

Series: Internal Antenna

Description: 4.9-7.125G FPC antenna

PART NUMBER: W3920Bxxx



Features:

- 4900-7125 MHz
- Size 12.5 X 7.6 X 0.15 mm
- Efficiency > 60%
- VSWR < 2
- Nominal impedance 50 Ω
- Cable and connector can be customized

Applications:



- WiFi 6E, 802.11ax
- DSRC
- ISM band radios
- IoT, M2M

All dimensions are in mm / inches

Issue: 2020

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 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



Description: 4.9-7.125G FPC antenna

Series: Internal Antenna

PART NUMBER: W3920Bxxx

ELECTRICAL SPECIFICATIONS

Antenna Type	Dipole
Frequency	4900-7125MHz
Nominal Impedance	50 Ω
Return Loss	4900-7125MHz<-7db
Radiation Pattern	Omni
Gain	4+/-1dBi@4900-7125MHz
Efficiency	60%@4900-7125MHz
Polarization	Linear
Power Withstanding	5W

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

Issue: 2020

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 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



2



Description: 4.9-7.125G FPC antenna

Series: Internal Antenna

PART NUMBER: W3920Bxxx

MECHANICAL SPECIFICATIONS		
Radiator material	FPC	
Color	Black	
Adhesive	3M467	
Thickness(with adhesive, no liner)	0.15 mm	
Weight	0.21 g	
FPC size(L X W X T)	12.5 X 7.6 X 0.15 mm	

ENVIRONMENTAL SPECIFICATIONS

Operating temperature

-40/+85 ° C

Issue: 2020

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



3



Description: 4.9-7.125G FPC antenna

Series: Internal Antenna

PART NUMBER: W3920Bxxx

This document covers all product variants of the following product family:

