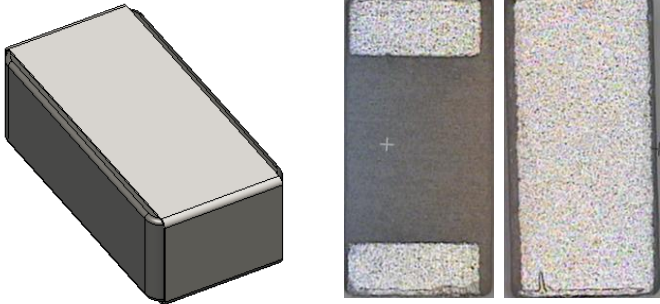


Description: Ceramic Dual Band WLAN

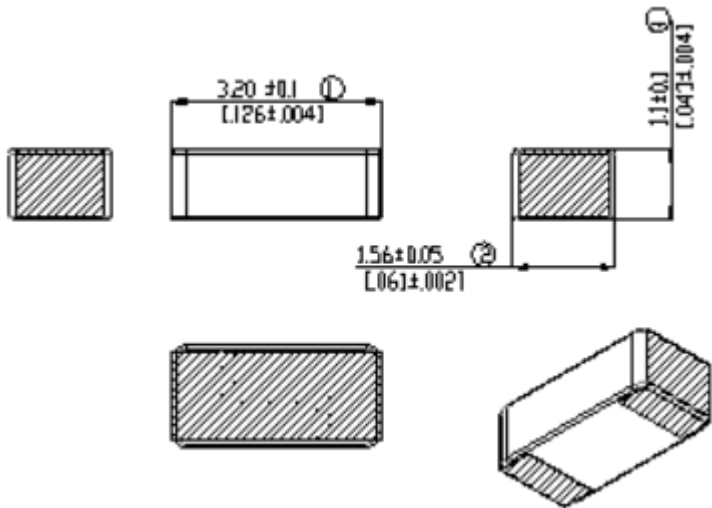
Series: Antenna

PART NUMBER: W3079



Features:

- High efficiency and high peak gain
- Low Profile
- Compact size (3.2x1.56x1.1mm)
- SMD compatible



Applications:

- IEEE 802.11 a/b/g
- Bluetooth, Zigbee
- 2.4GHz and 5GHz WLAN
- 2.4GHz and 5GHz ISM band

All dimensions are in mm / inches

Issue: 1622

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  
3611 NE 112<sup>th</sup> Ave  
Vancouver, WA 98682  
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: Ceramic Dual Band WLAN****Series: Antenna****PART NUMBER: W3079****ELECTRICAL SPECIFICATIONS**

|                                     |                            |
|-------------------------------------|----------------------------|
| Frequency                           | 2.4–2.4835 / 5.15–5.85 GHz |
| Nominal Impedance                   | 50 Ω                       |
| VSWR                                | < 1.9 / < 2.5              |
| Gain (peak)                         | 2.4 / 5.7 dBi +/- 1 dB     |
| Total efficiency (peak)             | 70 / 77 %                  |
| Ground clearance area under antenna | 6.0 x 11.00mm              |

**MECHANICAL SPECIFICATIONS**

|                            |                 |
|----------------------------|-----------------|
| Weight                     | 0,033 g         |
| Overall Dimensions (L*W*H) | 3.2*1.56*1.1 mm |

**ENVIRONMENTAL SPECIFICATIONS**

|                       |             |
|-----------------------|-------------|
| Operating temperature | -40-+85 ° C |
| MSL                   | Level3      |

Issue: 1622

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.

