

Description: 2.4-2.5GHz Sheet Metal PIFA

Series: Embedded Antenna

PART NUMBER: W3317



Features:

- 2400-2500MHz
- Gain 4dBi
- Radiation Efficiency 77%
- Size 22.4 x 3 x 6.25mm

Wi-Fi, Bluetooth, ZigBee

Routers, Gateways

Automation, security,

IoT terminals

transportation

M2M

2.4GHz ISM band radios

• VSWR 2:1

Applications:



All dimensions are in mm / inches

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Pulse Worldwide Headquarters 12220 World Trade Drive 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



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ELECTRICAL SPECIFICATIONS

Frequency	2400-2500	MHz
Nominal Impedance	50	Ω
VSWR	2:1	
Average efficiency	77	%
Peak Gain	4	dBi +/- 1 dB
Polarization:	linear	
Power withstanding	5	W

Note:

1. Performance measured on standard 100x100x1mm evaluation board, refer to page 5.

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MECHANICAL SPECIFICATIONS					
Material	Cu	Copper-Nickel-Zinc Alloy			
Weight	0.27	g			
Thickness	0.4[0.016]	mm[inch]			
Overall Length	22.2[0.874]	mm[inch]			

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	-40/+105	° C
Low temperature	-30 ° C	500 hours
High temperature	+85 ° C	500 hours
Humidity	+85°C and 90-95 % r.h.	96 hours
Vibration	X&Y directions	2 hours
	Z directions	4 hours
Thermal Shock	-30 ° C /+85 ° C	5 cycles

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MECHANICAL DRAWING



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OTHER SPECIFICATIONS

PCB LAYOUT

1. PCB material, FR4, size, 100X100X1mm



2. Clearance area (Top)



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OTHER SPECIFICATIONS

PCB LAYOUT 3. Clearance area (Bottom)



4. PCB features



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OTHER SPECIFICATIONS

ANTENNA MOUNTING ON PCB 5, Antenna on test PCB



Others:

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1. This antenna is designed for manual or semi automated assembly.

2. While soldering of the antenna it is recommend to use process jig to keep the placement of the antenna stable.



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CHARTS

VSWR



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CHARTS

Efficiency

Efficiency vs Frequency measured with 100mm*100mm ground W3317 measured at Pulse Suzhou



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CHARTS

Peak Gain

Peak Gain vs Frequency measured with 100mm*100mm ground W3317 measured at Pulse Suzhou 4.5 4 3.5 3 Peak Gain,dBi 2.5 2 1.5 1 0.5 0 2450 220 2400 2410 2420 2430 2440 2460 2470 2480 2490 2500 2510 Frequency,MHz

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ROHS 11



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CHARTS



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ROHS 13



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PACKAGING

Tray packing 50PCS/Tray 2000PCS/Carton box



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