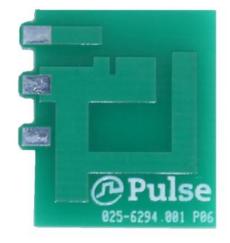


#### TECHNICAL DATA SHEET

**Description**: 2.4/5GHz Vertical mount PCB

Antenna

**PART NUMBER: W3712** 



### **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

All dimensions are in mm / inches

Issue: 1812

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 15255 Innovation Drive #100 San Diego, CA 92128 USA Tel:1-858-674-8100 Pulse/Larsen Antennas 18110 SE 34th 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**: 2.4/5GHz Vertical mount PCB

**Antenna** 

**PART NUMBER: W3712** 

### **ELECTRICAL SPECIFICATIONS**

Frequency 2400-2500/4900-5950 MHz **Nominal Impedance** 50 Ω \*VSWR 2:1 Radiation Pattern Omni \*Gain >3dBi \*Efficiency >60% Vertical Polarization 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  $-40^{\circ}$  C~+85  $^{\circ}$  C Storage Temperature  $-40^{\circ}$  C~+85  $^{\circ}$  C

RoHS Compliant Yes

### **OTHER SPECIFICATIONS**



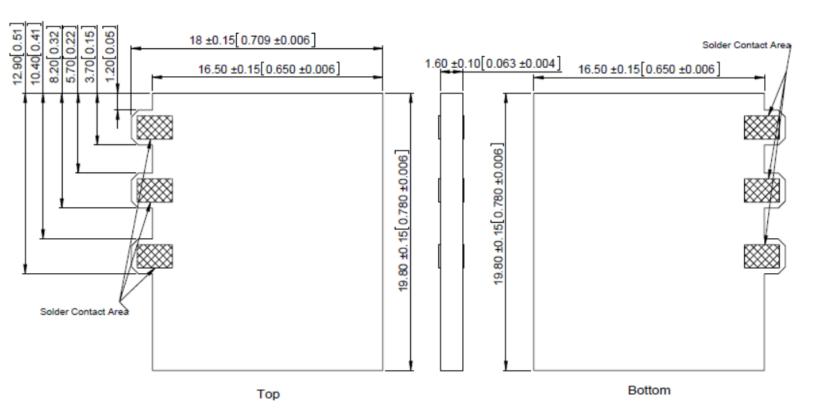
#### TECHNICAL DATA SHEET

**Description**: 2.4/5GHz Vertical mount PCB

**Antenna** 

**PART NUMBER: W3712** 

### **MECHANICAL DRAWING**



Dimension Unit: mm[Inch]



#### **TECHNICAL DATA SHEET**

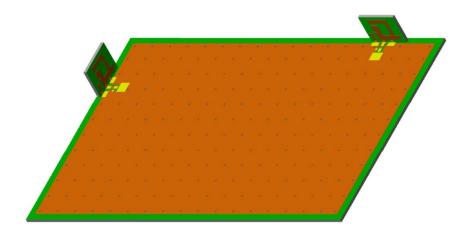
**Description**: 2.4/5GHz Vertical mount PCB

