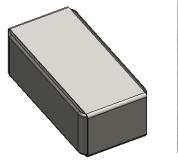


**Description: Ceramic Dual Band WLAN** 

**PART NUMBER: W3079** 

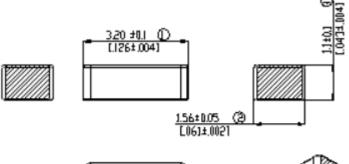
**Series: Antenna** 

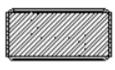


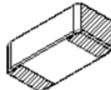


### **Features:**

- 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

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**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  $\Omega$ 

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





Series: Antenna

PART NUMBER: W3079

# **MECHANICAL DRAWING** Conflikentido This is a proprietary priorentiga pi Rules Finland Dy. No reproduction / copying is efficied without perression NOTE 3. rumbered I-1 zoign on hotched oreos Item Cd Hg Pb Cr6+ PBB PBBC Diter 1000 1000 1000 1000 Refxxx Countings Characteris key Process against studies required total Process country studies required and arguing statustical process control required, total 14:1 (A3) ¥3079 Rad [>pEcotyon Service update (class A referent) W3079 V01 1/3079 anterna assentily



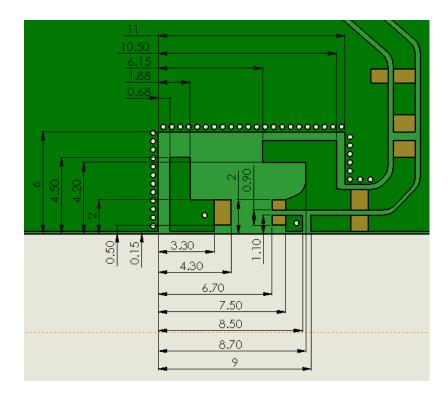


Series: Antenna

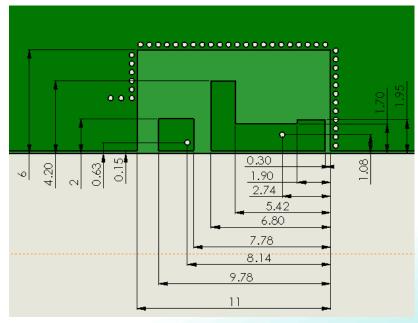
**PART NUMBER: W3079** 

# **OTHER SPECIFICATIONS**

# Top side



# **Bottom side**



Issue: 1622

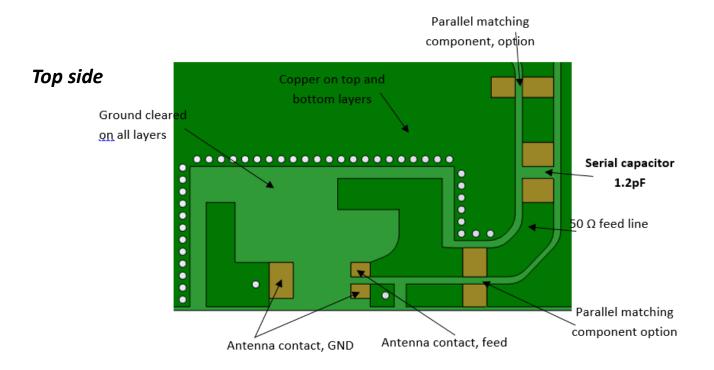




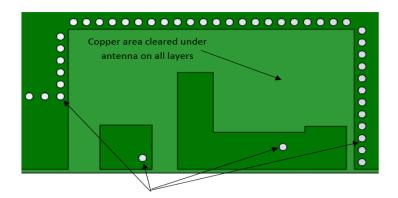
Series: Antenna

PART NUMBER: W3079

# **OTHER SPECIFICATIONS**



### **Bottom side**



Via holes connecting top and bottom layer copper



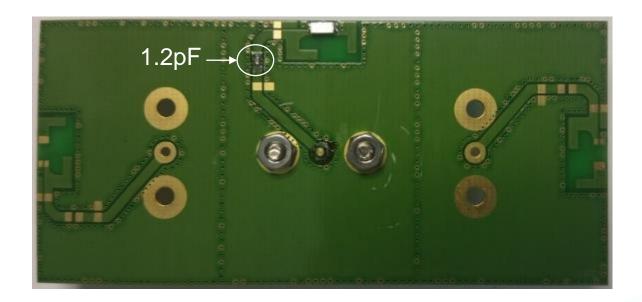


**Series: Antenna** 

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.





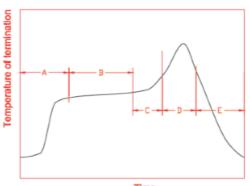


**Series: Antenna** 

**PART NUMBER: W3079** 

### OTHER SPECIFICATIONS

# Recommended reflow soldering



|   |                                    | Time                                    |             |
|---|------------------------------------|---|-------------|
| Α | 1 <sup>st</sup> rising temperature | The normal to Preheating<br>temperature | 30s to 60s  |
| В | Preheating                         | 140℃ to 160℃                            | 60s to 120s |
| С | 2 <sup>nd</sup> rising temperature | Preheating to 200℃                      | 20s to 40s  |
| D | Main heating                       | if 220℃                                 | 50s~60s     |
|   |                                    | if 230°C                                | 40s~50s     |
|   |                                    | if 240°C                                | 30s~40s     |
|   |                                    | if 250°C                                | 20s~40s     |
|   |                                    | if 260°C                                | 20s~40s     |
| Ε | Regular cooling                    | 200℃ to 100℃                            | 1℃/s ~ 4℃/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.