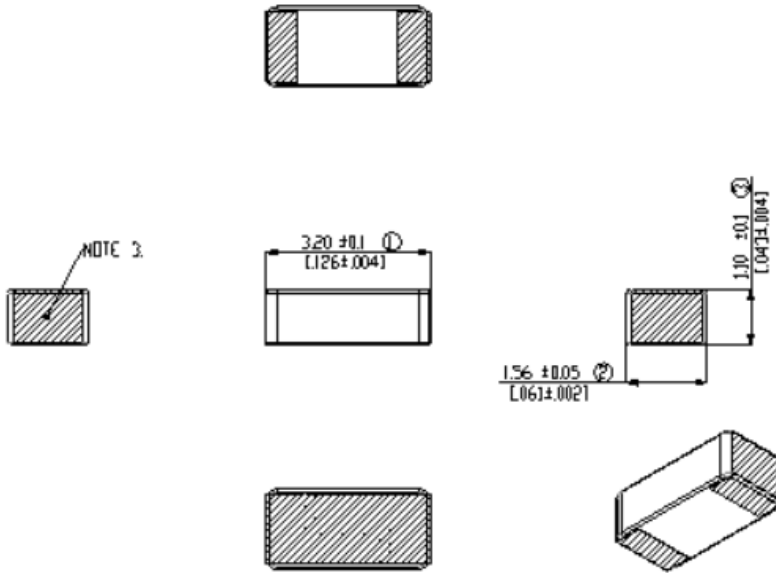
Description: Ceramic Dual Band WLAN

Series: Antenna

PART NUMBER: W3079

MECHANICAL DRAWING

Confidential:  
This is a proprietary information of Pulse LARSEN Oy.  
No reproduction / copying is allowed without permission.



NOTES:

- 1. RoHS compliant
- 2. Dimension numbered 1-3
- 3. Ag metallization on hatched areas

| ROHS request |     |      |      |      |      |      |        |
|--------------|-----|------|------|------|------|------|--------|
| Item         | Cd  | Hg   | Pb   | Cr6+ | PBB  | PBDE | Other  |
| PPW=C        | 100 | 1000 | 1000 | 1000 | 1000 | 1000 | ReXXXX |

(Elements must be free of Br, Cl, Hg, Pb, Sn ppm in homogeneous material)

Functional characteristic key:  
Process capability studies required (total) pcs  
Process capability studies (material and ongoing statistical process control) required (total) pcs

| Rev | Description                       |
|-----|-----------------------------------|
| A   | Several updates (class A release) |

Pulse Electronics  
Pulse Sweden  
Pulse Finland  
Pulse Denmark  
Pulse France  
Pulse Germany  
Pulse Italy  
Pulse Japan  
Pulse Korea  
Pulse Mexico  
Pulse Netherlands  
Pulse Poland  
Pulse Portugal  
Pulse Spain  
Pulse Switzerland  
Pulse Taiwan  
Pulse Thailand  
Pulse USA  
Pulse UK

Product: W3079  
Part Name: W3079 antenna assembly

|                        |                                  |       |
|------------------------|----------------------------------|-------|
| Scale: 14:1 (A3)       | Sheet number: 1/1                |       |
| Document number: W3079 | General tolerance: ECTADW number |       |
| Part version: A        | Drawn: Jouni 20150929            |       |
| Document revision: V01 | Checked: Jouni                   |       |
| Rev                    | Date                             | Drawn |

Issue: 1622

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. This 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.



