

Series: Gemini

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, Telit, Huawei, Gemalto, uBlox, ZTE, and others.
- Security, Video, Graphics
- IoT, SmartGrid, Meters, Remote Monitoring, Sensor Networks

All dimensions are in mm / inches

Issue: 1817

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 34<sup>th</sup> St Bldg 2 Suite 250  
Vancouver, WA 98683  
USA  
Tel: 1-360-944-7551

Europe Headquarters  
Pulse GmbH & Co, 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



**Description:** LTE 698-3600MHz FPC Antenna

**Series:** Gemini

**PART NUMBER:** W3907XXXX

**ELECTRICAL SPECIFICATIONS**

| P/N                                                                   | W3907B0100/<br>W3907B0127/<br>W3907BD0100                        | 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:** 1817

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 34<sup>th</sup> 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


**Description:** LTE 698-3600MHz FPC Antenna

**Series:** Gemini

**PART NUMBER:** W3907XXXX

**ELECTRICAL SPECIFICATIONS**

| P/N                         | W3907B0100/<br>W3907B0127/<br>W3907BD0100 | 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: 1817

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 34<sup>th</sup> 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


**Description:** LTE 698-3600MHz FPC Antenna

**Series:** Gemini

**PART NUMBER:** W3907XXXX

### MECHANICAL SPECIFICATIONS

|                          |                  |
|--------------------------|------------------|
| Overall Length           | 110.7X20.4mm     |
| Antenna Color / Material | BLACK FPC        |
| Cable type               | See table detail |
| Cable length             | See table detail |

### ENVIRONMENTAL SPECIFICATIONS

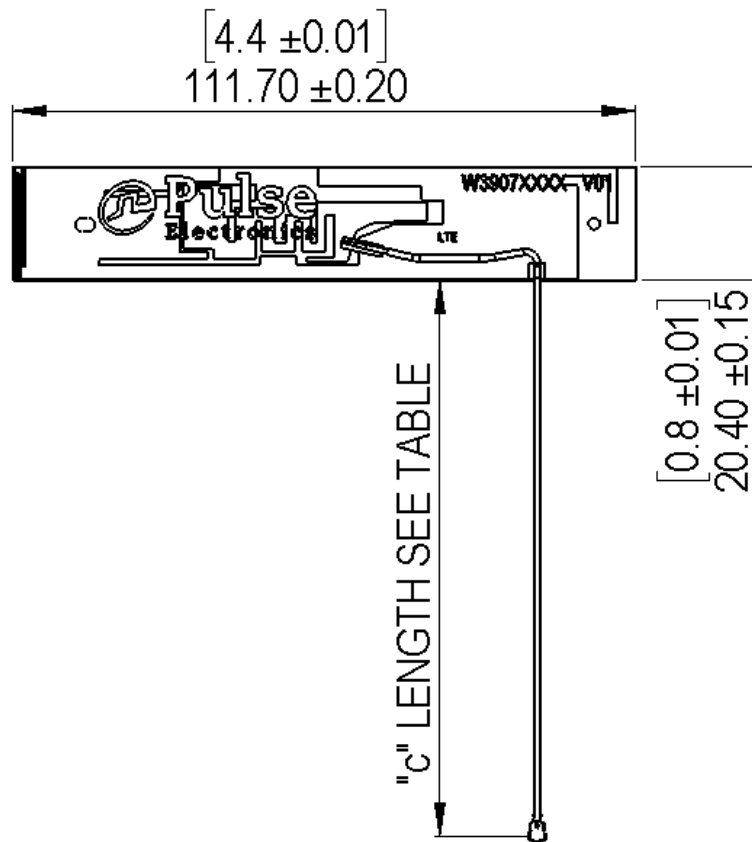
|                       |            |
|-----------------------|------------|
| Operating Temperature | -40~+85° C |
| Storage Temperature   | -40~+85° C |
| RoHS Compliant        | Yes        |

Description: LTE 698-3600MHz FPC Antenna

Series: Gemini

PART NUMBER: W3907XXXX

## MECHANICAL DRAWING



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

Issue: 1817

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.

Description: LTE 698-3600MHz FPC Antenna

Series: Gemini

PART NUMBER: W3907XXXX

## CHARTS

### Return Loss



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

Issue: 1817

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.

