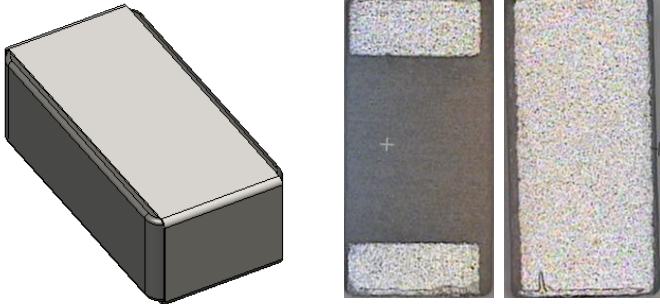


Description: Ceramic Dual Band WLAN

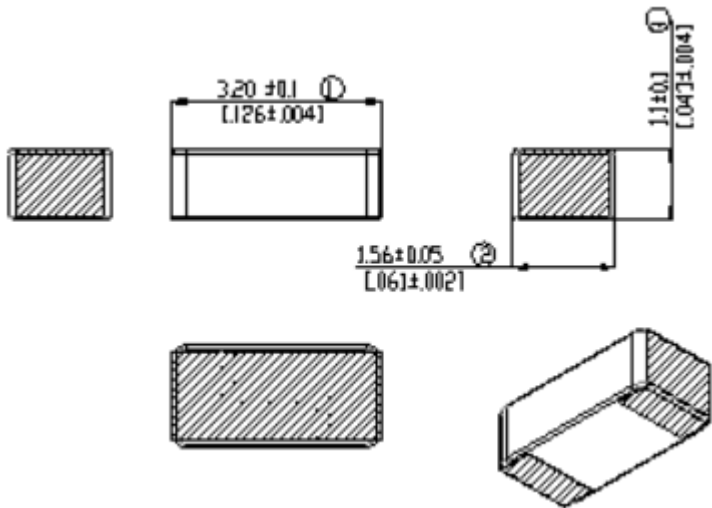
Series: Antenna

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

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Pulse (Suzhou) Wireless Products Co, Inc.  
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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 $\Omega$
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

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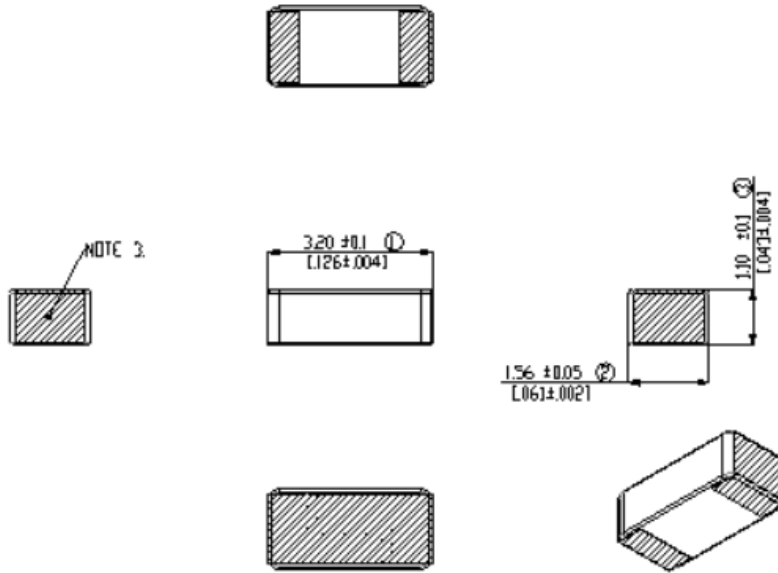
Description: Ceramic Dual Band WLAN

Series: Antenna

PART NUMBER: W3079

MECHANICAL DRAWING

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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

(Plastics must be free of Br, Cl, Hg, Pb, and Cu 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 Oy, Puhokatu 10, 01500 Vammala, Finland  
Pulse Oy, Puhokatu 10, 01500 Vammala, Finland  
www.pulseelectronics.com

Scale	14:1 (A3)	Sheet number	1/1
Document number	W3079	General tolerance	
Part version	A	Customer number	
Document revision	V01	Drawn	Jarielvi
		Checked	
		Approved	20150929
		Rev	Date
			File