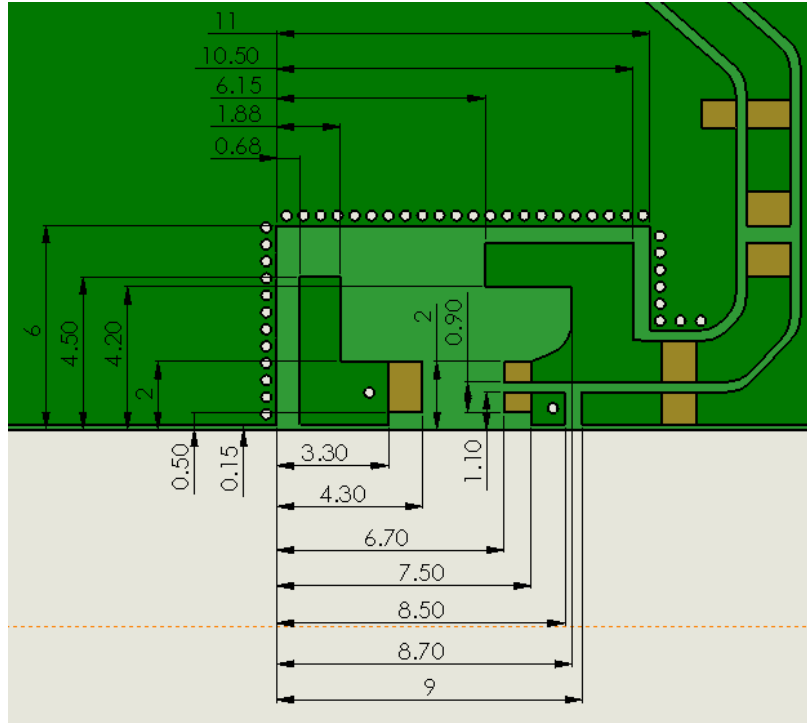
**Description: Ceramic Dual Band WLAN**

**Series: Antenna**

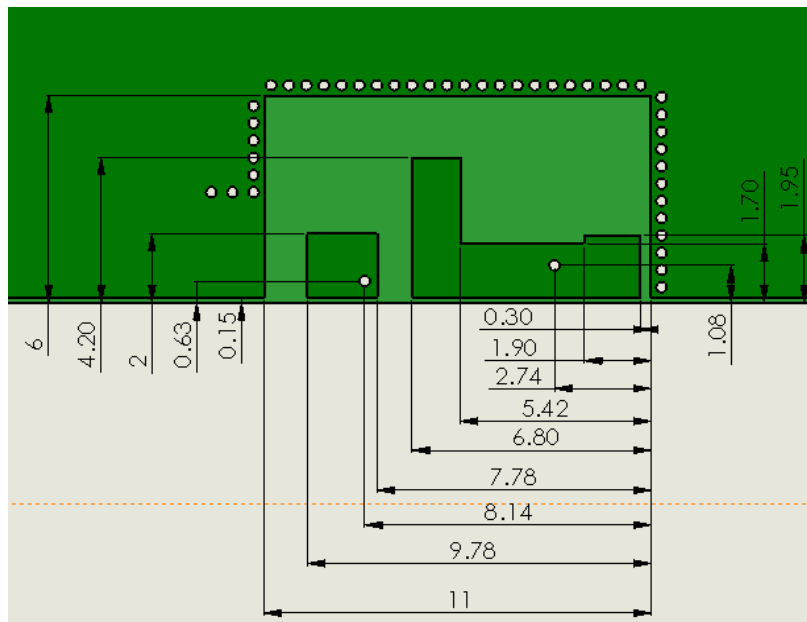
**PART NUMBER: W3079**

**OTHER SPECIFICATIONS**

*Top side*



*Bottom side*



Issue: 1622

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

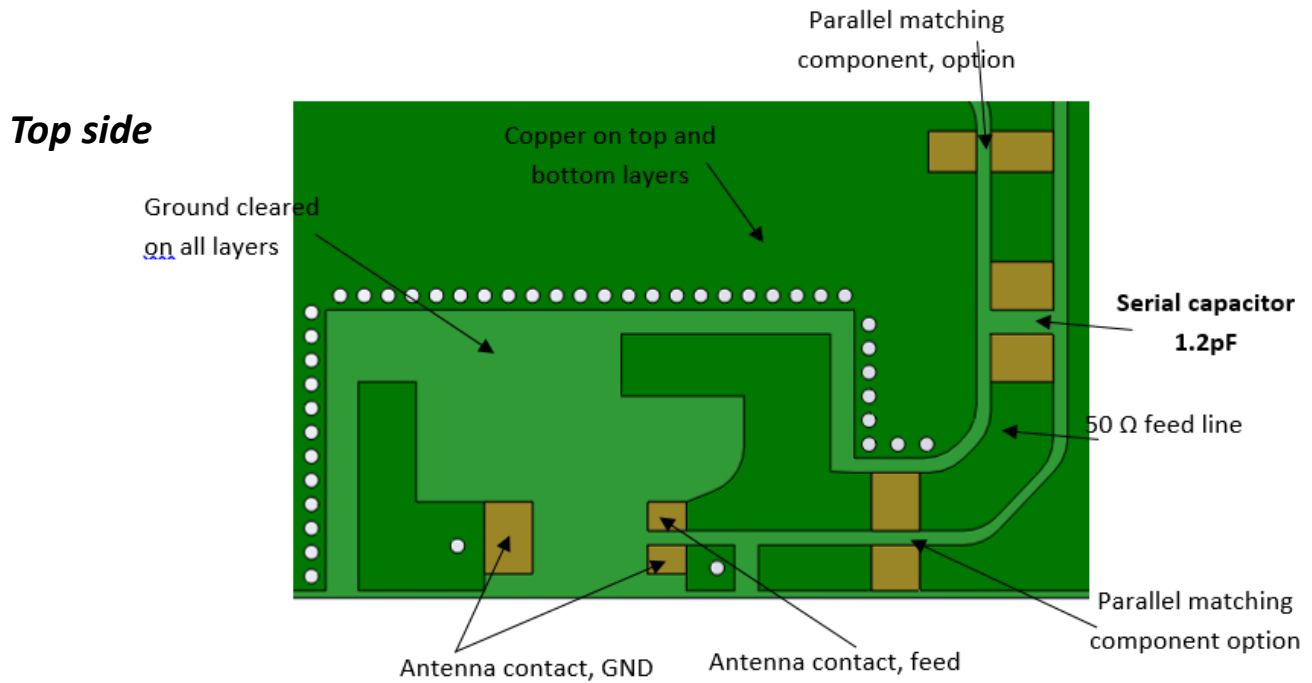
This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

