

TECHNICAL DATA SHEET Description: 2.4GHz Vertical Mount PCB Antenna PART NUMBER: W3716





Features:

- 2400-2500MHz
- Efficiency >70%
- Gain > 3dBi
- Size 21.5x11x1.6mm
- Radiation pattern Omni
- RoHS Compliant

Applications:

- · ISM band 2.4GHz radios
- Bluetooth, BLE, WiFi
- 2.4GHz MiMo applications
- 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,4th 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 MHz
Nominal Impedance	50 Ω
*VSWR	1.6:1
Radiation Pattern	Omni
*Gain	>3dBi
*Efficiency	>70%
Polarization	Vertical
Power Withstanding	2 W

MECHANICAL SPECIFICATIONS		
Overall Length	21.5x11x1.6mm	
Weight	0.65g	
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

Issue: 1812

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

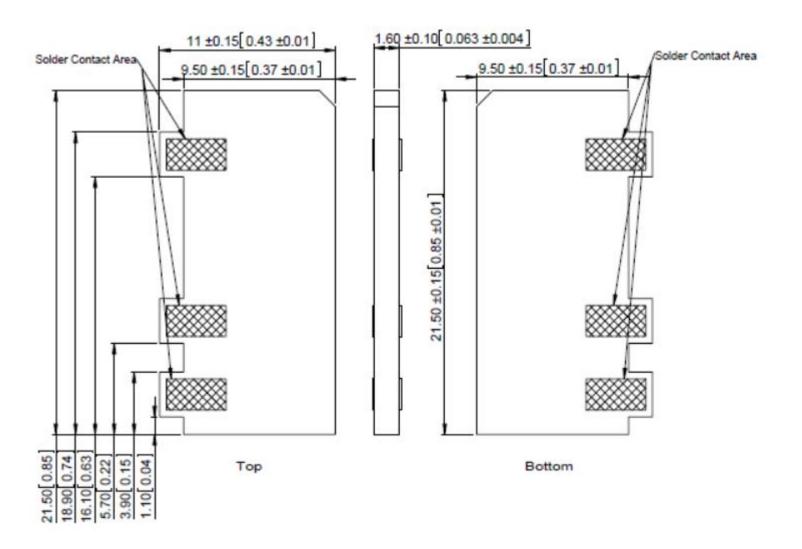


2



Series: Embedded PCB Ant

MECHANICAL DRAWING



Dimension Unit: mm[Inch]

Issue: 1812

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

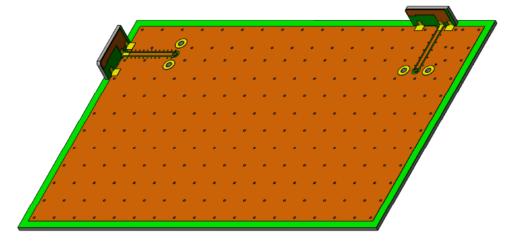


3

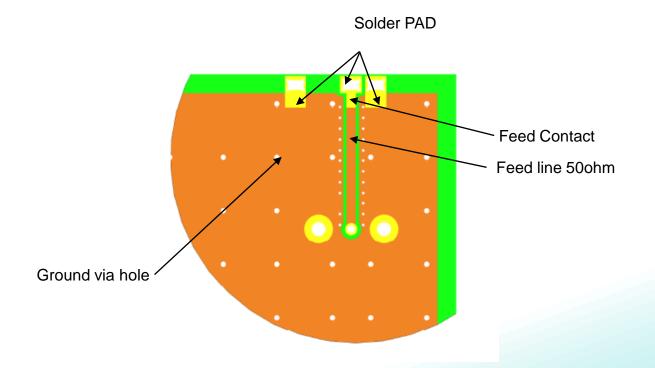


TECHNICAL DATA SHEET Description: 2.4GHz Vertical Mount PCB Antenna PART NUMBER: W3716