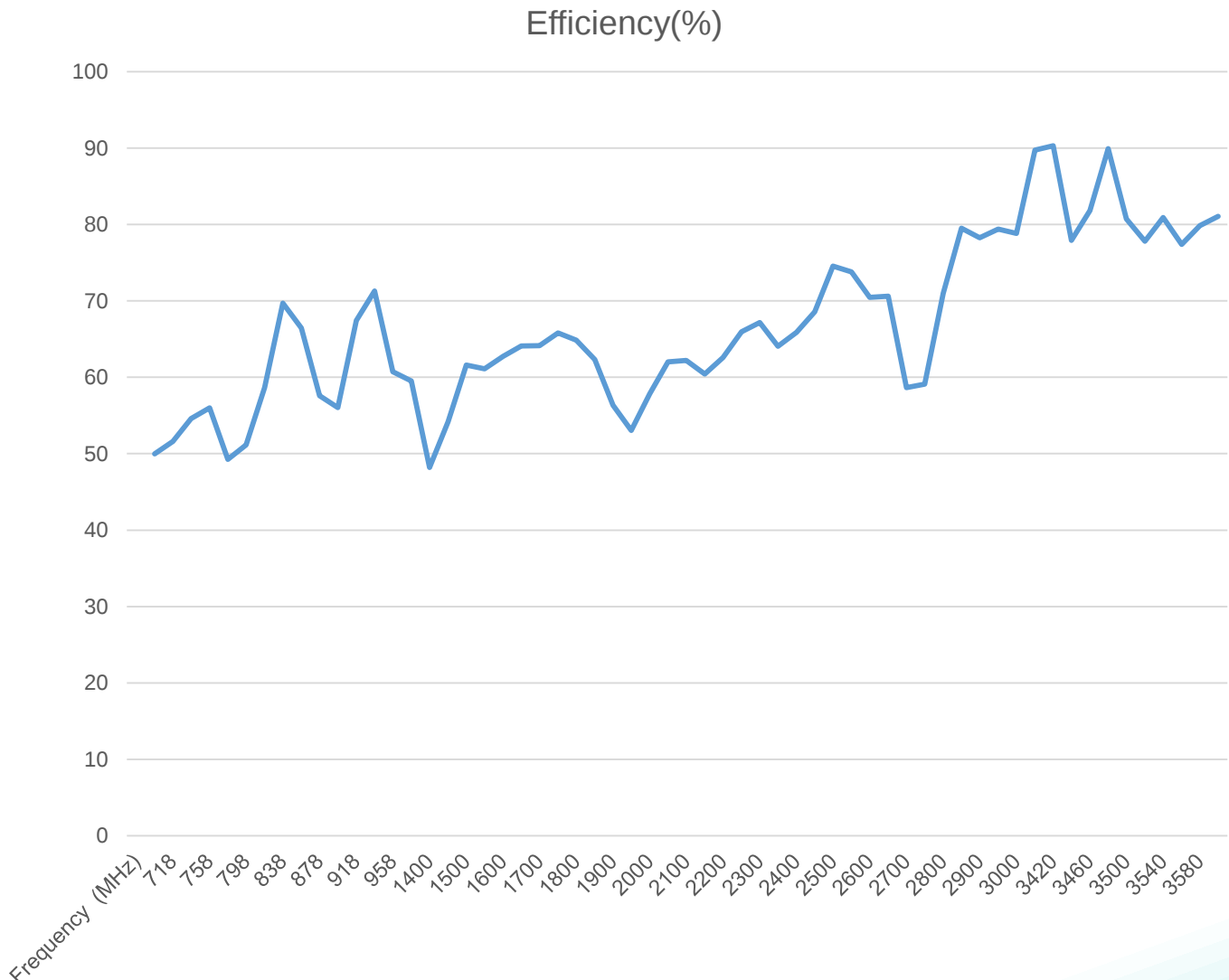
Description: LTE 698-3600MHz FPC Antenna

Series: Gemini

PART NUMBER: W3907XXXX

## CHARTS

### Efficiency



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

Issue: 1817

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.