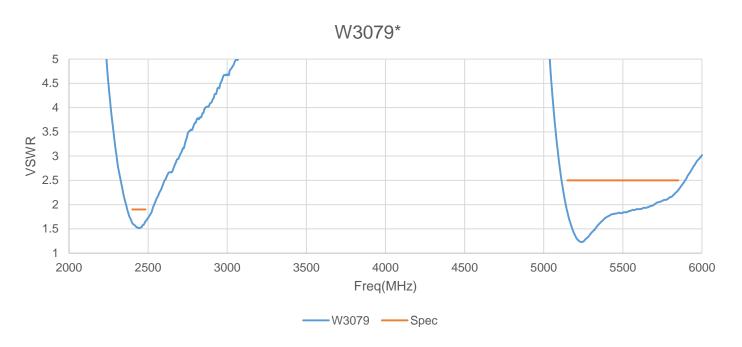


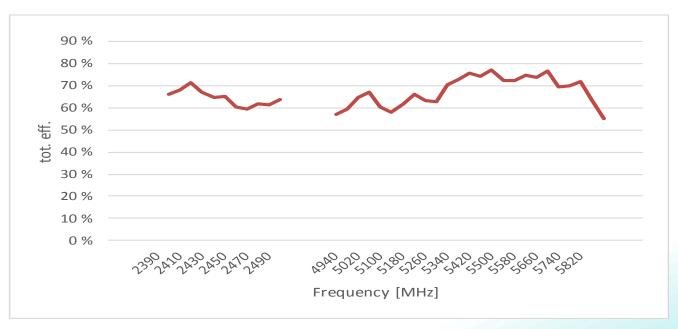


Series: Antenna

PART NUMBER: W3079

### **CHARTS**





<sup>\*</sup> Free space measurements on Pulse reference test PCB

Issue: 1622

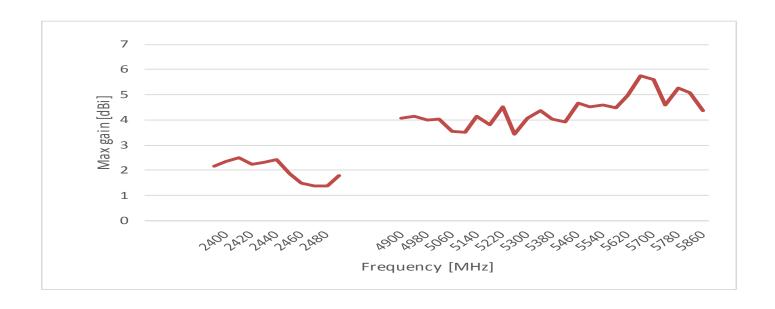


**Description: Ceramic Dual Band WLAN** 

Series: Antenna

PART NUMBER: W3079

### **CHARTS**



<sup>\*</sup> Free space measurements on Pulse reference test PCB

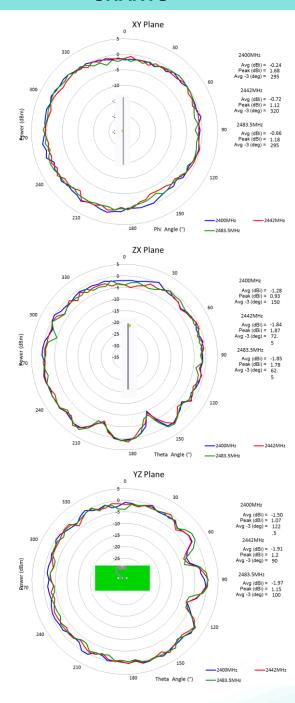




**Series: Antenna** 

**PART NUMBER: W3079** 

# **CHARTS**



<sup>\*</sup> Free space measurements on Pulse reference test PCB

Issue: 1622

ROHS

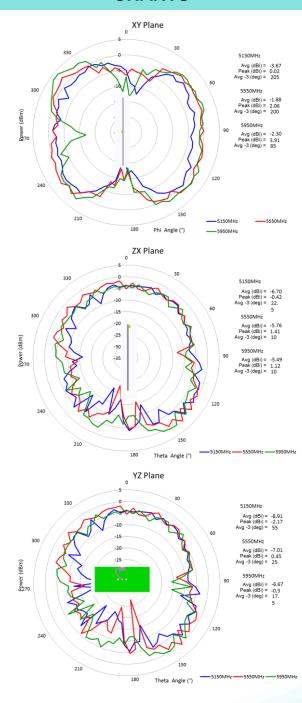




Series: Antenna

**PART NUMBER: W3079** 

### **CHARTS**



<sup>\*</sup> Free space measurements on Pulse reference test PCB

Issue: 1622

ROHS

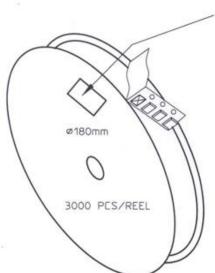
11



**Description: Ceramic Dual Band WLAN** 

Series: Antenna PART NUMBER: W3079

### **PACKAGING**



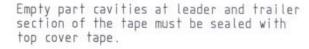
REEL LABEL INFORMATION:

- 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.



BOX H85-00128 (182x182x132) 1 pcs

- LABEL

1 pcs/BOX

REEL H85-00127

10 pcs

(D180,W12) - REEL LABEL

1 pcs/REEL

### **ASSEMBLY**



OOO «ЛайфЭлектроникс" "LifeElectronics" LLC

ИНН 7805602321 КПП 780501001 P/C 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 3010181090000000703 БИК 044030703

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

### Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный) Email: org@lifeelectronics.ru