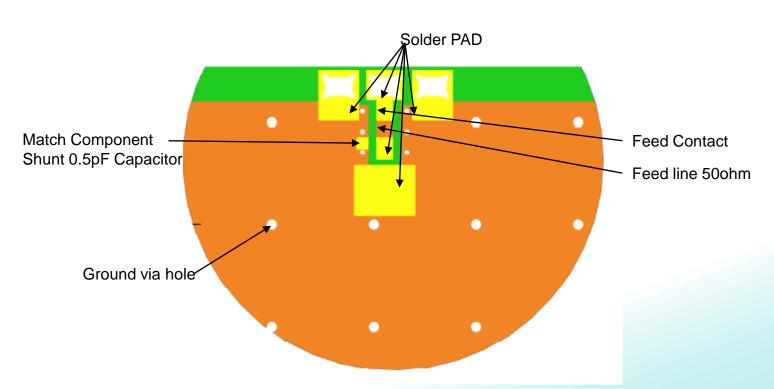
**Antenna** 

**PART NUMBER: W3712** 

### **TEST SETUP**

### Test PWB for PCB Antenna W3712





Issue: 1812

ROHS



#### TECHNICAL DATA SHEET

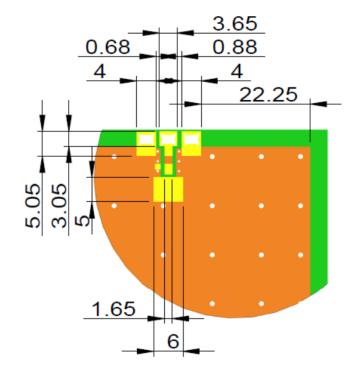
**Description**: 2.4/5GHz Vertical mount PCB

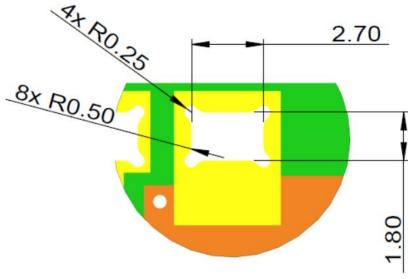
**Antenna** 

**PART NUMBER: W3712** 

### **TEST SETUP**

# PWB PAD Dimension in top copper









#### **TECHNICAL DATA SHEET**

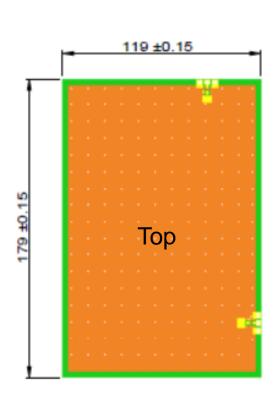
**Description**: 2.4/5GHz Vertical mount PCB

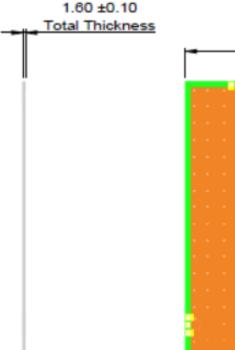
**Antenna** 

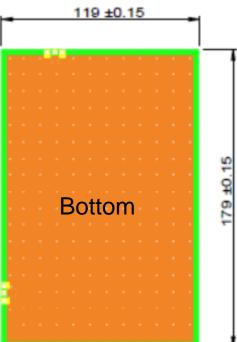
**PART NUMBER: W3712** 

### **TEST SETUP**

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









#### **TECHNICAL DATA SHEET**

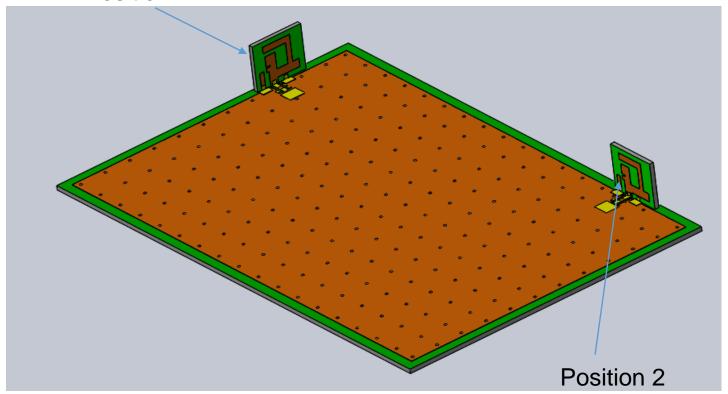
**Description**: 2.4/5GHz Vertical mount PCB

**Antenna** 

**PART NUMBER: W3712** 

### **TEST SETUP**

### Position 1



Test on Pulse test board in free space.



