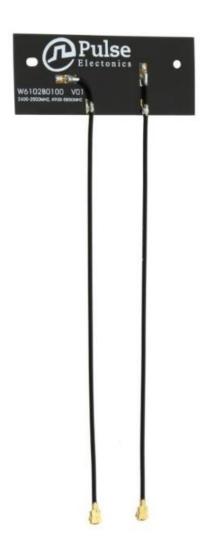




**Series: FPC Antenna** 

**Description: 2X2 MIMO Dual WiFi Antenna** 

**PART NUMBER: W6102B0100** 



### Features:

- Port 1: 2.4-2.5/4.9-5.925GHz
- Port 2: 2.4-2.5/4.9-5.925GHz
- Supports dual band WiFi and DSRC bands
- Size 50x20mm
- Cables 100mm 1.13mm OD
- U.FL compatible connectors

### **Applications:**

- WiFi, Zigbee, Bluetooth radios
- ISM 2.4GHz and 5GHz
- DSRC 5925MHz
- Routers, Gateways, Security
- Transportation
- M2M, IoT

Issue: 1701

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

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden. For more information:

Pulse Worldwide Headquarters 12220 World Trade Drive 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



#### **TECHNICAL DATA SHEET**

**Description: 2X2 MIMO Dual WiFi Antenna** 

Series: FPC Antenna
PART NUMBER: W6102B0100

### **ELECTRICAL SPECIFICATIONS**

Frequency 2.4-2.5/4.9-5.925GHz

Nominal Impedance  $50\Omega$ 

VSWR <2

Gain 2dBi+/- 1dB@ 2.4GHz

6dBi+/-1dB@5GHz

Radiation Pattern Omni

Polarization Linear

Power withstanding 3W

Connector type U.FL compatible

Cable type Low loss Φ1.13mm Coaxial Cable

Cable length 100mm

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



### **TECHNICAL DATA SHEET**

**Description: 2X2 MIMO Dual WiFi Antenna** 

**Series: FPC Antenna** 

**PART NUMBER: W6102B0100** 

### **MECHANICAL SPECIFICATIONS**

Color Black

Weight 1.22 g

Overall Length 50 mm

Radiator Thickness with adhesive tape 0.2 mm

Fixing system Adhesive Tape, 3M6677 PC