Test PWB for PCB Antenna W3716



TEST SETUP



Issue: 1812

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

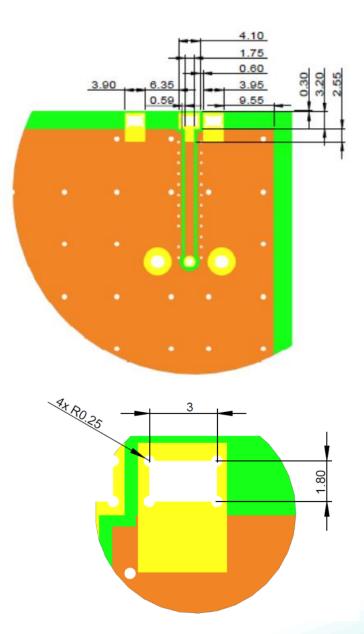




Series: Embedded PCB Ant

TEST SETUP

PWB PAD Dimension in top copper



Issue: 1812

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



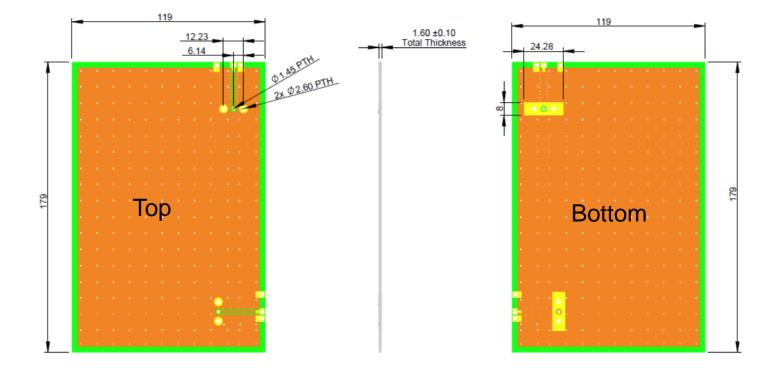
5



Series: Embedded PCB Ant

TEST SETUP

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



Issue: 1812

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

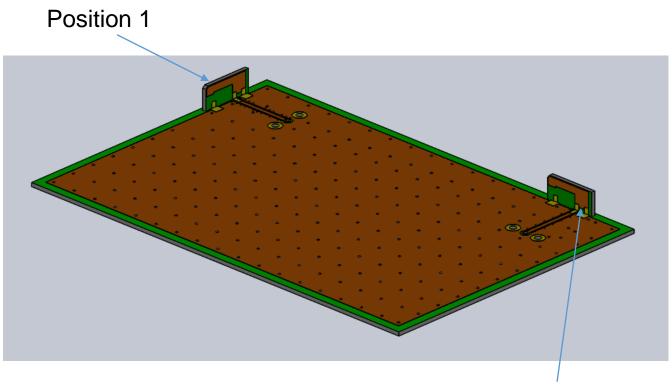


6



Series: Embedded PCB Ant

TEST SETUP



Position 2

Test on Pulse test board in free space.

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

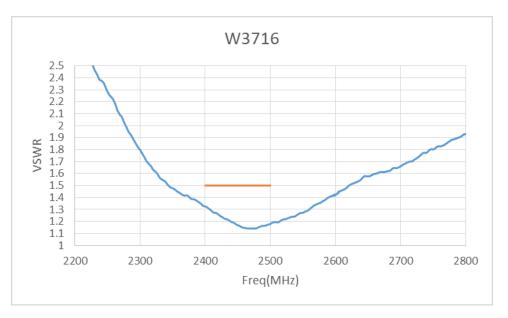




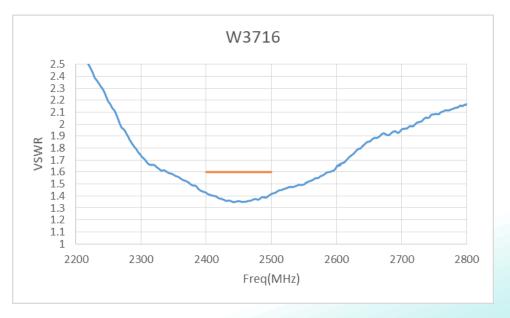
TECHNICAL DATA SHEET Description: 2.4GHz Vertical Mount PCB Antenna PART NUMBER: W3716

CHARTS

VSWR at position 1



VSWR at position 2



Issue: 1812

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

CONFIDENTIAL AND PROPRIETARY INFORMATION



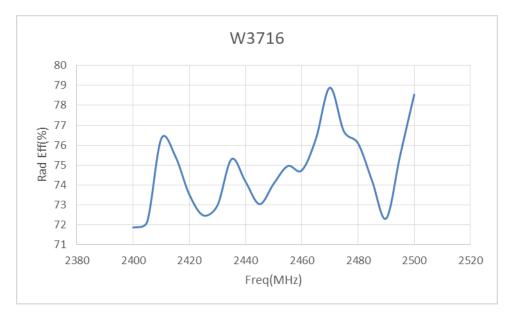
8



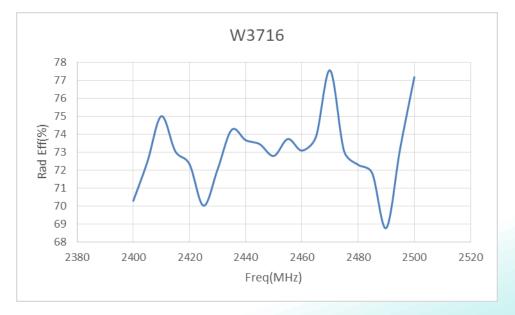
TECHNICAL DATA SHEET Description: 2.4GHz Vertical Mount PCB Antenna PART NUMBER: W3716