#### **TECHNICAL DATA SHEET**

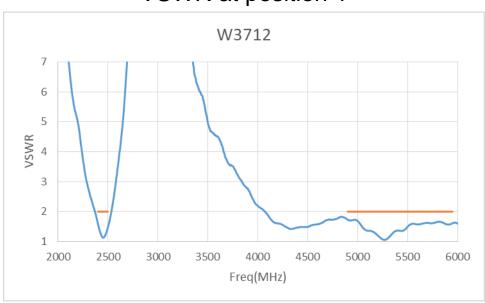
**Description**: 2.4/5GHz Vertical mount PCB

**Antenna** 

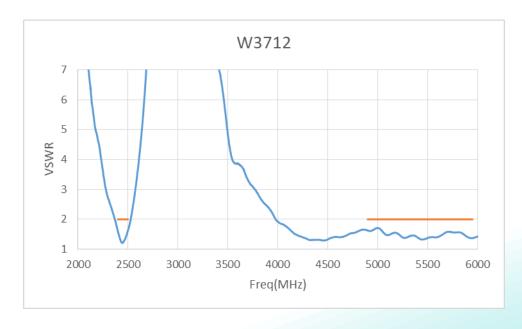
**PART NUMBER: W3712** 

### **CHARTS**

# VSWR at position 1



## VSWR at position 2







#### TECHNICAL DATA SHEET

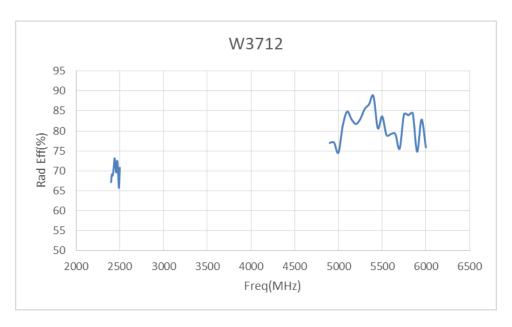
**Description**: 2.4/5GHz Vertical mount PCB

Antenna

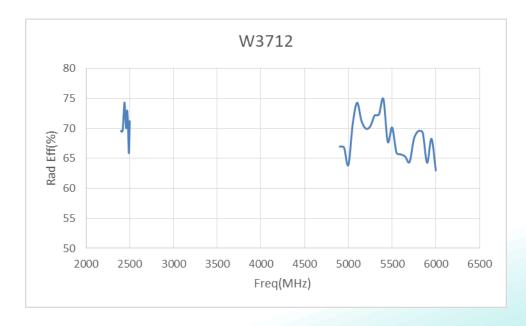
PART NUMBER: W3712

### **CHARTS**

# Radiation Efficiency at position 1



# Radiation Efficiency at position 2







#### TECHNICAL DATA SHEET

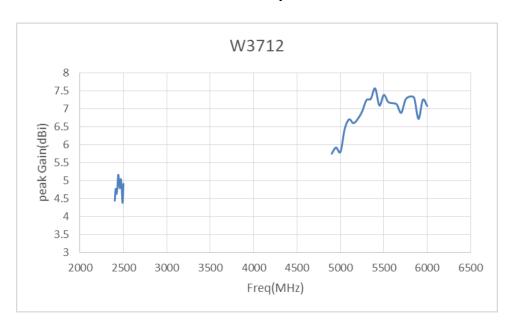
**Description**: 2.4/5GHz Vertical mount PCB

