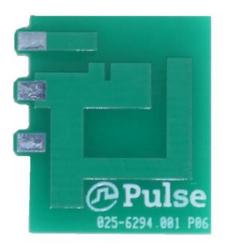


Series: Embedded PCB Ant





### All dimensions are in mm / inches

### Features:

- 2400-2500/4900-5950MHz
- Efficiency >70%
- Gain > 3dBi
- Size 19.8x18x1.6mm
- Radiation pattern Omni
- RoHS Compliant

## **Applications:**

- ISM band 2.4GHz radios
- ISM band 5GHz radios
- Bluetooth, BLE
- WiFi Dualband
- 2.4 and 5GHz MiMo applications
- Gateways, Data terminals, Hot Spots
- IoT, Security, Telematics



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For more information: 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 1



Series: Embedded PCB Ant

**ELECTRICAL SPECIFICATIONS** 

| Frequency          | 2400-2500/4900-5950 MHz |
|--------------------|-------------------------|
| Nominal Impedance  | 50 Ω                    |
| *VSWR              | 2:1                     |
| Radiation Pattern  | Omni                    |
| *Gain              | >3dBi                   |
| *Efficiency        | >60%                    |
| Polarization       | Vertical                |
| Power Withstanding | 2 W                     |

| MECHANICAL SPECIFICATIONS |               |  |
|---------------------------|---------------|--|
| Overall Length            | 19.8x18x1.6mm |  |
| Weight                    | 1.06g         |  |
| Antenna Material          | PCB Antenna   |  |
| Fix system                | Solder        |  |
|                           |               |  |

| ENVIRONMENTAL SPECIFICATIONS |                |  |
|------------------------------|----------------|--|
| Operating Temperature        | -40° C~+85 ° C |  |
| Storage Temperature          | -40° C~+85 ° C |  |
| RoHS Compliant               | Yes            |  |

### **OTHER SPECIFICATIONS**

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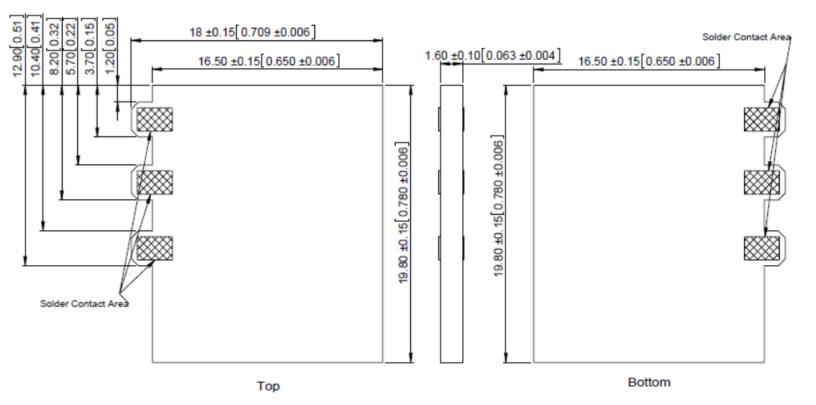


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### **MECHANICAL DRAWING**



# Dimension Unit: mm[Inch]

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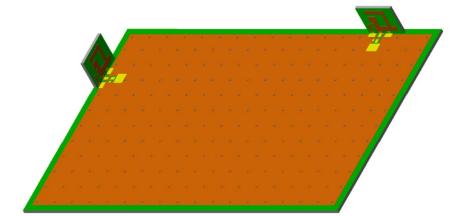
3