CHARTS

Radiation Efficiency at position 1



Radiation Efficiency at position 2



Issue: 1812

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



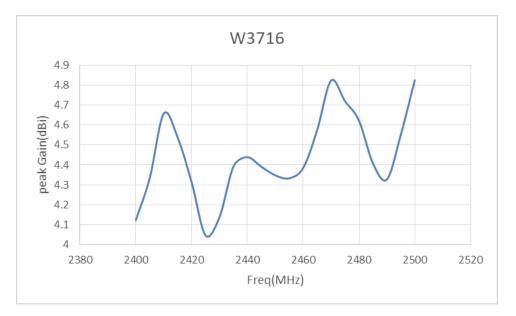
9



TECHNICAL DATA SHEET Description: 2.4GHz Vertical Mount PCB Antenna PART NUMBER: W3716

CHARTS

Peak Gain at position 1



Peak Gain at position 2



Issue: 1812

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

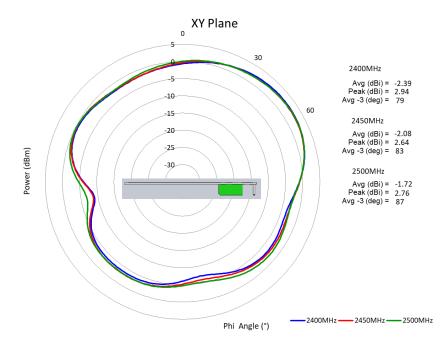
ROHS 10



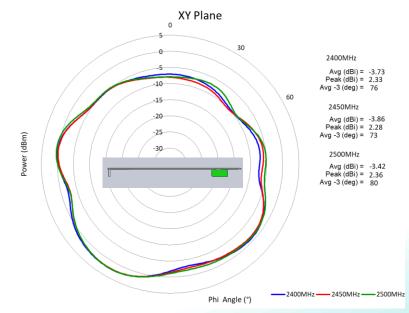
TECHNICAL DATA SHEET Description: 2.4GHz Vertical Mount PCB Antenna PART NUMBER: W3716

CHARTS

Radiation Pattern of X-Y plane at position 1



Radiation Pattern of X-Y plane at position 2



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.



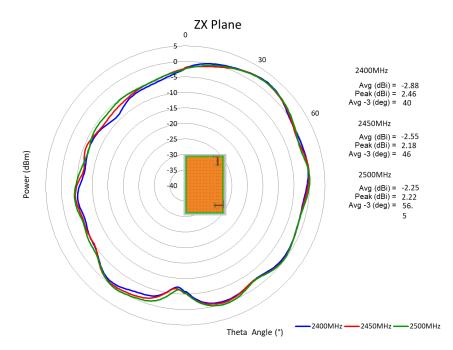
11



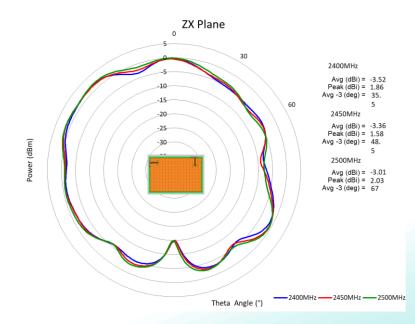
TECHNICAL DATA SHEET Description: 2.4GHz Vertical Mount PCB Antenna PART NUMBER: W3716

CHARTS

Radiation Pattern of Z-X plane at position 1



Radiation Pattern of Z-X plane at position 2



Issue: 1812

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

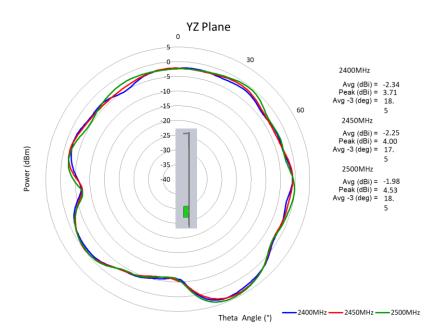
12



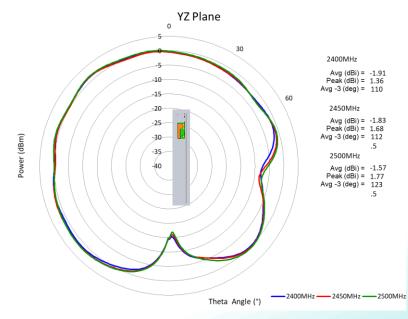
TECHNICAL DATA SHEET Description: 2.4GHz Vertical Mount PCB Antenna PART NUMBER: W3716

CHARTS

Radiation Pattern of Y-Z plane at position 1



Radiation Pattern of Y-Z plane at position 2



Issue: 1812

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