**Description: Ceramic Dual Band WLAN**

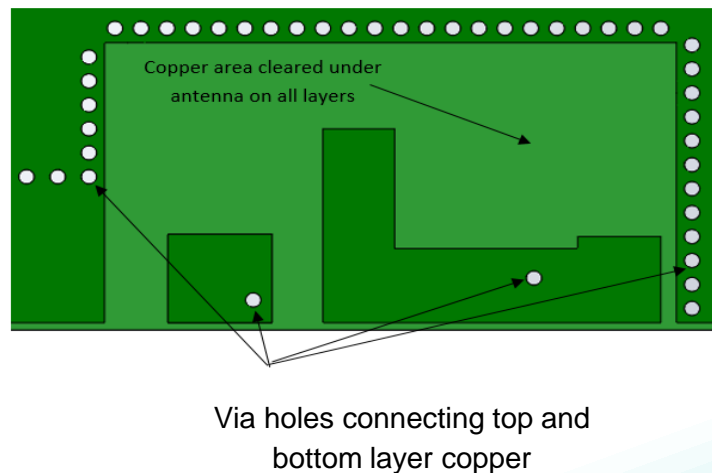
**Series: Antenna**

**PART NUMBER: W3079**

**OTHER SPECIFICATIONS**



**Bottom side**



Issue: 1622

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.

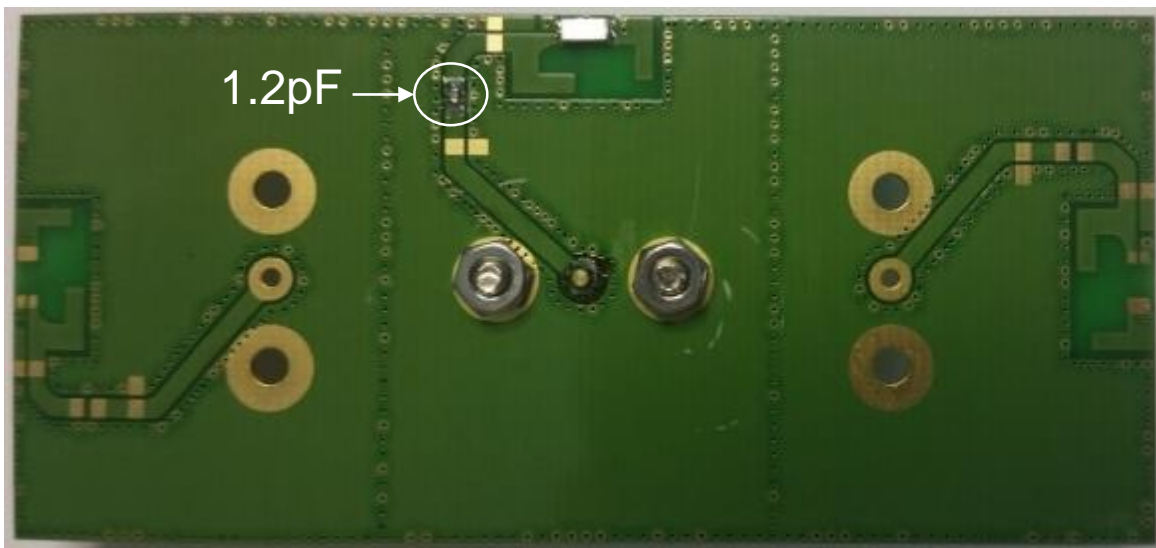
## Description: Ceramic Dual Band WLAN

Series: Antenna

**PART NUMBER: W3079**

### Recommended Antenna Position on PCB

- The recommended antenna location is the center edge of the longer PCB side.
- All measurement results of W3079 are measured on the 37x80mm evaluation board with matching circuit (series 1.2pF capacitor).
- To construct a fine matching on customer PCB design, proper impedance matching values should be obtained with a final customer PCB dimension, surrounded metallic components, and a package condition (with final assembly condition).
- The recommended minimum PCB size is around 35x35mm to obtain similar RF performances of datasheet. For more discussion, please contact to Pulse electronics.