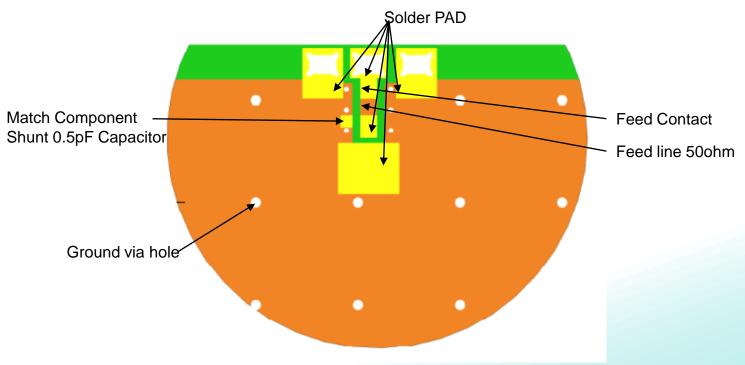


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### **TEST SETUP**

# Test PWB for PCB Antenna W3712





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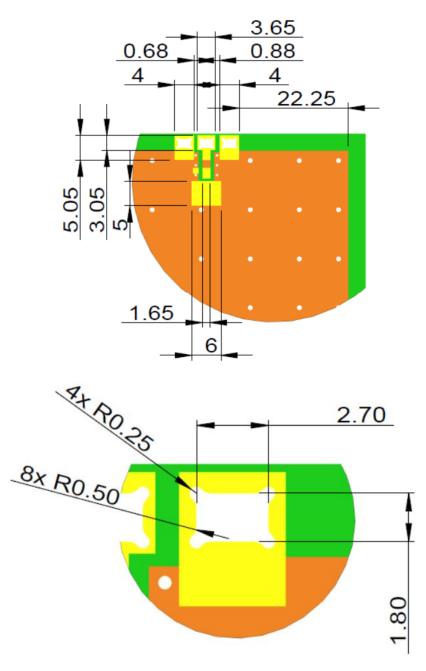




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### **TEST SETUP**

PWB PAD Dimension in top copper



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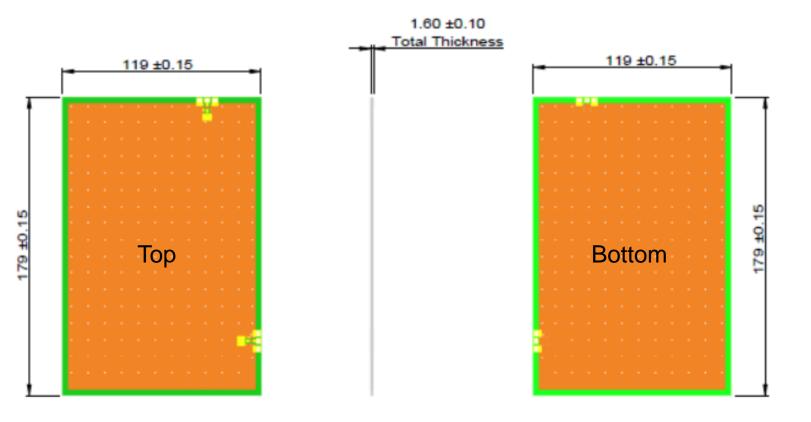
5



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### **TEST SETUP**

PWB Layout, Pulse PWB size;119x179mm, thickness 1.6mm, other size boards can be used depending on customer size.



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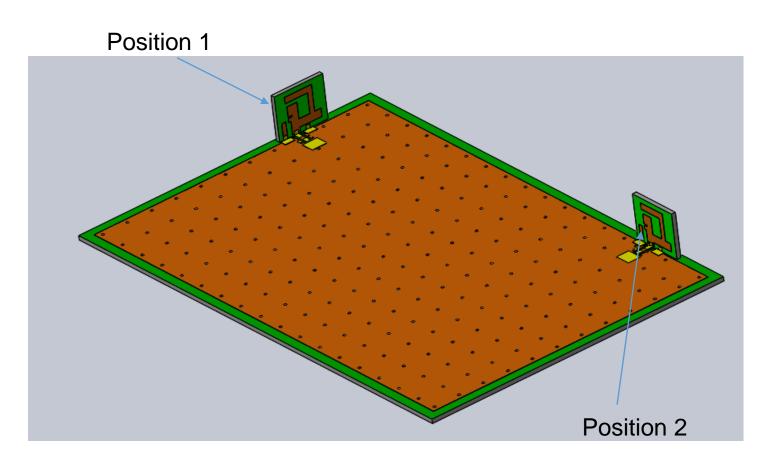


6



TECHNICAL DATA SHEET Description: 2.4/5GHz Vertical mount PCB Antenna PART NUMBER: W3712

### **TEST SETUP**



Test on Pulse test board in free space.