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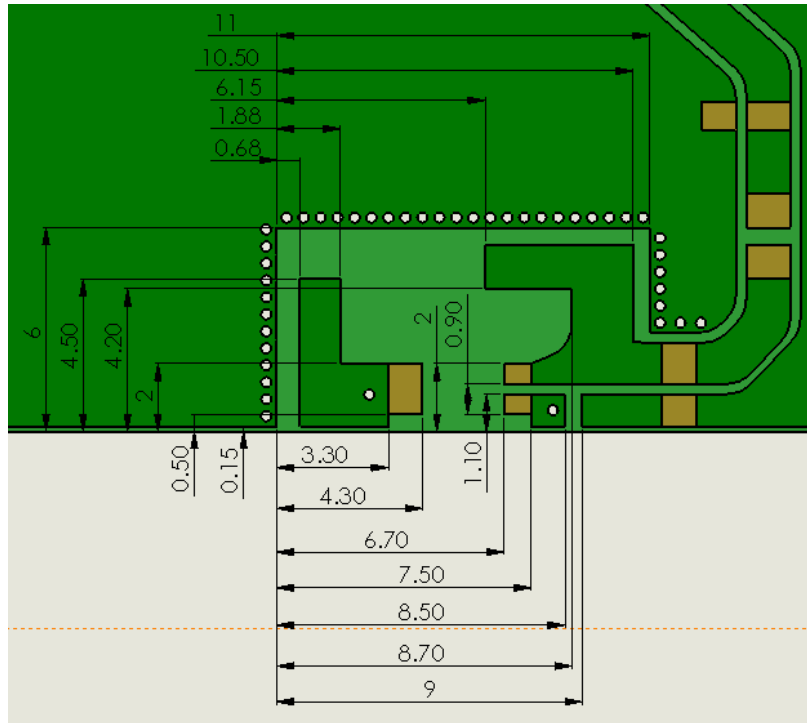
Description: Ceramic Dual Band WLAN