Issue: 1622

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.

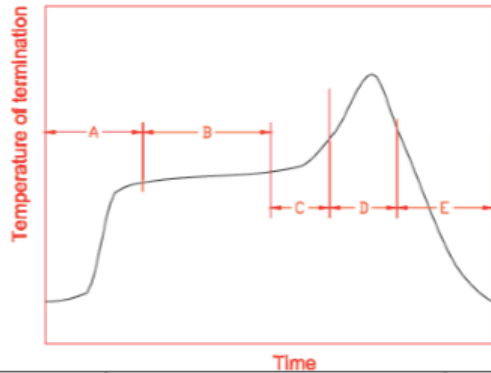
Description: Ceramic Dual Band WLAN

Series: Antenna

PART NUMBER: W3079

OTHER SPECIFICATIONS

Recommended reflow soldering



|   |                                    |                                      |               |
|---|------------------------------------|--------------------------------------|---------------|
| A | 1 <sup>st</sup> rising temperature | The normal to Preheating temperature | 30s to 60s    |
| B | Preheating                         | 140°C to 160°C                       | 60s to 120s   |
| C | 2 <sup>nd</sup> rising temperature | Preheating to 200°C                  | 20s to 40s    |
| D | Main heating                       | if 220°C                             | 50s~60s       |
|   |                                    | if 230°C                             | 40s~50s       |
|   |                                    | if 240°C                             | 30s~40s       |
|   |                                    | if 250°C                             | 20s~40s       |
| E | Regular cooling                    | if 260°C                             | 20s~40s       |
|   |                                    | 200°C to 100°C                       | 1°C/s ~ 4°C/s |

\*reference: J-STD-020C

(1) Soldering gun procedure

Note the follows, in case of using solder gun for replacement.

(a) The tip temperature must be less than 350°C for the period within 3 seconds by using soldering gun under 30 W.

(b) The soldering gun tip shall not touch this product directly.

(2) Soldering volume

Note that excess of soldering volume will easily get crack the body of this product.