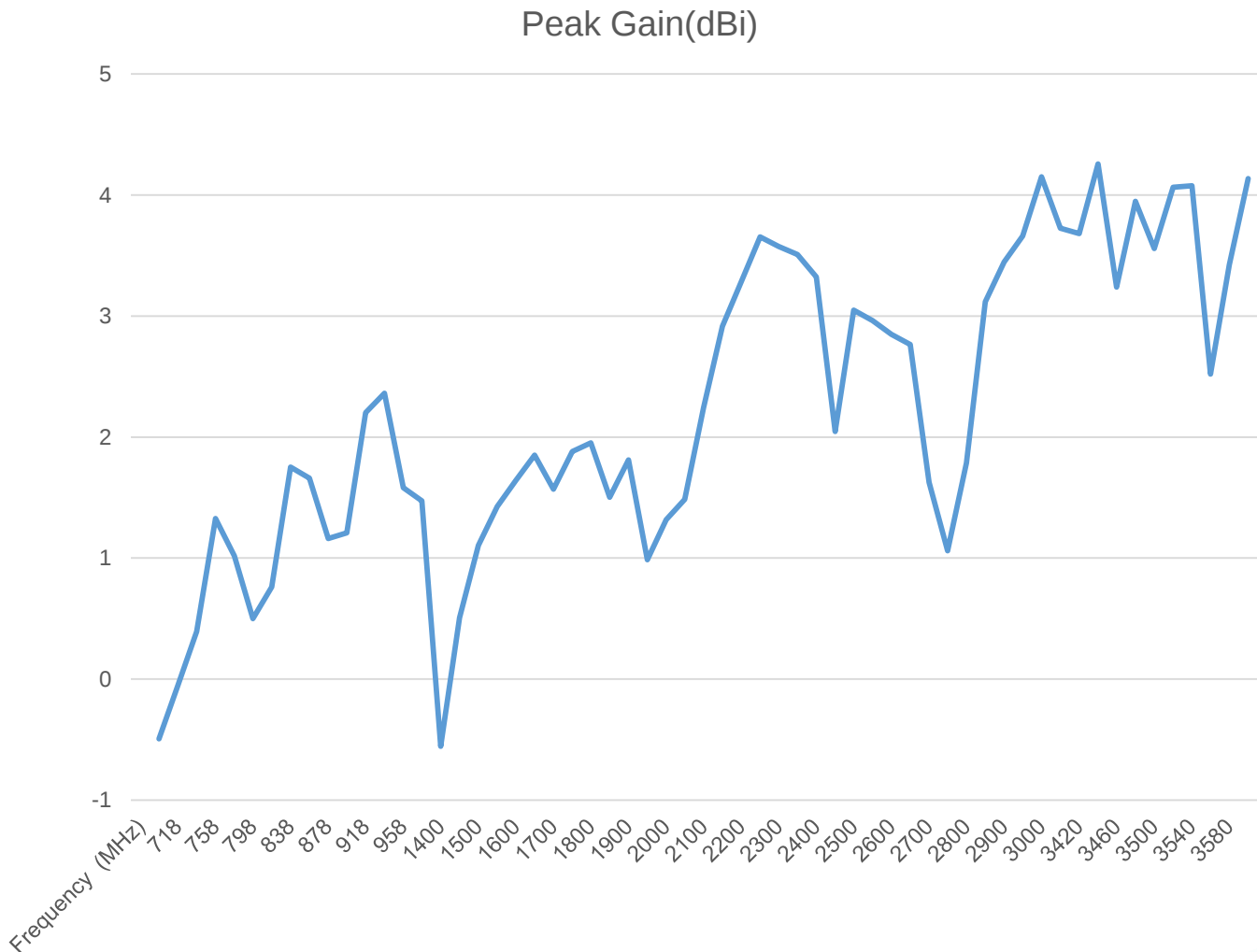
Description: LTE 698-3600MHz FPC Antenna

Series: Gemini

PART NUMBER: W3907XXXX

## CHARTS

### Peak Gain



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

Issue: 1817

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.