Series: Antenna

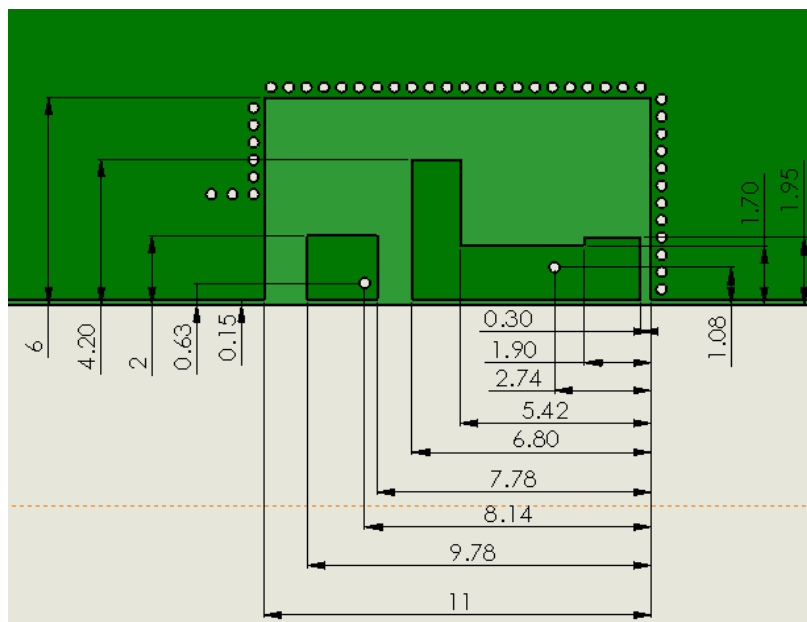
PART NUMBER: W3079

OTHER SPECIFICATIONS

Top side



Bottom side



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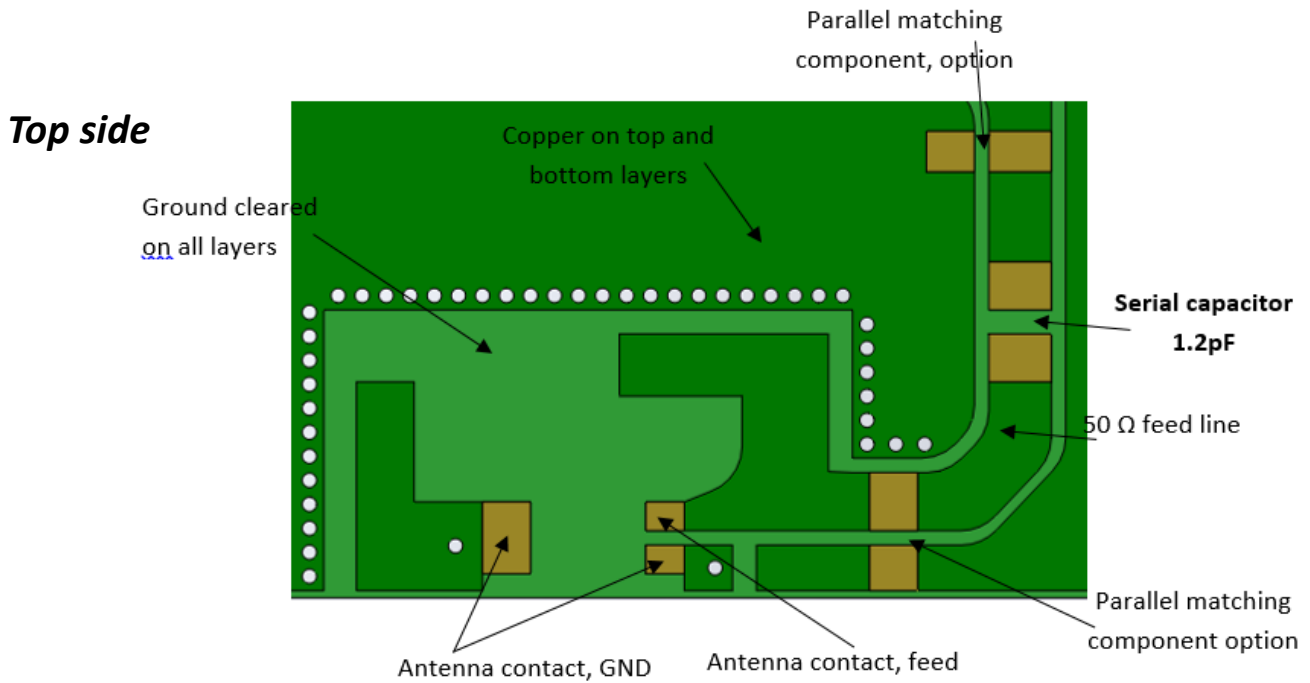
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Description: Ceramic Dual Band WLAN