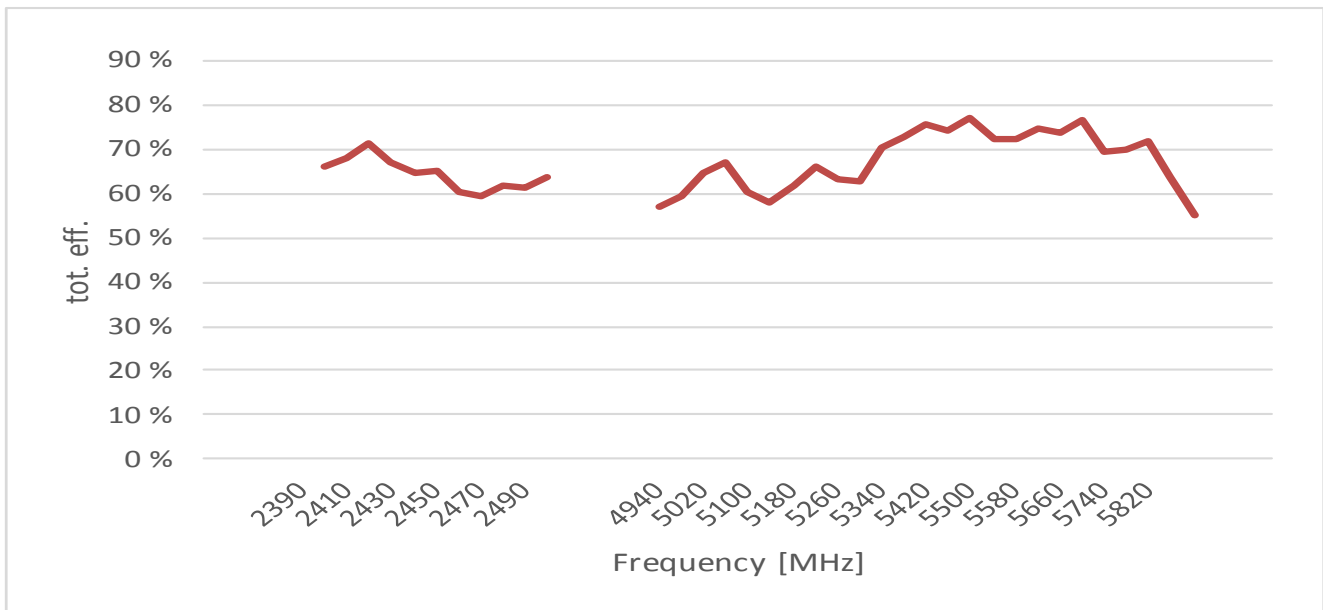
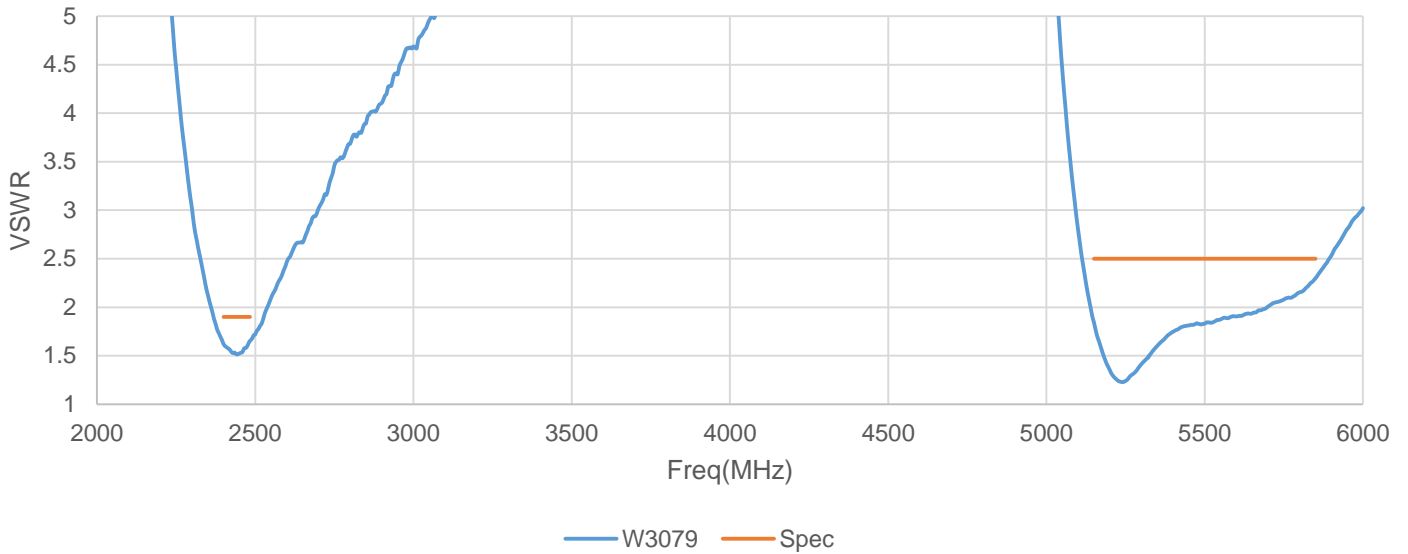
Description: Ceramic Dual Band WLAN

Series: Antenna

PART NUMBER: W3079

CHARTS

W3079\*



\* Free space measurements on Pulse reference test PCB

Issue: 1622

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.