Description: LTE 698-3600MHz FPC Antenna

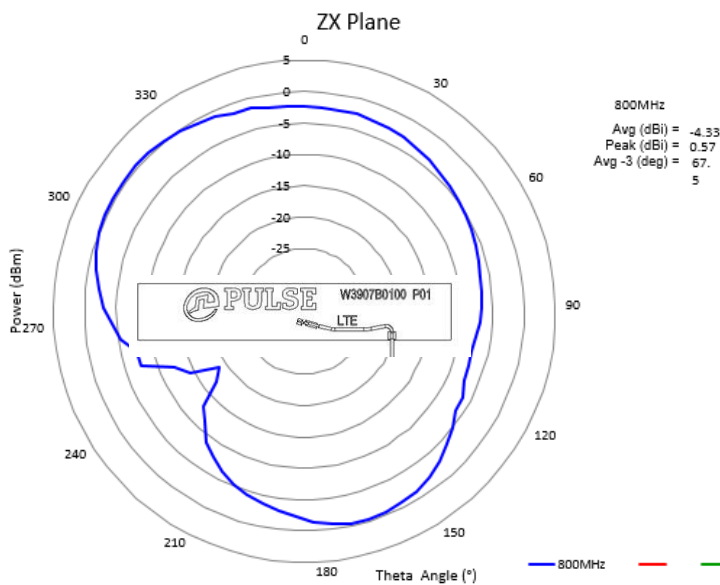
Series: Gemini

PART NUMBER: W3907XXXX

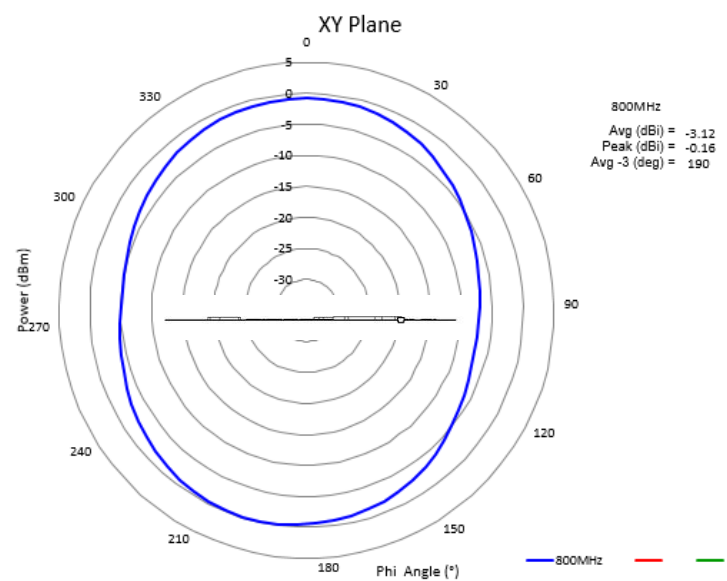
## CHARTS

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

### Elevation Plane



### Horizontal Plane



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

Issue: 1817

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.