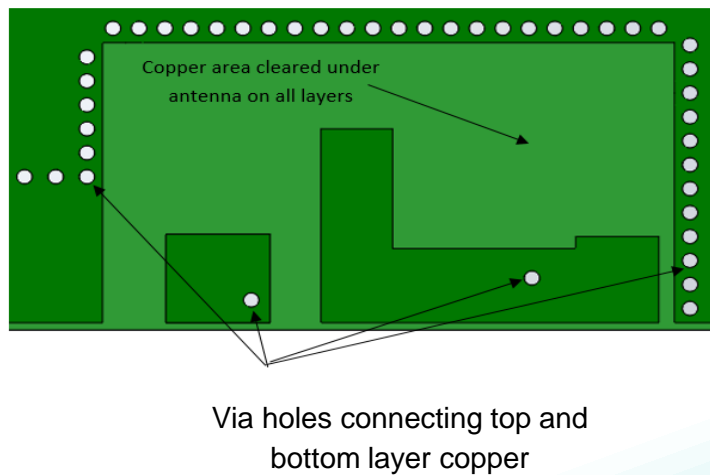
Series: Antenna

PART NUMBER: W3079

OTHER SPECIFICATIONS



**Bottom side**



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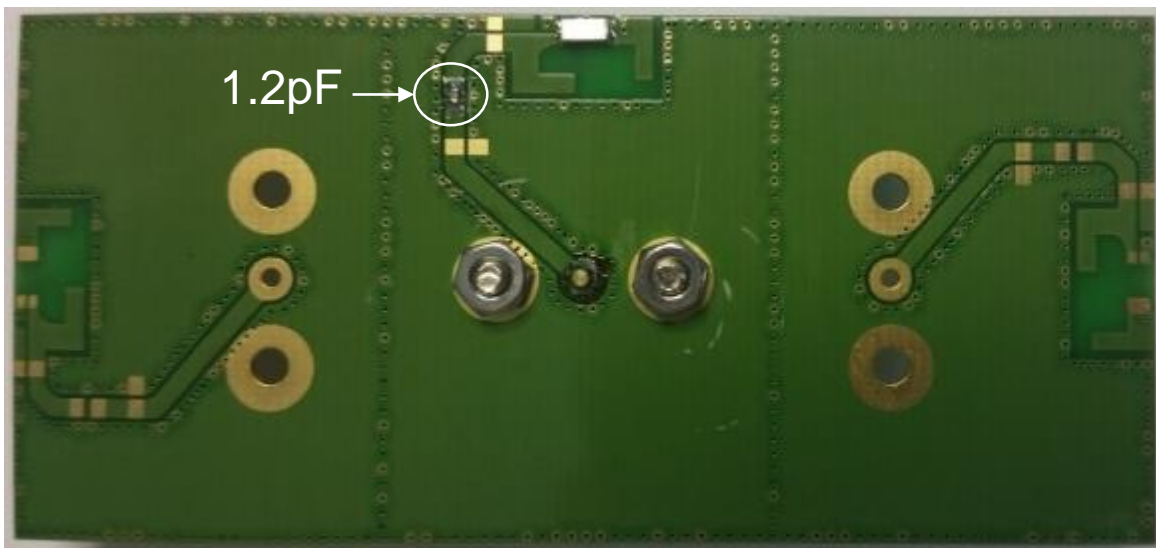
## Description: Ceramic Dual Band WLAN

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.



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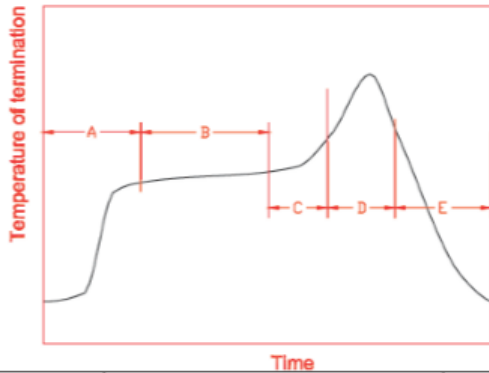
Description: Ceramic Dual Band WLAN

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.

