

Series: Gemini

TECHNICAL DATA SHEET

Description: LTE 698-3600MHz FPC Antenna

PART NUMBER: W3907XXXX



Features:

- 2G / 3G / 4G Div Ant for MiMo
- Used as pair for W3906B0100
- Can be used as Primary antenna
- 698-3600MHz
- Global LTE Bands:
 - B1-B23, B25-B29, B33-B42
 - N.A.; Europe, Asia (incl. Jap.)
- Foldable for tight spaces

Applications:

- Challenging RF Environments Demanding:
 - Highest Peak Gain
 - Lowest ECC (Envelope Correlation Coeff.).
- Matched to Radio Modules from:
 - Sierra Wireless, Quectel, Telit, Huawei, Gemalto, uBlox, ZTE, and others.
- Security, Video, Graphics
- IoT, SmartGrid, Meters, Remote Monitoring, Sensor Networks

All dimensions are in mm / inches

Issue: 2104

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



Description: LTE 698-3600MHz FPC Antenna

PART NUMBER: W3907XXXX

Series: Gemini

ELECTRICAL SPECIFICATIONS

ELECTRICAL SPECIFICATIONS					
P/N	W3907B0100/ W3907B0127/ W3907BD0100	W3907B0350/ W3907BD0350			
Frequency	698-960/1427.9- 1510.9/1559- 1610/1695- 2200/2300- 2700/3400- 3600MHz	698-960/1427.9-1510.9/1559- 1610/1695-2200/2300- 2700/3400-3600MHz			
Return Loss(698-960MHz)	-6dB	-6dB			
Return Loss(1427.9-1510.9/1559- 1610/1695-2200/2300-2700/3400- 3600MHz)	-7.5dB	-7.5dB			
Average Total Efficiency(698-960MHz)	55%	49%			
Average Total Efficiency(1427.9- 1510.9MHz)	60%	48%			
Average Total Efficiency(1559-1610MHz)	60%	52%			
Average Total Efficiency(1695-2200MHz)	65%	48%			
Average Total Efficiency(2300-2700MHz)	70%	48%			
Average Total Efficiency(3400-3600MHz)	65%	40%			

Issue: 2104

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:





Description: LTE 698-3600MHz FPC Antenna

PART NUMBER: W3907XXXX

Series: Gemini

ELECTRICAL SPECIFICATIONS				
P/N	W3907B0100/ W3907B0127/ W3907BD0100	W3907B0350/ W3907BD0350		
Peak Gain(698-960MHz)	2.9dBi	1.0dBi		
Peak Gain(1427.9-1510.9MHz)	1.7dBi	1.1dBi		
Peak Gain(1559-1610MHz)	1.8dBi	1.4dBi		
Peak Gain(1695-2200MHz)	3.4dBi	2.2dBi		
Peak Gain(2300-2700MHz)	3.8dBi	2.0dBi		
Peak Gain(3400-3600MHz)	4.2dBi	1.4dBi		
Polarization	Linear	Linear		
Nominal Impedance	50ohm	50ohm		
Power Standing	3W	3W		

Typical free space performance measured on 2mm thickness PC plate

Issue: 2104

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 RóHS



Description: LTE 698-3600MHz FPC Antenna

PART NUMBER: W3907XXXX

Series: Gemini

MECHANICAL SPECIFICATIONS

Overall Length

Antenna Color / Material

Cable type

Cable length

110.7X20.4mm

BLACK FPC

See table detail

See table detail

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature $-40\sim+85^{\circ}$ C Storage Temperature $-40\sim+85^{\circ}$ C RoHS Compliant Yes



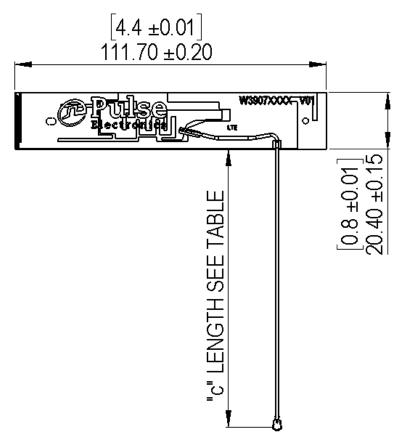


Description: LTE 698-3600MHz FPC Antenna

PART NUMBER: W3907XXXX

Series: Gemini

MECHANICAL DRAWING



P.N	"C' LENGTH	CABEL TYPE	CONNECTOR TYPE
W3907B0100	100000	AWG#32 1.13MM	Equivalent of I-PEX MHF
W3907BD0100	100MM	AWG#36 0.81MM	Equivalent of I-PEX MHF4
W3907B0127	127MM	AWG#32 1.13MM	Equivalent of I-PEX MHF
W3907B0350	350MM	AWG#32 1.13MM	Equivalent of I-PEX MHF
W3907BD0350	350MM	AWG#36 0.81MM	Equivalent of I-PEX MHF4