Description: LTE 698-3600MHz FPC Antenna

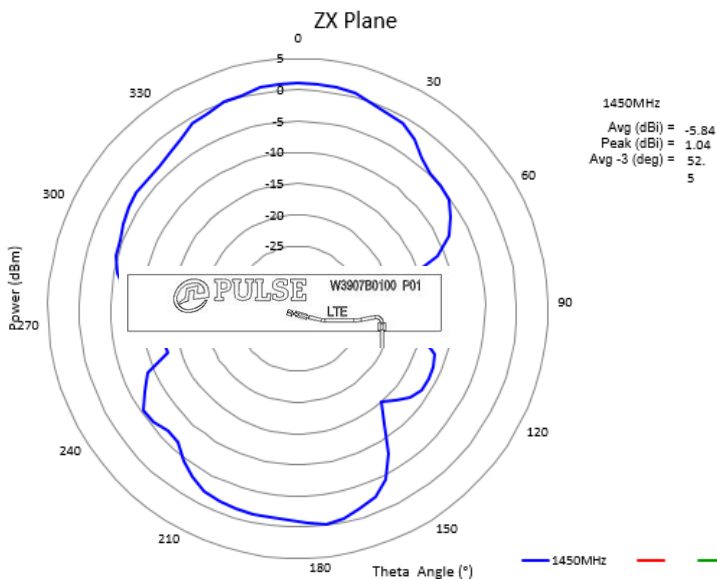
Series: Gemini

PART NUMBER: W3907XXXX

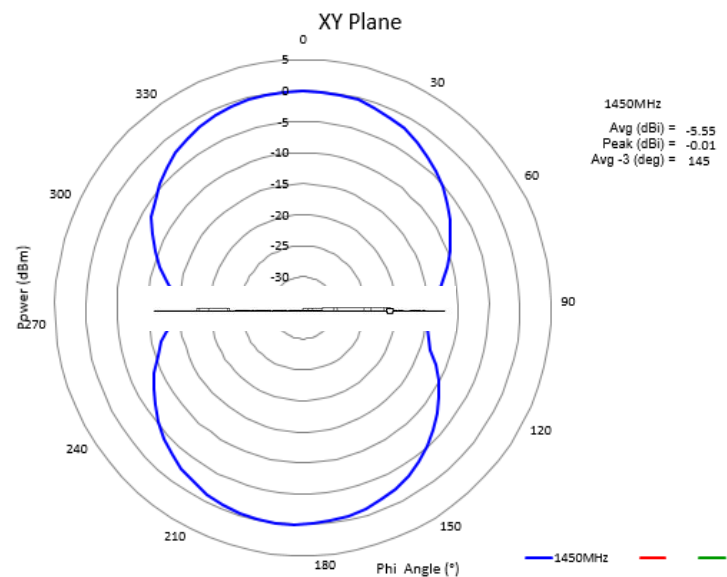
## CHARTS

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

Elevation Plane



Horizontal Plane



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

Issue: 1817

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.

Description: LTE 698-3600MHz FPC Antenna

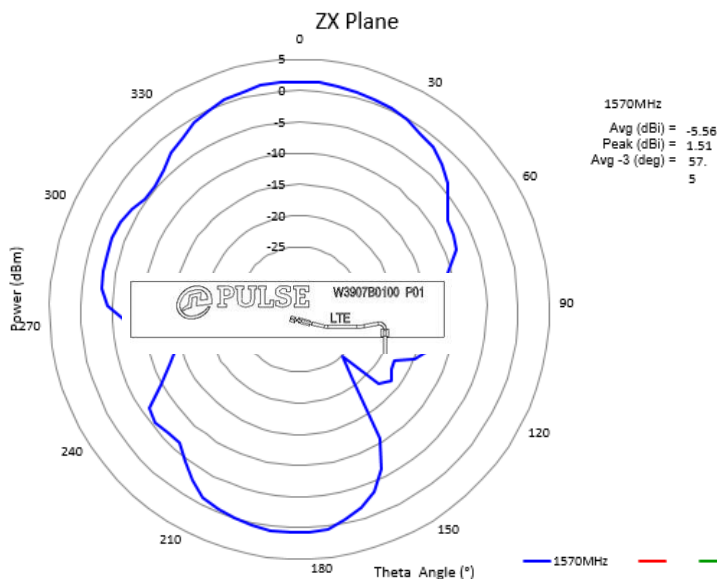
Series: Gemini

PART NUMBER: W3907XXXX

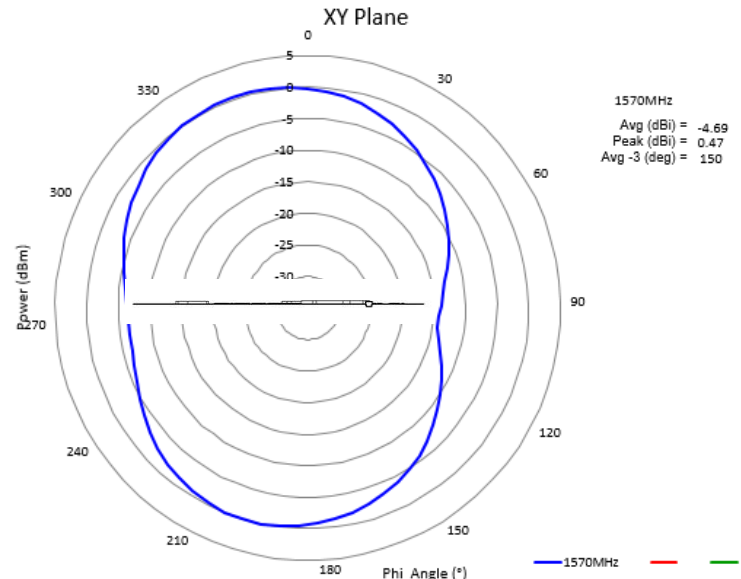
## CHARTS

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

### Elevation Plane



### Horizontal Plane



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

Issue: 1817

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.