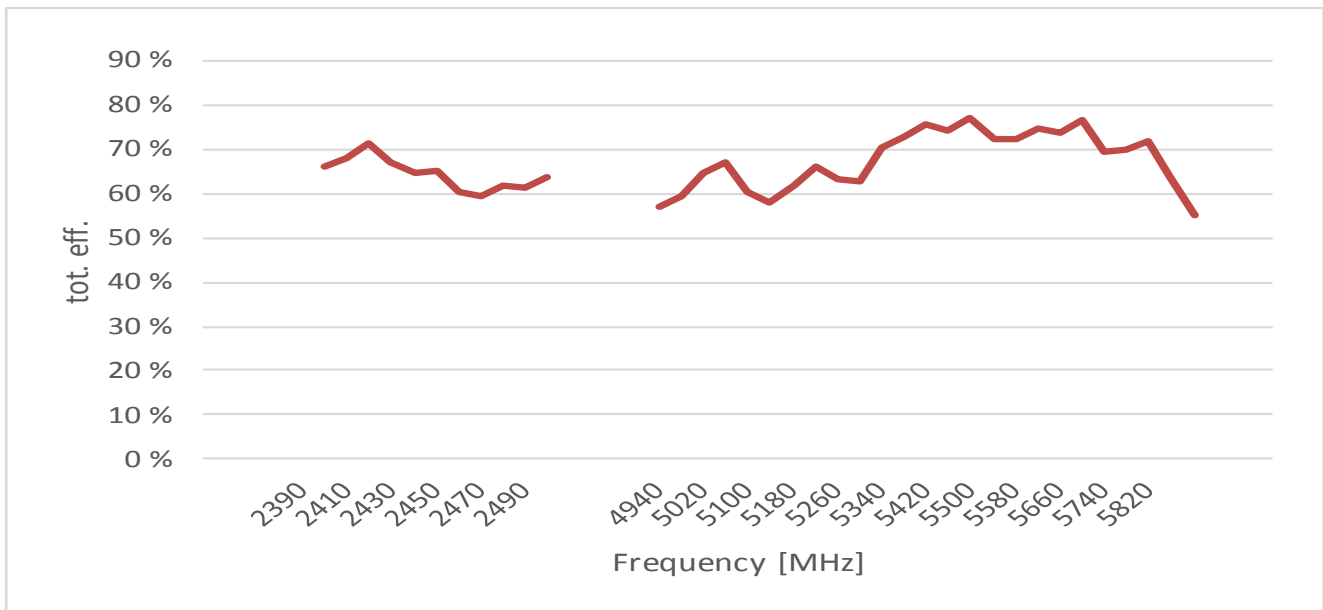
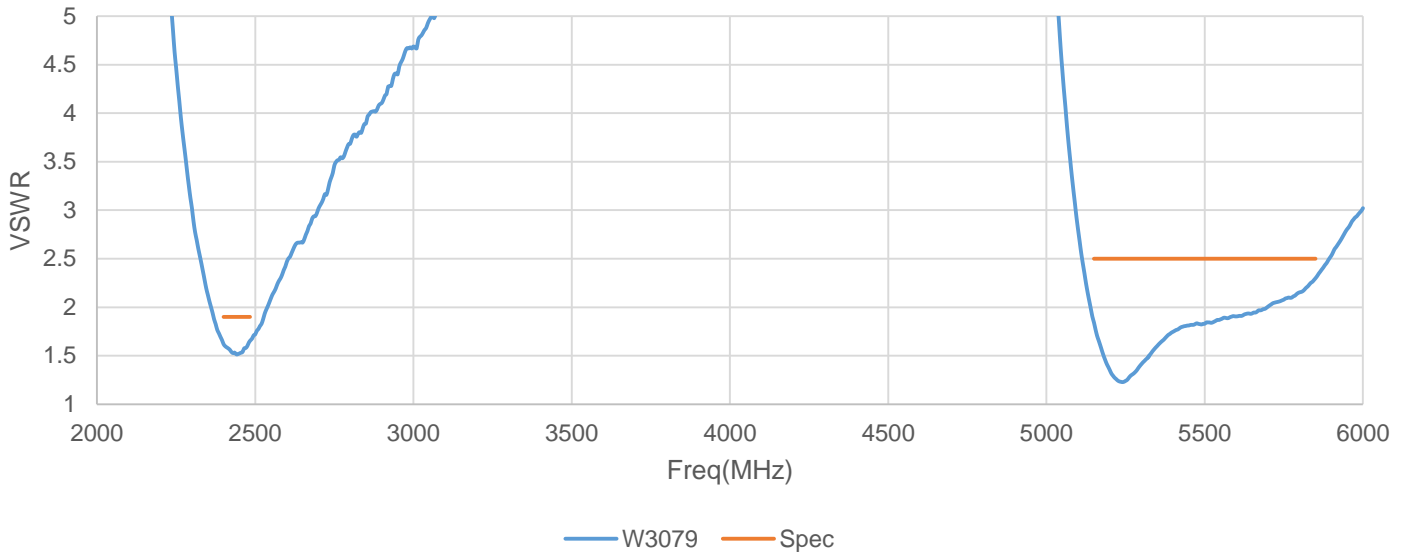
Description: Ceramic Dual Band WLAN