### **ENVIRONMENTAL SPECIFICATIONS**

Operating temperature

-40~ +85° C

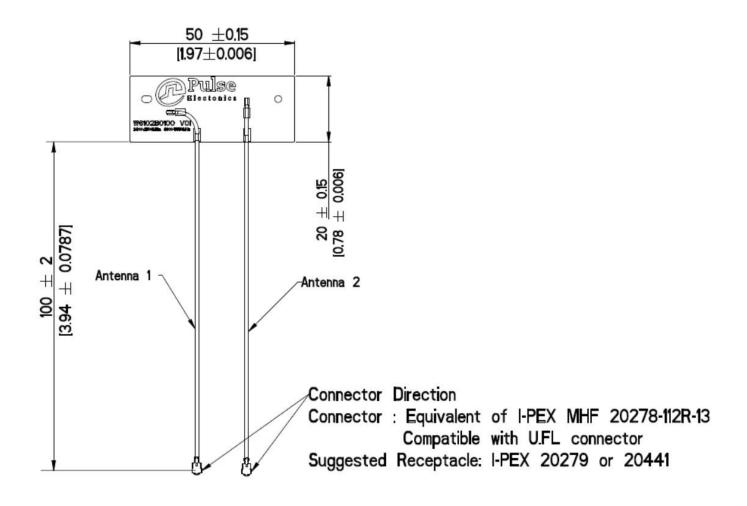


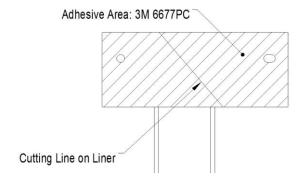


**Series: FPC Antenna** 

**PART NUMBER: W6102B0100** 

### **MECHANICAL DRAWING**









**Series: FPC Antenna** 

**PART NUMBER: W6102B0100** 

### **CHARTS**



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

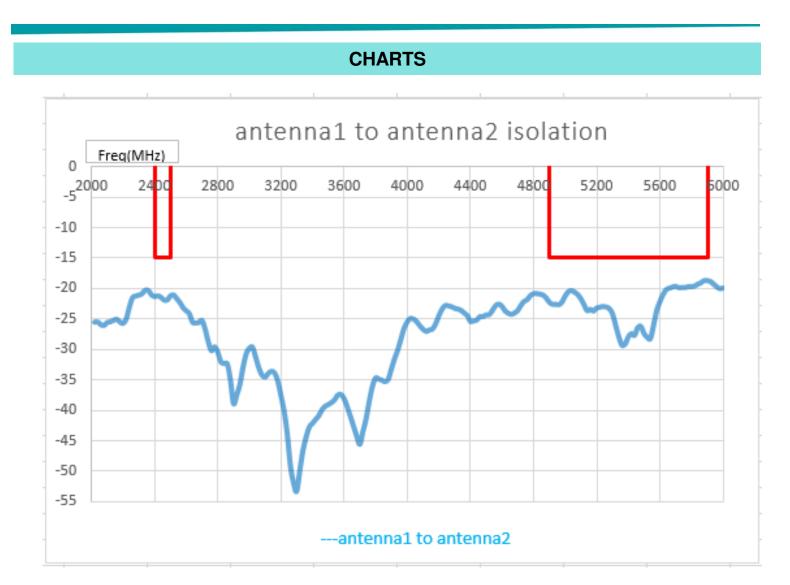






**Series: FPC Antenna** 

**PART NUMBER: W6102B0100** 



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

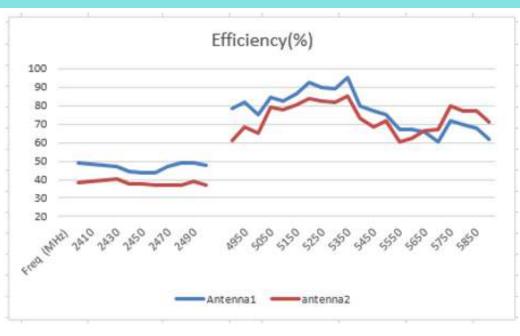


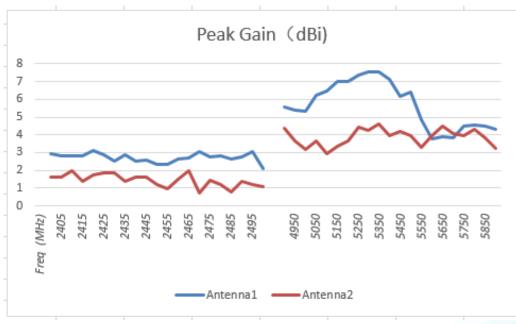


**Series: FPC Antenna** 

**PART NUMBER: W6102B0100** 

### **CHARTS**





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

Issue: 1701







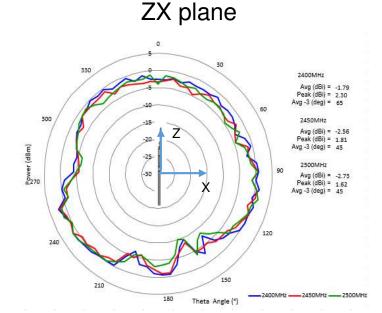
**Series: FPC Antenna** 

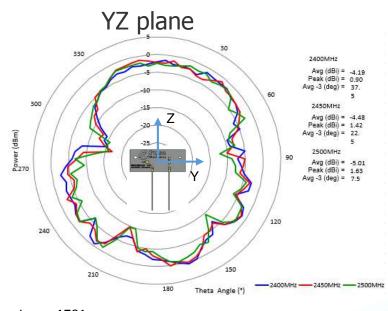
**PART NUMBER: W6102B0100** 

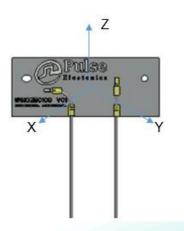
### **CHARTS**

Typical free space radiation pattern—Antenna1: 2.4-2.5GHz (\*) All RF parameters measured on 2mm thick PC plate

# 300 2400MHz Avg (dBi) = -1.60 Peak (dBi) = 2.29 Avg -3 (deg) = 165 2450MHz Avg (dBi) = -2.67 Peak (dBi) = 2.19 Avg -3 (deg) = 115 2500MHz Avg (dBi) = -3.07 Peak (dBi) = 2.58 Avg -3 (deg) = 70







Issue: 1701

ROHS





Series: FPC Antenna

**PART NUMBER: W6102B0100** 

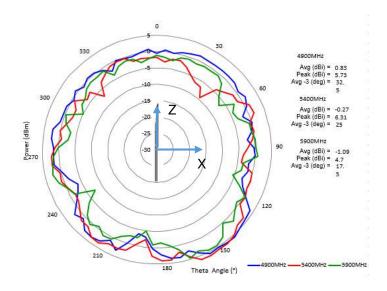
### **CHARTS**

Typical free space radiation pattern—Antenna1: 4.9-5.925GHz (\*) All RF parameters measured on 2mm thick PC plate