Description: LTE 698-3600MHz FPC Antenna

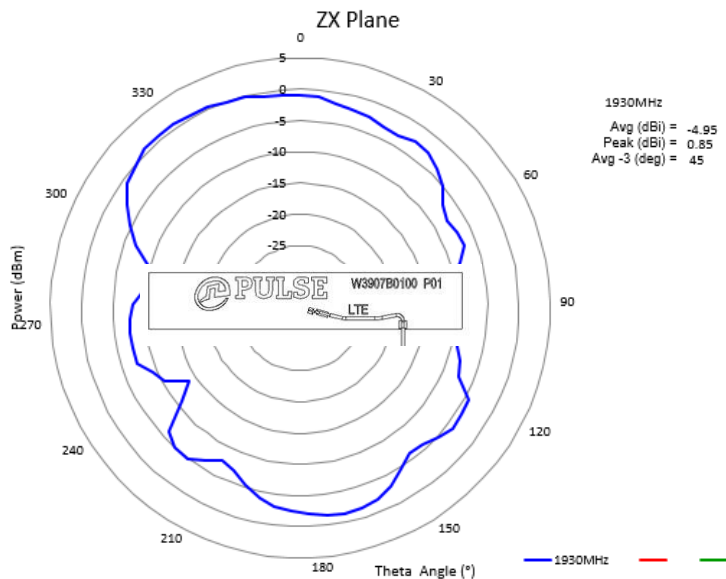
Series: Gemini

PART NUMBER: W3907XXXX

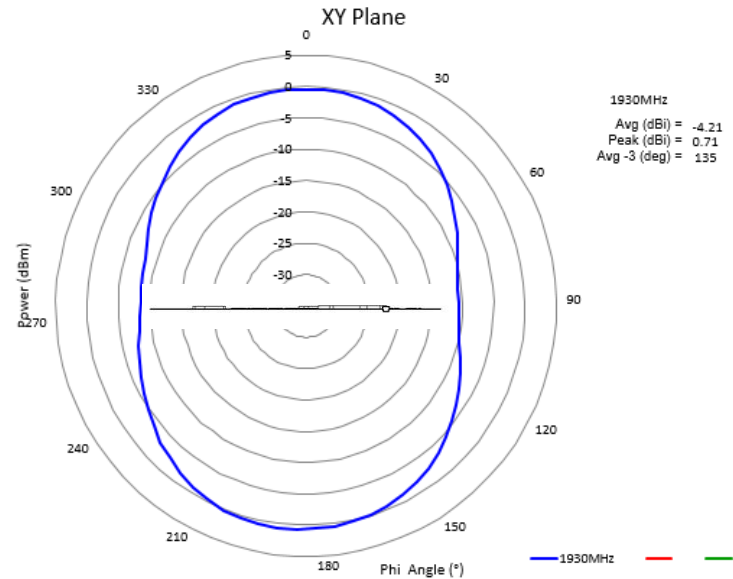
## CHARTS

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

Elevation Plane



Horizontal Plane



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

Issue: 1817

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.