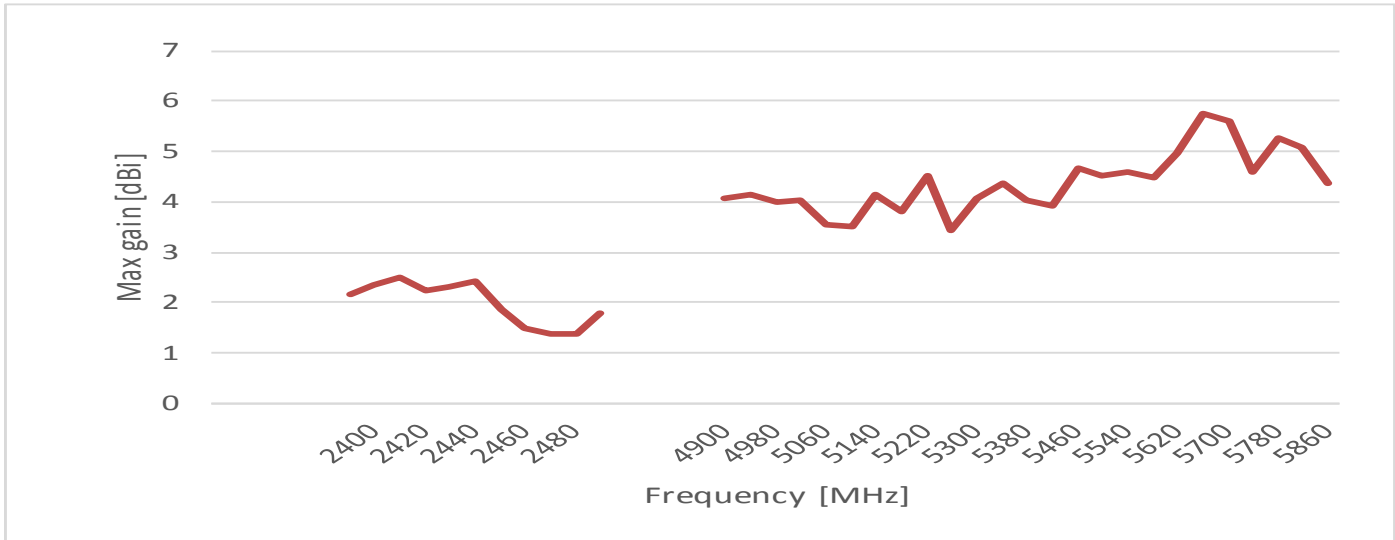


Description: Ceramic Dual Band WLAN

Series: Antenna

PART NUMBER: W3079

CHARTS



\* Free space measurements on Pulse reference test PCB

Issue: 1622

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

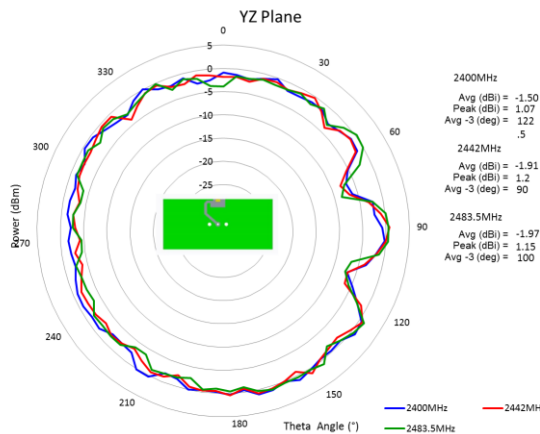
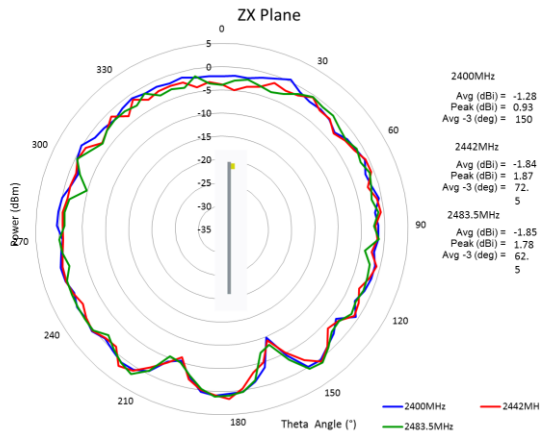
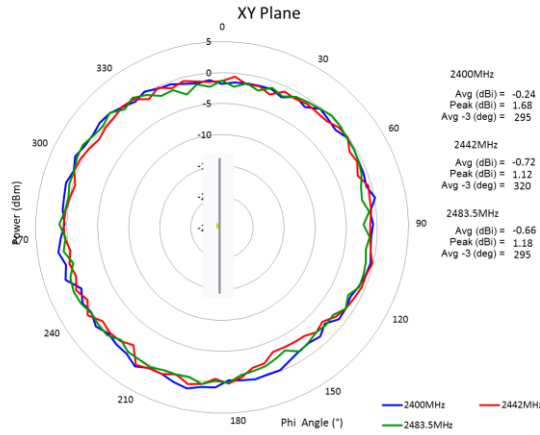
This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