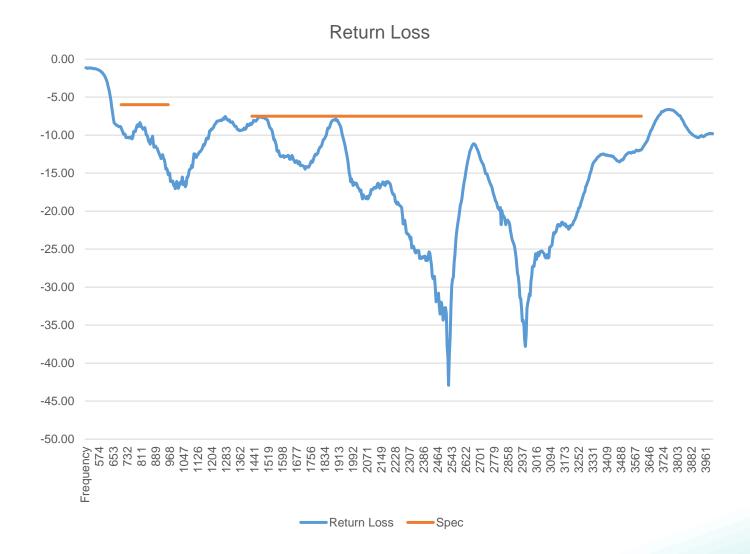
Description: LTE 698-3600MHz FPC Antenna

PART NUMBER: W3907XXXX

Series: Gemini

CHARTS

Return Loss



Note: Antenna tested on 2mm thickness PC plate with 100mm feed cable





Description: LTE 698-3600MHz FPC Antenna

PART NUMBER: W3907XXXX

Series: Gemini

CHARTS Efficiency Efficiency(%) 100 90 80 70 60 50 40 30 20 10 Frederick MHZ

Note: Antenna tested on 2mm thickness PC plate with 100mm feed cable





Description: LTE 698-3600MHz FPC Antenna

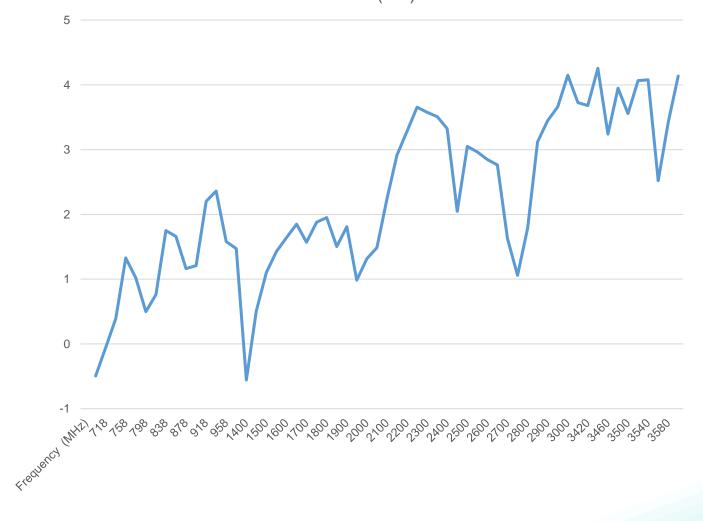
PART NUMBER: W3907XXXX

Series: Gemini

CHARTS

Peak Gain

Peak Gain(dBi)



Note: Antenna tested on 2mm thickness PC plate with 100mm feed cable





Description: LTE 698-3600MHz FPC Antenna

PART NUMBER: W3907XXXX

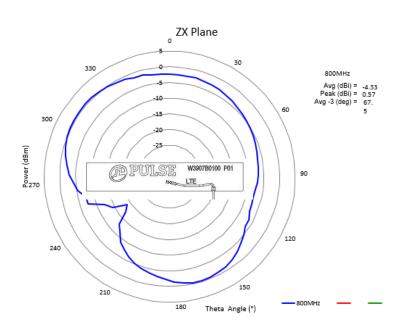
Series: Gemini

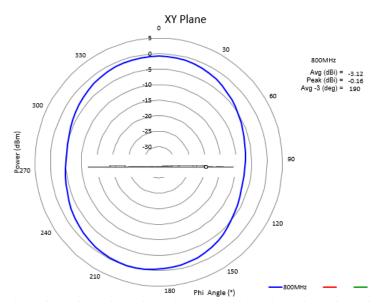
CHARTS

Typical free space radiation pattern 698-960MHz (800MHz)