W3920B0050 50mm 1.13mm OD cable

W3920B0100 100mm 1.13mm OD cable

U.FL compatible connector

U.FL compatible connector

Issue: 2020

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



4

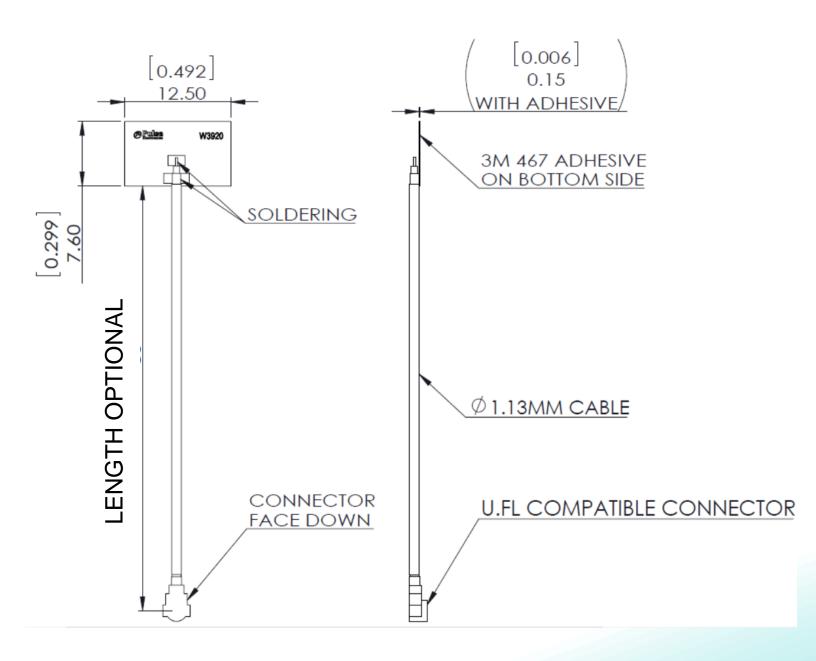


Description: 4.9-7.125G FPC antenna

Series: Internal Antenna

PART NUMBER: W3920Bxxx

MECHANICAL DRAWING



Issue: 2020

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



5



Description: 4.9-7.125G FPC antenna

Series: Internal Antenna

PART NUMBER: W3920Bxxx

CHARTS

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

Test Setup



Issue: 2020

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



6



Description: 4.9-7.125G FPC antenna

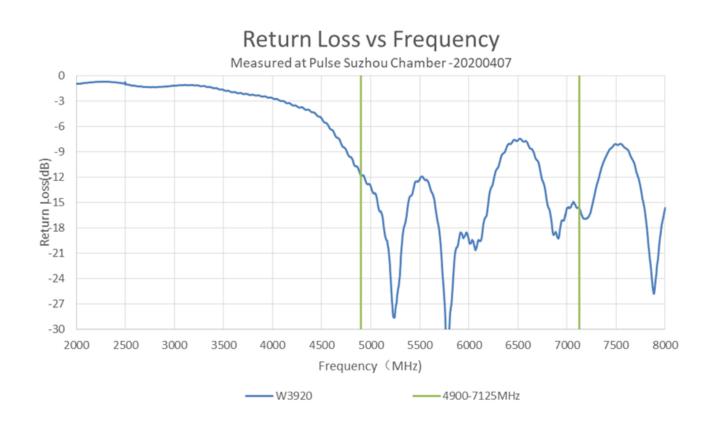
Series: Internal Antenna

PART NUMBER: W3920Bxxx

CHARTS

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

Return Loss



Issue: 2020

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



7



Description: 4.9-7.125G FPC antenna

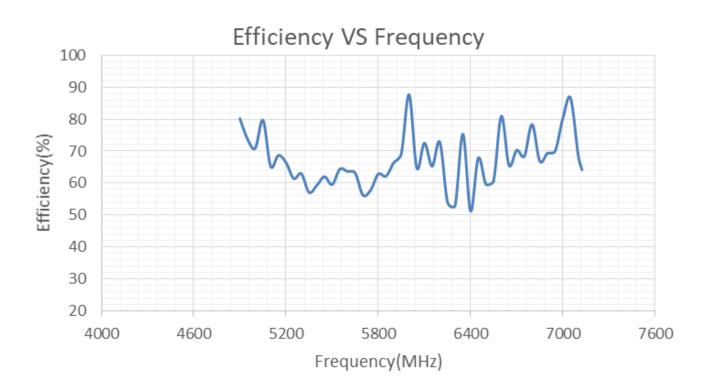
Series: Internal Antenna

PART NUMBER: W3920Bxxx

CHARTS

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

Efficiency



Issue: 2020

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



8



Description: 4.9-7.125G FPC antenna

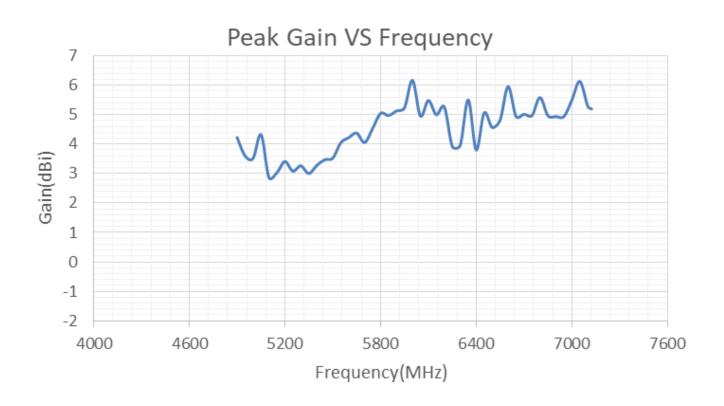
Series: Internal Antenna

PART NUMBER: W3920Bxxx

CHARTS

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

Gain



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



9



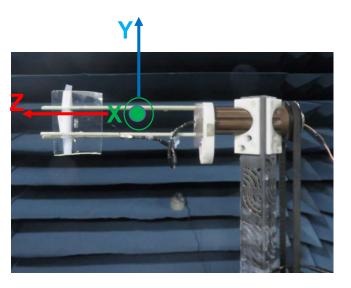
Description: 4.9-7.125G FPC antenna

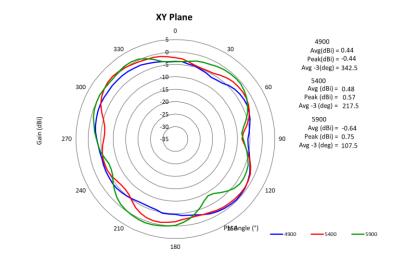
Series: Internal Antenna

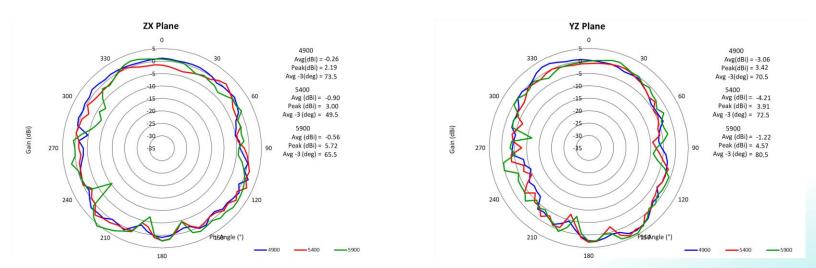
PART NUMBER: W3920Bxxx

CHARTS

Radiation Patterns 4900-5900MHz







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

Issue: 2020

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





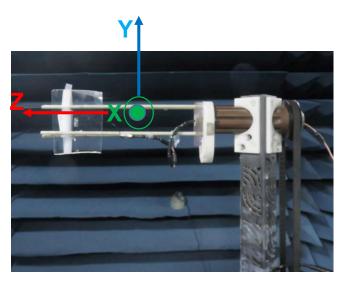
Description: 4.9-7.125G FPC antenna

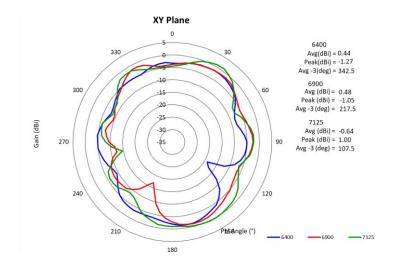
Series: Internal Antenna

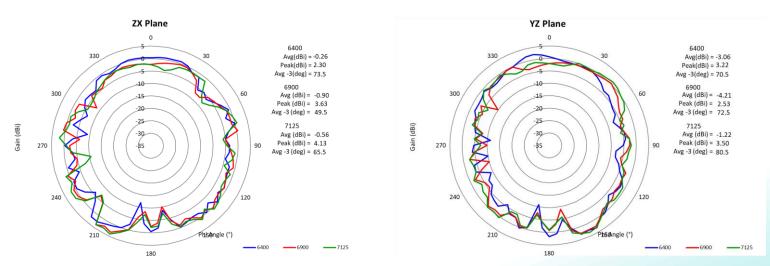
PART NUMBER: W3920Bxxx

CHARTS

Radiation Patterns 6000-7125MHz







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

Issue: 2020

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