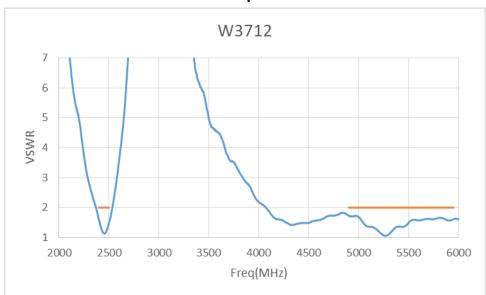
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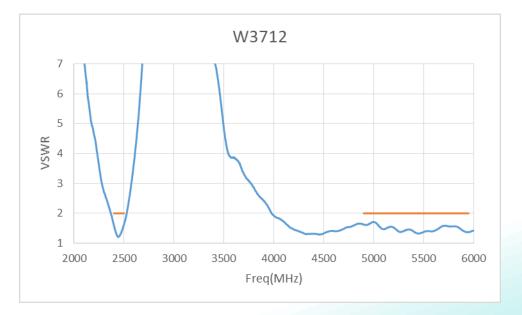
TECHNICAL DATA SHEET Description: 2.4/5GHz Vertical mount PCB Antenna PART NUMBER: W3712

### CHARTS



# VSWR at position 1

# VSWR at position 2



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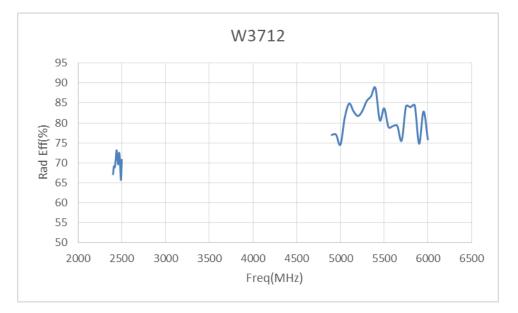
8



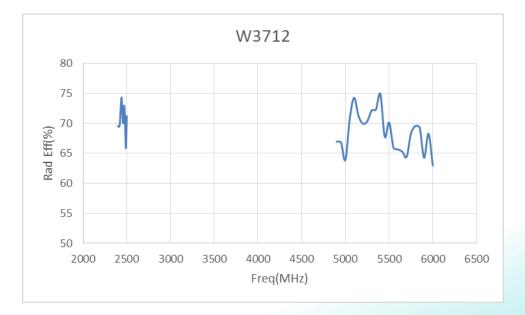
TECHNICAL DATA SHEET Description: 2.4/5GHz Vertical mount PCB Antenna PART NUMBER: W3712

### CHARTS

# Radiation Efficiency at position 1



# Radiation Efficiency at position 2



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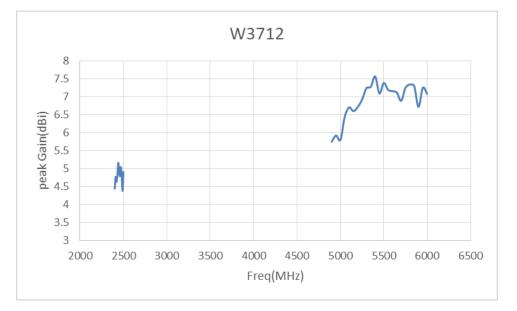
9



TECHNICAL DATA SHEET Description: 2.4/5GHz Vertical mount PCB Antenna PART NUMBER: W3712