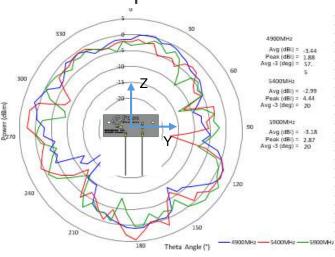
# XY plane

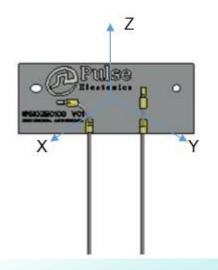
# 330 300 4900MHz Avg (dBi) = -1.57 Peak (dBi) = 3.44 Avg -3 (deg) = 75 5400MHz Avg (dBi) = -0.74 Peak (dBi) = 3.54 Avg -3 (deg) = 110 5900MHz Synow Avg -3 (deg) = 110 5900MHz Avg -3 (deg) = 110 5900MHz Avg -3 (deg) = 170 180 Phi Angle (\*)

# ZX plane



# YZ plane





Issue: 1701



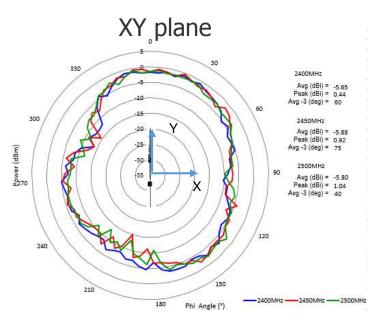


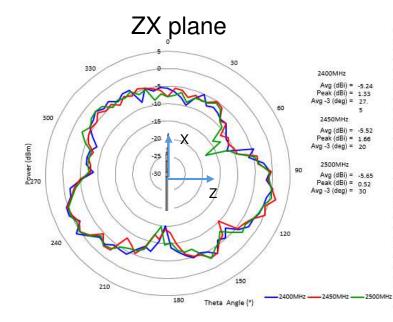
Series: FPC Antenna

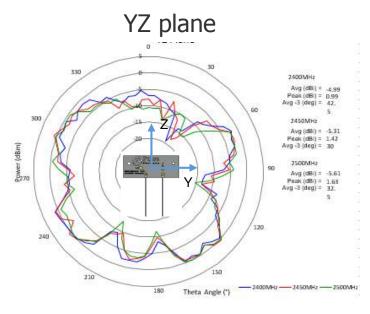
**PART NUMBER: W6102B0100** 

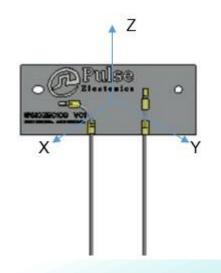
### **CHARTS**

Typical free space radiation pattern—Antenna2: 2.4-2.5GHz (\*) All RF parameters measured on 2mm thick PC plate









Issue: 1701





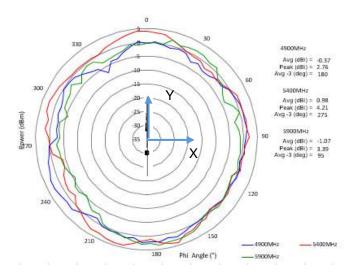
PART NUMBER: W6102B0100

### **Series: FPC Antenna**

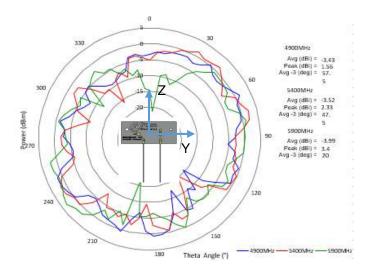
### **CHARTS**

Typical free space radiation pattern—Antenna2: 4.9-5.925GHz (\*) All RF parameters measured on 2mm thick PC plate

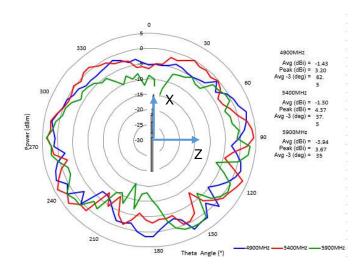
# XY plane

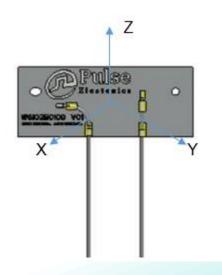


# YZ plane



# ZX plane







### **TECHNICAL DATA SHEET**

**Description: 2X2 MIMO Dual WiFi Antenna** 

**PART NUMBER: W6102B0100** 

**Series: FPC Antenna** 

### **PACKAGING**

5 antennas packed in one plastic bag

100 bags(TBD) of antennas packed in a cardboard box

1 label on each box with qty, part number, date code.