Elevation Plane

Horizontal Plane





Note: Antenna tested on 2mm thickness PC plate with 100mm feed cable

RóHS



Description: LTE 698-3600MHz FPC Antenna

PART NUMBER: W3907XXXX

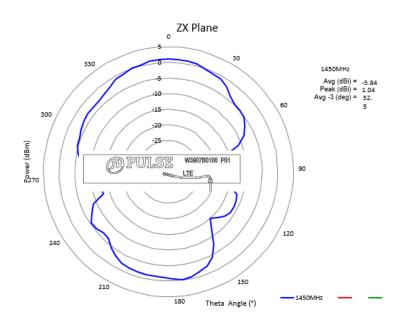
Series: Gemini

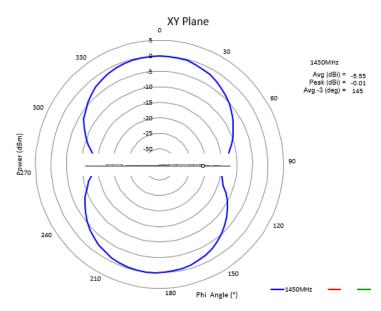
CHARTS

Typical free space radiation pattern 1427.9-1510.9MHz (1450MHz)

Elevation Plane

Horizontal Plane







Description: LTE 698-3600MHz FPC Antenna

PART NUMBER: W3907XXXX

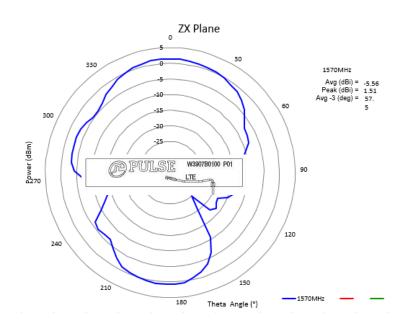
Series: Gemini

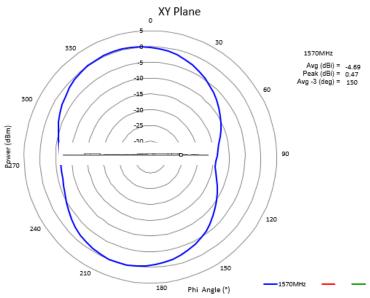
CHARTS

Typical free space radiation pattern 1559-1610MHz (1570MHz)

Elevation Plane

Horizontal Plane





Note: Antenna tested on 2mm thickness PC plate with 100mm feed cable

RóHS



Description: LTE 698-3600MHz FPC Antenna

PART NUMBER: W3907XXXX

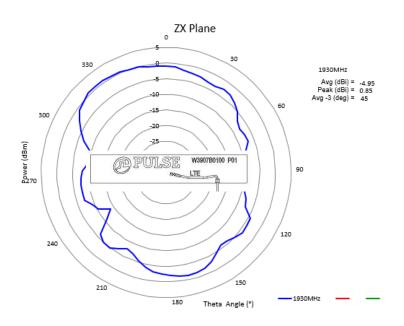
Series: Gemini

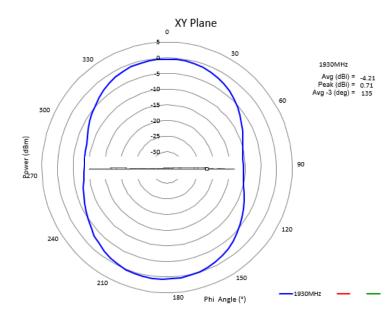
CHARTS

Typical free space radiation pattern 1695-2200MHz (1930MHz)

Elevation Plane

Horizontal Plane







Description: LTE 698-3600MHz FPC Antenna

PART NUMBER: W3907XXXX

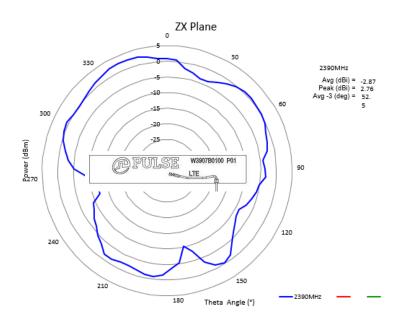
Series: Gemini

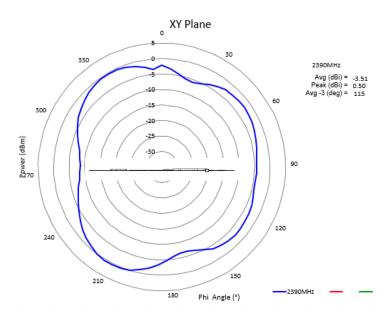
CHARTS

Typical free space radiation pattern 2300-2700MHz (2390MHz)

Elevation Plane

Horizontal Plane







Description: LTE 698-3600MHz FPC Antenna

PART NUMBER: W3907XXXX

Series: Gemini

CHARTS

Typical free space radiation pattern 3400-3600MHz (3400MHz)

Elevation Plane

Horizontal Plane