**Antenna** 

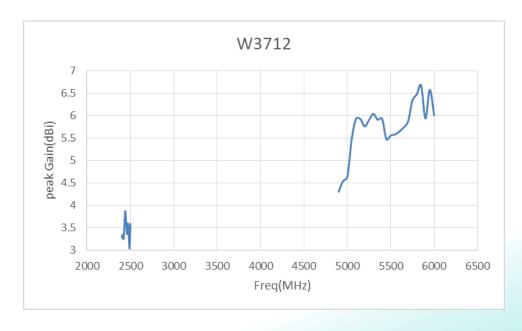
**PART NUMBER: W3712** 

### **CHARTS**

# Peak Gain at position 1



# Peak Gain at position 2





#### TECHNICAL DATA SHEET

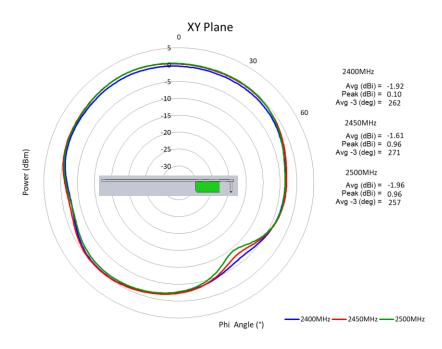
**Description**: 2.4/5GHz Vertical mount PCB

**Antenna** 

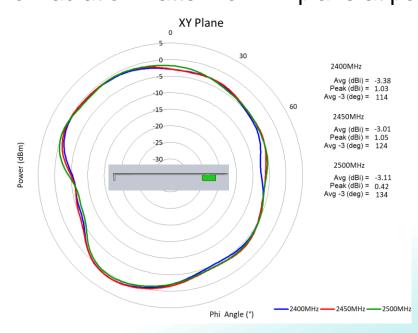
**PART NUMBER: W3712** 

### **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



Issue: 1812

RÓHS



#### TECHNICAL DATA SHEET

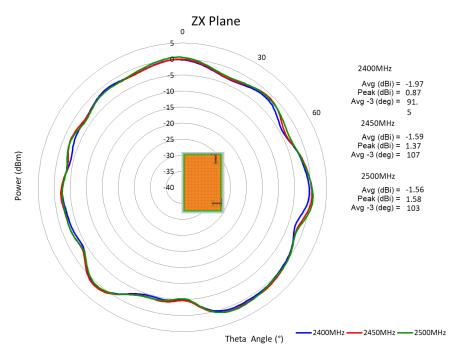
**Description**: 2.4/5GHz Vertical mount PCB

**Antenna** 

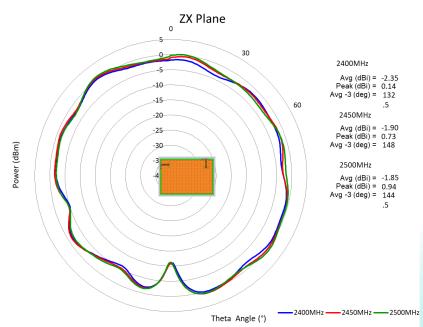
**PART NUMBER: W3712** 

### **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



Issue: 1812

RóHS

12

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



#### TECHNICAL DATA SHEET

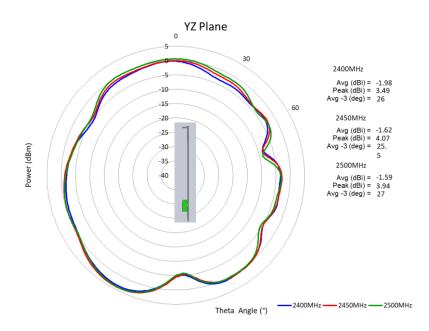
**Description**: 2.4/5GHz Vertical mount PCB

Antenna

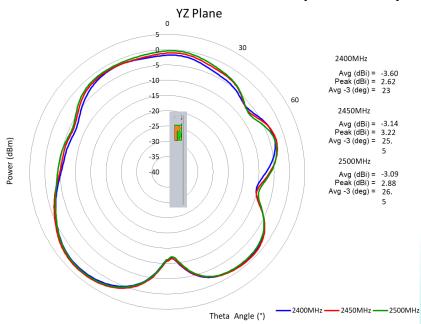
**PART NUMBER: W3712** 

### **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



Issue: 1812

RŏHS



#### TECHNICAL DATA SHEET

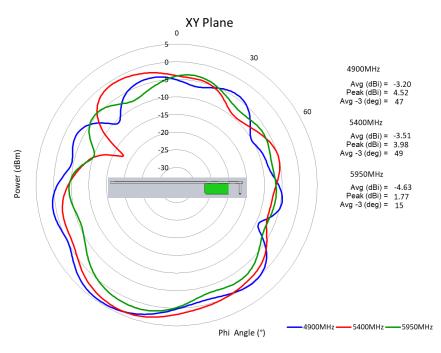
**Description**: 2.4/5GHz Vertical mount PCB