Description: Ceramic Dual Band WLAN

Series: Antenna

PART NUMBER: W3079

CHARTS



\* Free space measurements on Pulse reference test PCB

Issue: 1622

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

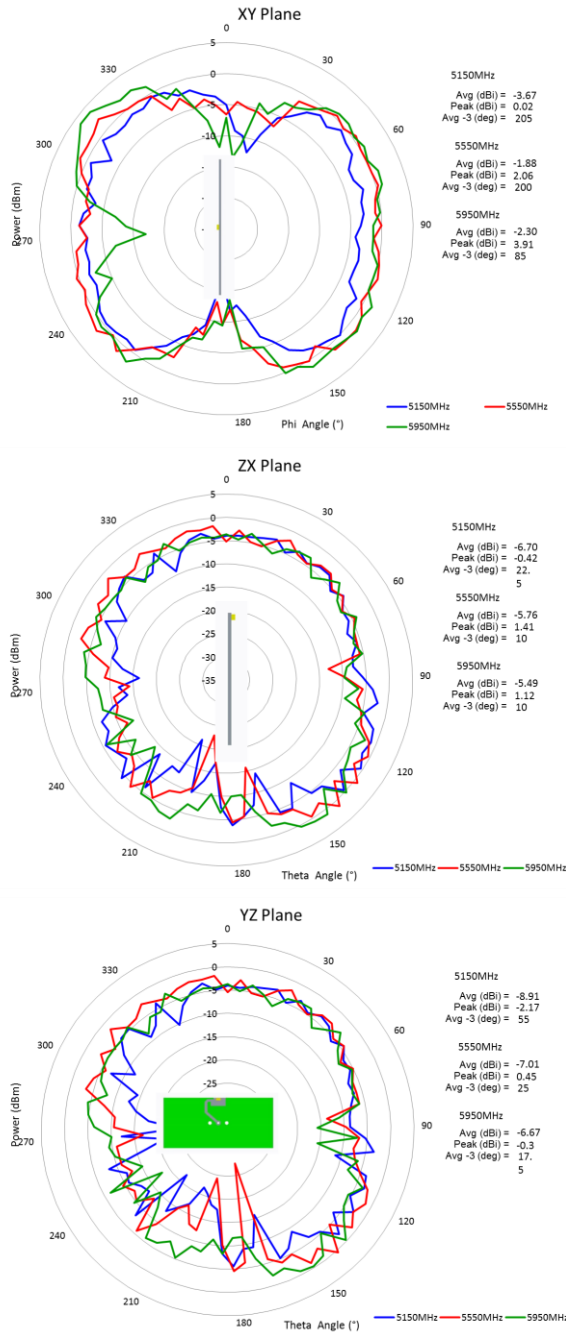
This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

Description: Ceramic Dual Band WLAN

Series: Antenna

PART NUMBER: W3079

CHARTS



\* Free space measurements on Pulse reference test PCB

Issue: 1622

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

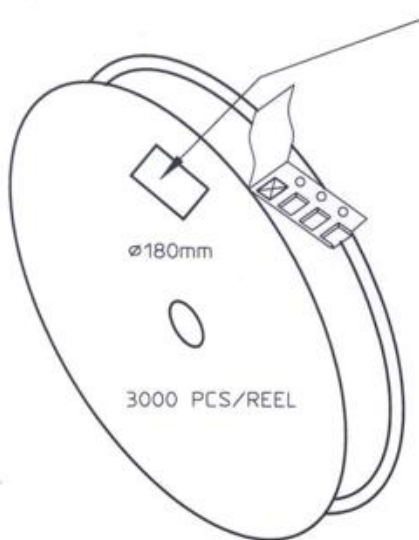
This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

Description: Ceramic Dual Band WLAN

Series: Antenna

PART NUMBER: W3079

PACKAGING



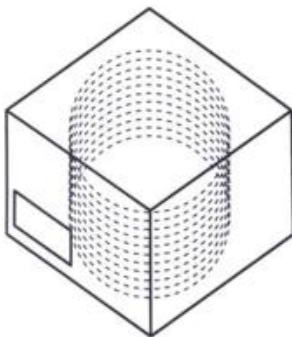
REEL LABEL INFORMATION:  
 - TRACEABILITY  
 - QUANTITY  
 - PRODUCT CODE

CARRIER TAPE H85-00125  
 width=8,00 depth=1,22  
 COVER TAPE H85-00126  
 width=5,60

LENGTH OF TAPE:

- Leader section: min 350 mm before component section
- Trailer section: min 40 mm after component section.

Empty part cavities at leader and trailer section of the tape must be sealed with top cover tape.



|                                |            |
|--------------------------------|------------|
| BOX H85-00128<br>(182x182x132) | 1 pcs      |
| - LABEL                        | 1 pcs/BOX  |
| REEL H85-00127<br>(D180, W12)  | 10 pcs     |
| - REEL LABEL                   | 1 pcs/REEL |

ASSEMBLY

Issue: 1622

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.

## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9