Series: Antenna

PART NUMBER: W3079

CHARTS

W3079\*



\* Free space measurements on Pulse reference test PCB

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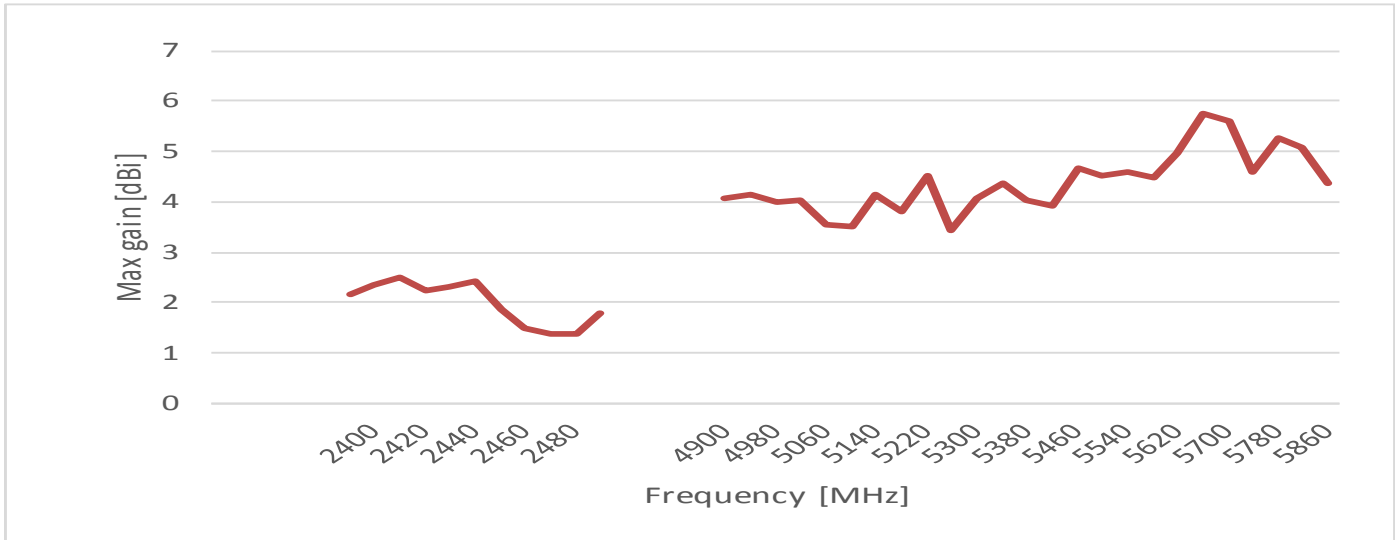


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Series: Antenna

PART NUMBER: W3079

CHARTS



\* Free space measurements on Pulse reference test PCB

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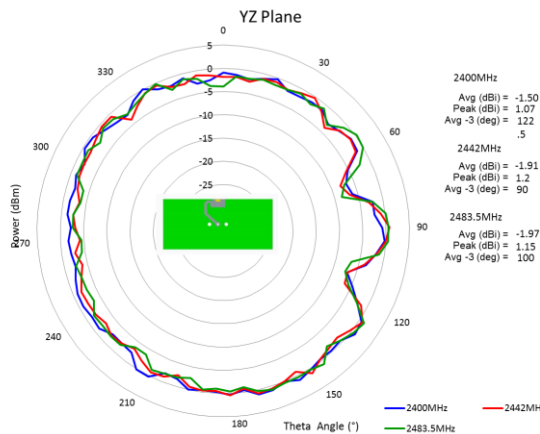
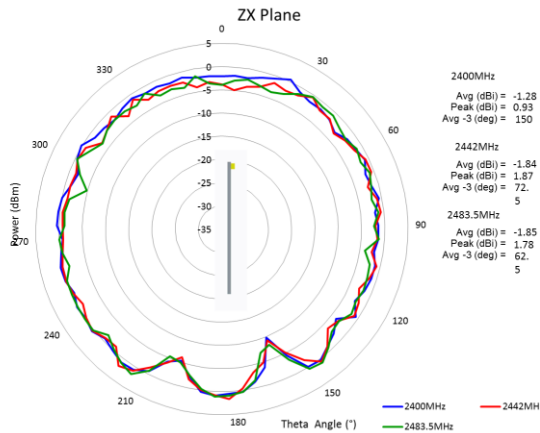
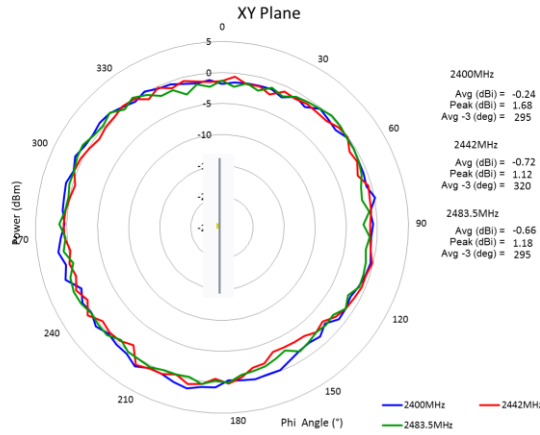
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# Description: Ceramic Dual Band WLAN

