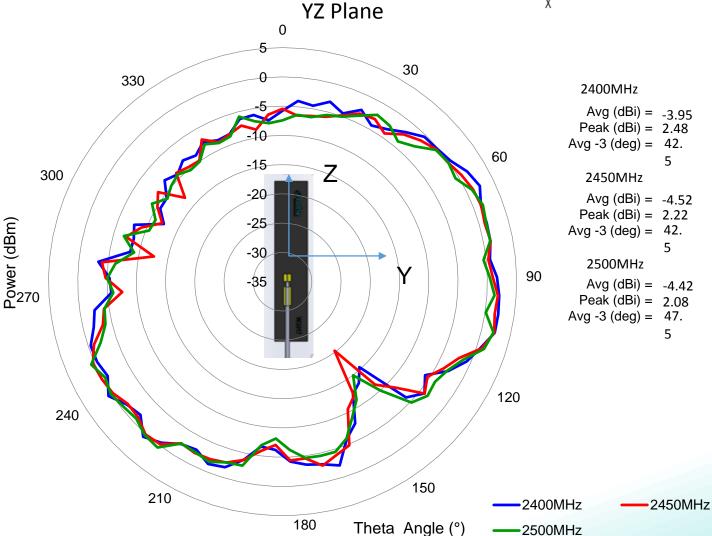
### **CHARTS**

Typical free space radiation pattern WIFI2.4GHz

(\*) All RF parameters measured on 2mm thick

PC plate







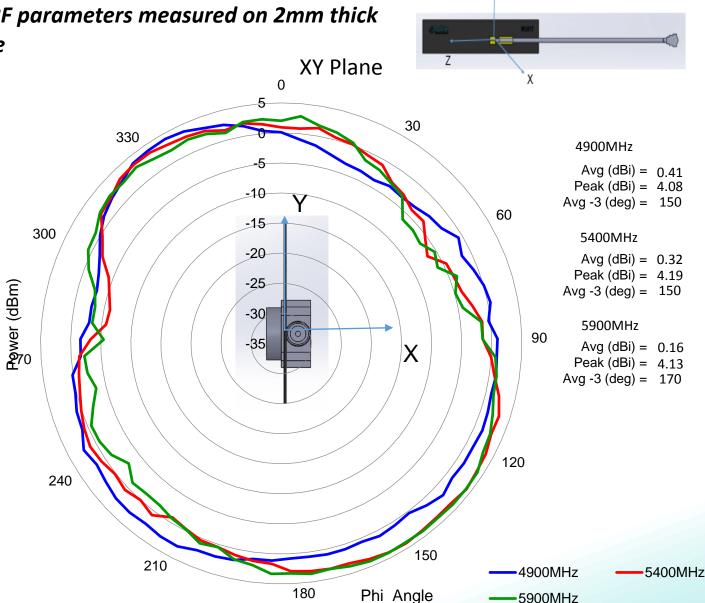
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### **CHARTS**

Typical free space radiation pattern
WIFI 5GHz
(\*) All RF parameters measured on 2mm thick

PC plate



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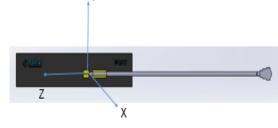
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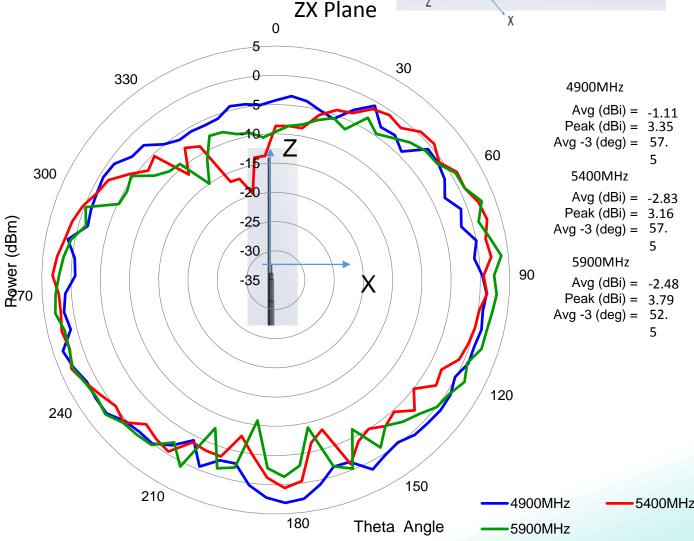
### **CHARTS**

Typical free space radiation pattern WIFI 5GHz

(\*) All RF parameters measured on 2mm thick

PC plate









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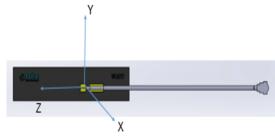
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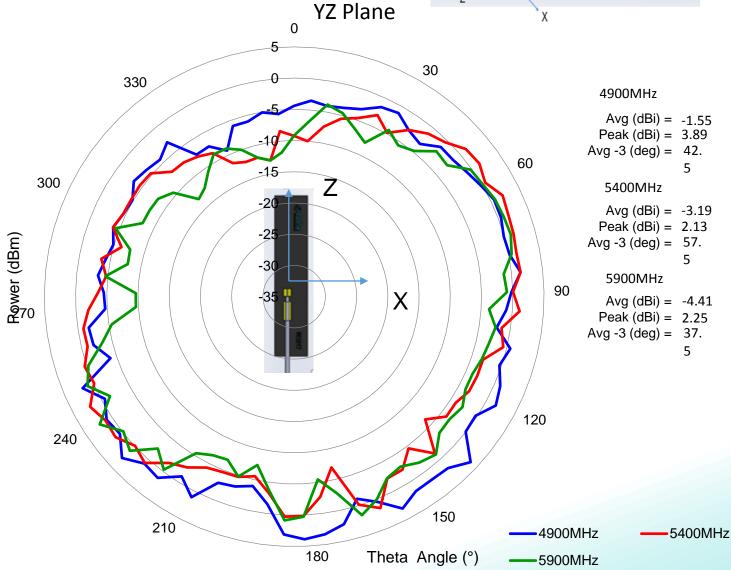
### **CHARTS**

Typical free space radiation pattern
WIFI 5GHz

(\*) All PE parameters measured on 2mm th

(\*) All RF parameters measured on 2mm thick PC plate





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ROHS





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### **PACKAGING**

10PCS/PE bag 10 PE bag/foam bag 50 foam bag/ carton box

Total 5000PCS/Carton box