### CHARTS

# Peak Gain at position 1



# Peak Gain at position 2



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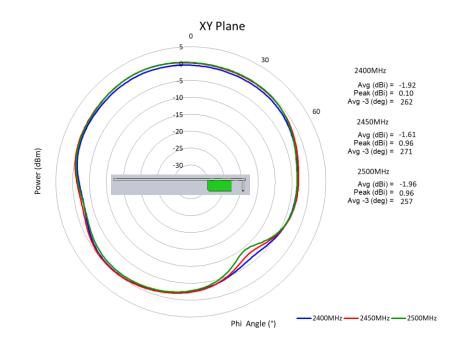
ROHS 10



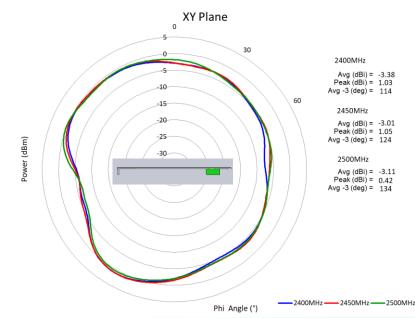
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### CHARTS

# 2.4GHz band Radiation Pattern of X-Y plane at position 1



2.4GHz Band Radiation Pattern of X-Y plane at position 2



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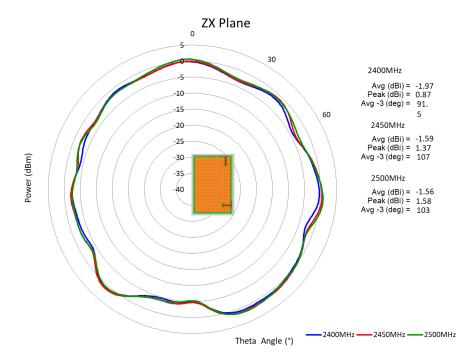
11



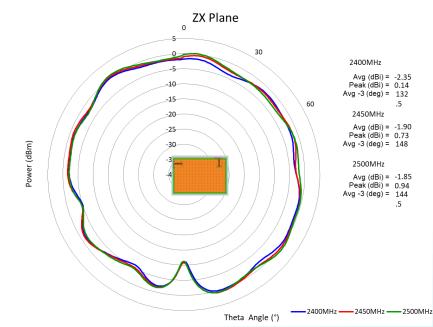
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CHARTS

## 2.4GHz band Radiation Pattern of Z-X plane at position 1



2.4GHz band Radiation Pattern of X-Z plane at position 2



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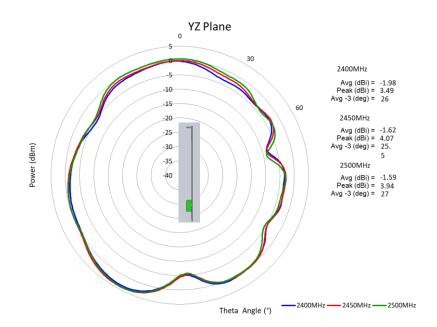
12



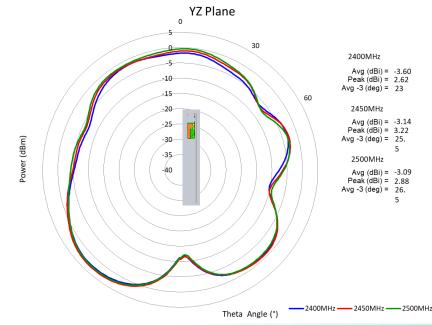
TECHNICAL DATA SHEET Description: 2.4/5GHz Vertical mount PCB Antenna PART NUMBER: W3712