Description: LTE 698-3600MHz FPC Antenna

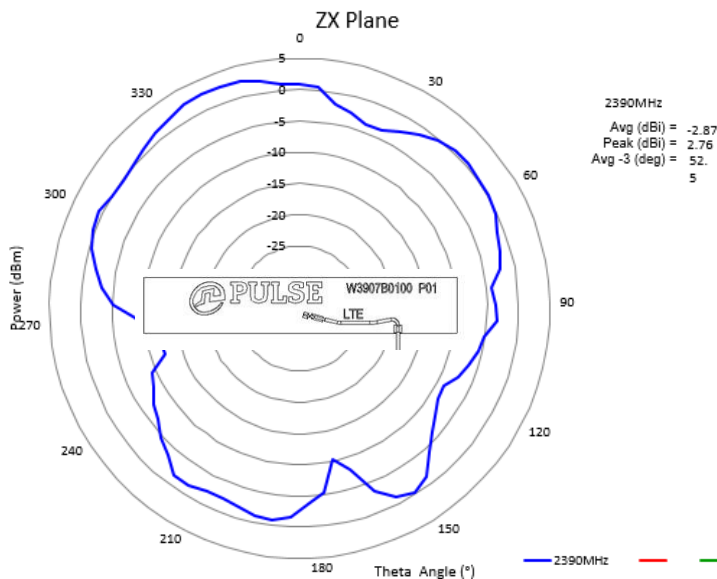
Series: Gemini

PART NUMBER: W3907XXXX

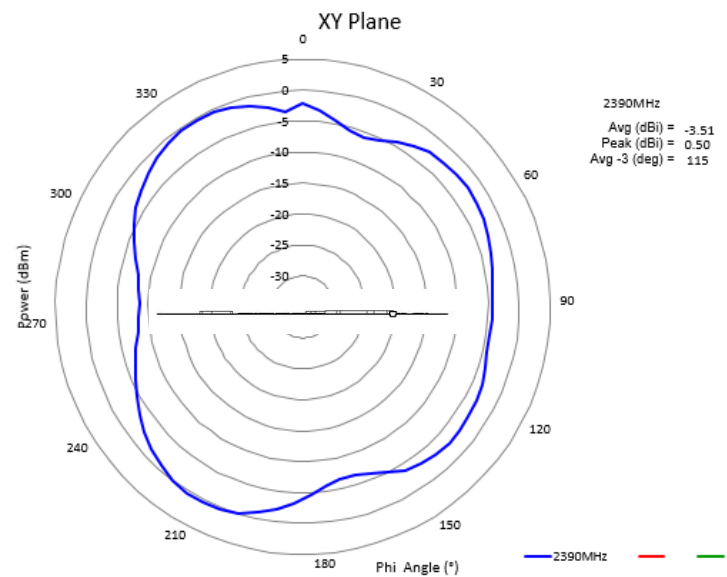
## CHARTS

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

### Elevation Plane



### Horizontal Plane



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

Issue: 1817

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.

Description: LTE 698-3600MHz FPC Antenna

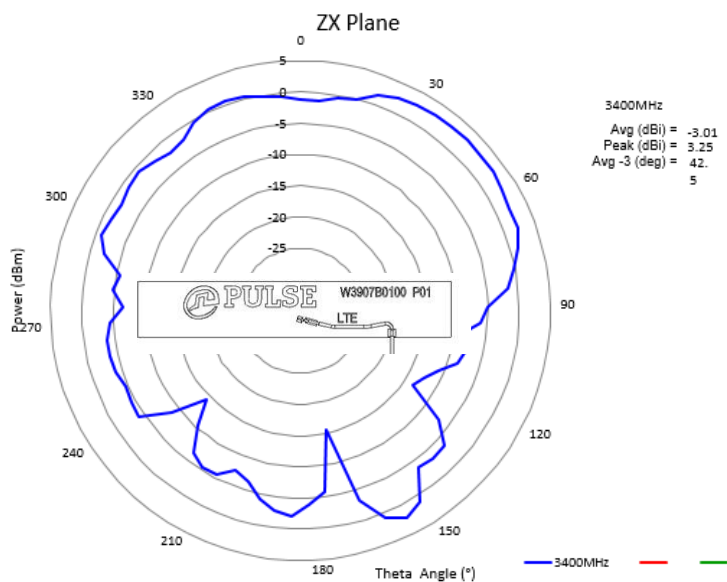
Series: Gemini

PART NUMBER: W3907XXXX

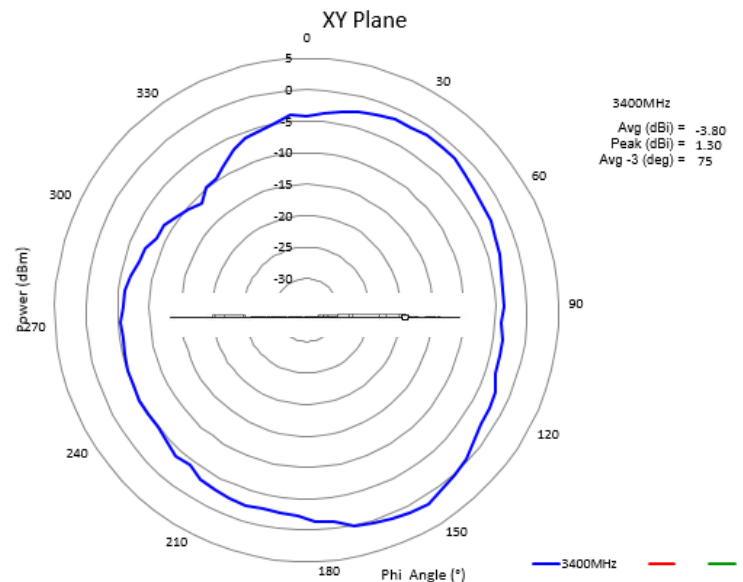
## CHARTS

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

Elevation Plane



Horizontal Plane



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

Issue: 1817

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.

**Description:** LTE 698-3600MHz FPC Antenna

**Series:** Gemini

**PART NUMBER:** W3907XXXX

## PACKAGING

10pcs antenna per PE bag

10pcs PE bags per form bag

12pcs form bag per package box

Total 1200pcs per package box

Package box: 460mm\*235mm\*140mm