Series: Antenna

PART NUMBER: W3079

## CHARTS



\* Free space measurements on Pulse reference test PCB

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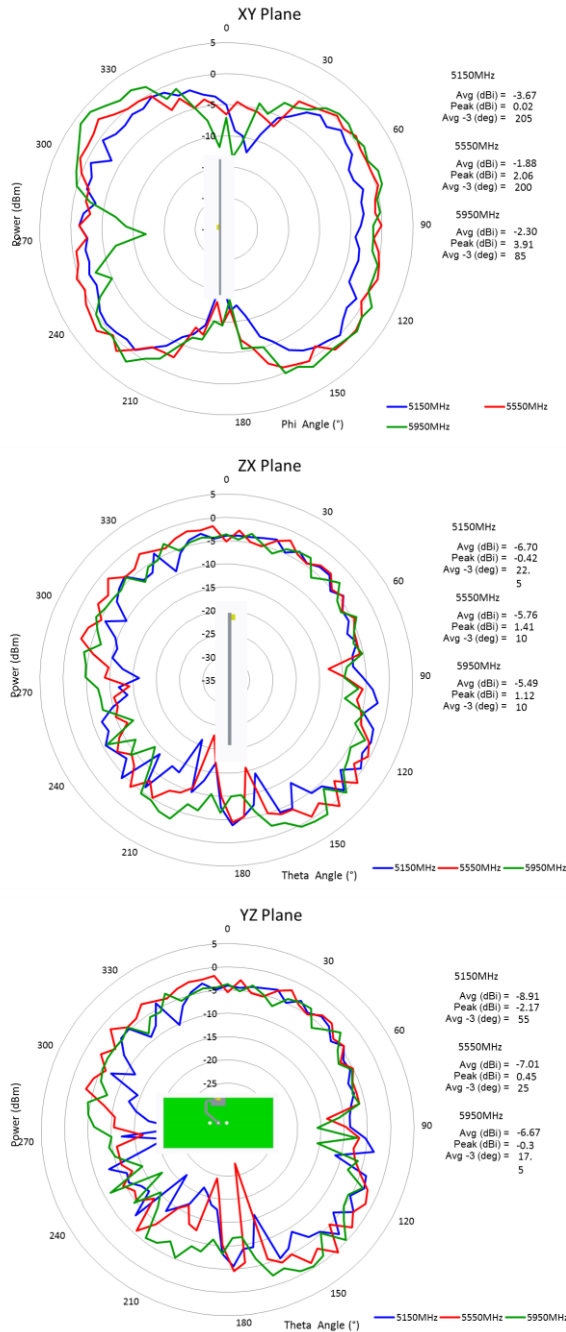
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# Description: Ceramic Dual Band WLAN

Series: Antenna

PART NUMBER: W3079

## CHARTS



\* Free space measurements on Pulse reference test PCB

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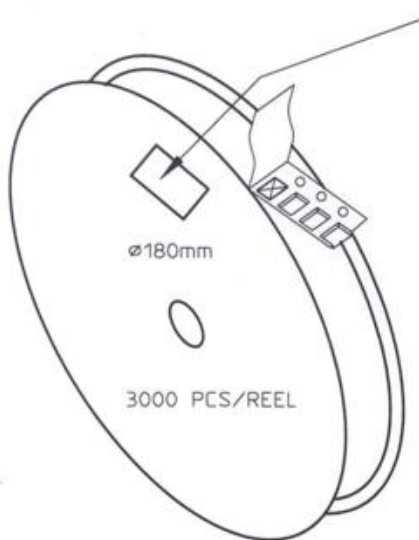
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**Description: Ceramic Dual Band WLAN**

**Series: Antenna**

**PART NUMBER: W3079**

**PACKAGING**



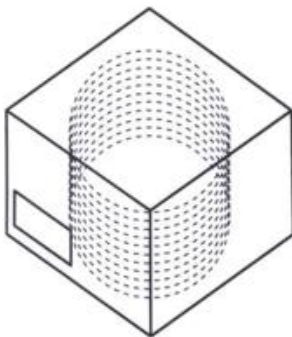
REEL LABEL INFORMATION:  
 - TRACEABILITY  
 - QUANTITY  
 - PRODUCT CODE

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 (182x182x132)	1 pcs
- LABEL	1 pcs/BOX
REEL H85-00127 (D180, W12)	10 pcs
- REEL LABEL	1 pcs/REEL

**ASSEMBLY**

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- Поставка сложных, дефицитных, либо снятых с производства позиций;
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- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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## JONHON

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«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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