CHARTS

# 2.4GHz band Radiation Pattern of Y-Z plane at position 1



2.4GHz band Radiation Pattern of Y-Z plane at position 2



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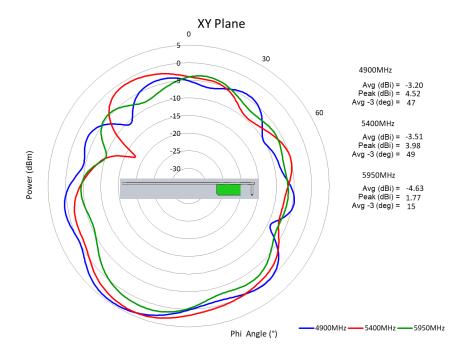
13



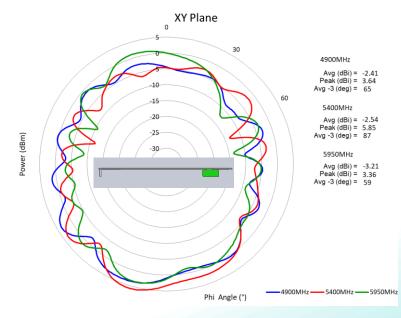
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### CHARTS

# 5GHz band Radiation Pattern of X-Y plane at position 1



5GHz Band Radiation Pattern of X-Y plane at position 2



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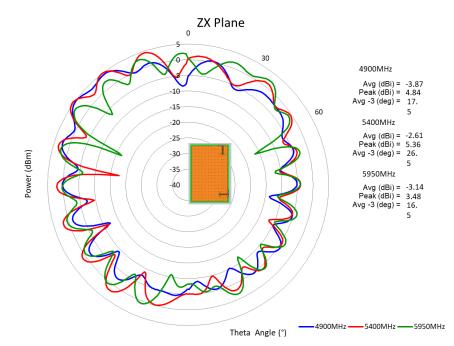




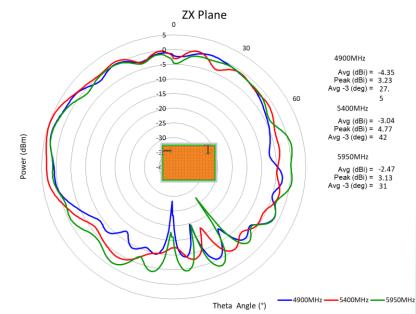
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CHARTS

# 5GHz band Radiation Pattern of Z-X plane at position 1



5GHz band Radiation Pattern of X-Z plane at position 2



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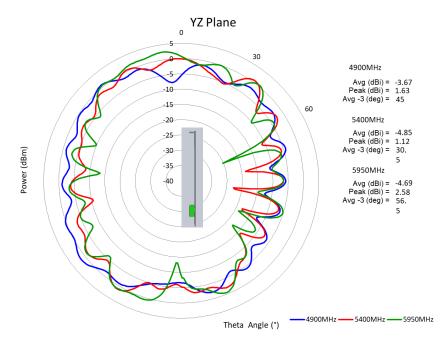
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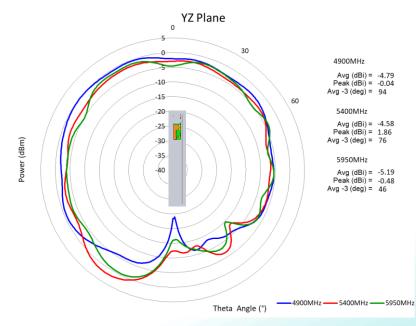
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CHARTS

# 5GHz band Radiation Pattern of Y-Z plane at position 1



5GHz band Radiation Pattern of Y-Z plane at position 2



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### PACKAGING

90pcs/PE bag PE bag size:140x70x0.05mm 8 pcs PE bag/Vacuum bag Vacuum bag size:310x310x0.08mm 5pcs Vacuum bag/package box Package box:350x350x120mm Total 3600pcs/ Package Box

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Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный) **Факс:** 8 (812) 320-02-42 **Электронная почта:** <u>org@eplast1.ru</u> **Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.