**Antenna** 

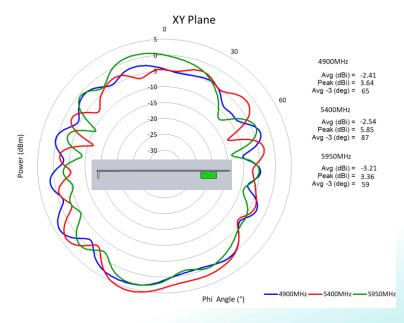
**PART NUMBER: W3712** 

### **CHARTS**

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



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







#### TECHNICAL DATA SHEET

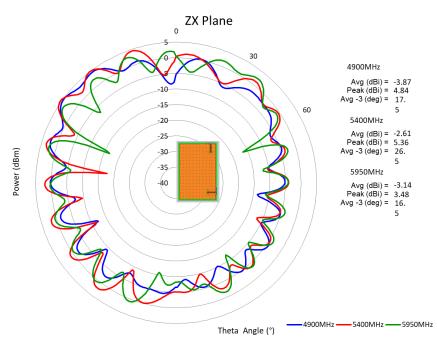
**Description**: 2.4/5GHz Vertical mount PCB

**Antenna** 

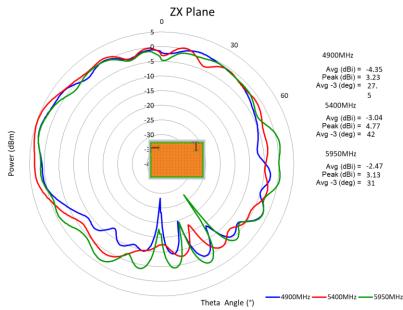
**PART NUMBER: W3712** 

### **CHARTS**

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



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



Issue: 1812

RŏHS

15



#### TECHNICAL DATA SHEET

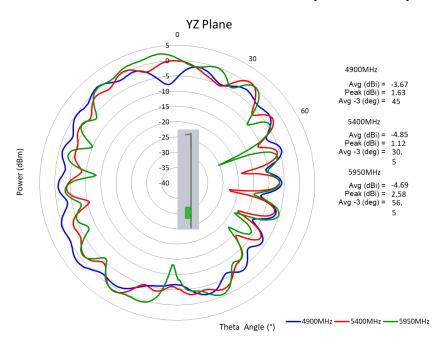
**Description**: 2.4/5GHz Vertical mount PCB

**Antenna** 

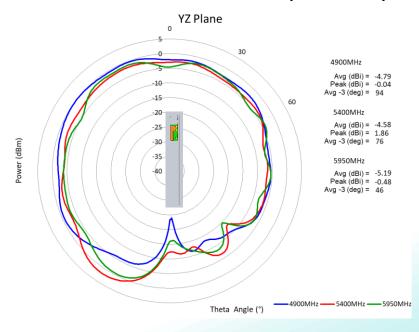
PART NUMBER: W3712

### **CHARTS**

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



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









#### **TECHNICAL DATA SHEET**

**Description**: 2.4/5GHz Vertical mount PCB

Antenna

**PART NUMBER: W3712** 

### **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

### **ПОСТАВКА** ЭЛЕКТРОННЫХ КОМПОНЕНТОВ

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001 Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

# Данный компонент на территории Российской Федерации Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

#### http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

#### Офис по работе с юридическими лицами:

105318, г. Москва, ул. Щербаковская д. 3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru moschip.ru\_6 moschip.ru\_4 moschip.ru\_9