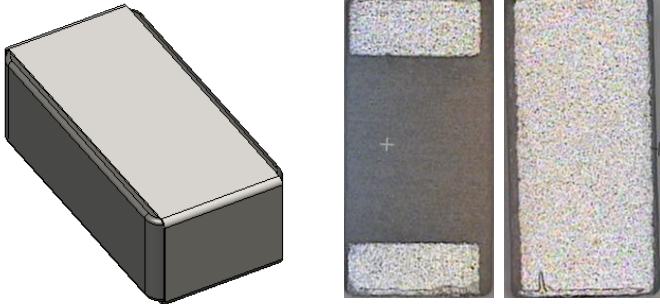


Description: Ceramic Dual Band WLAN

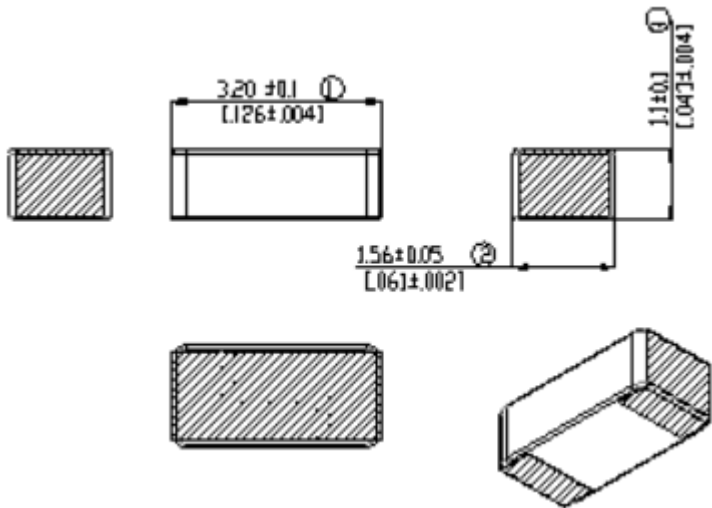
Series: Antenna

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.  
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 $\Omega$
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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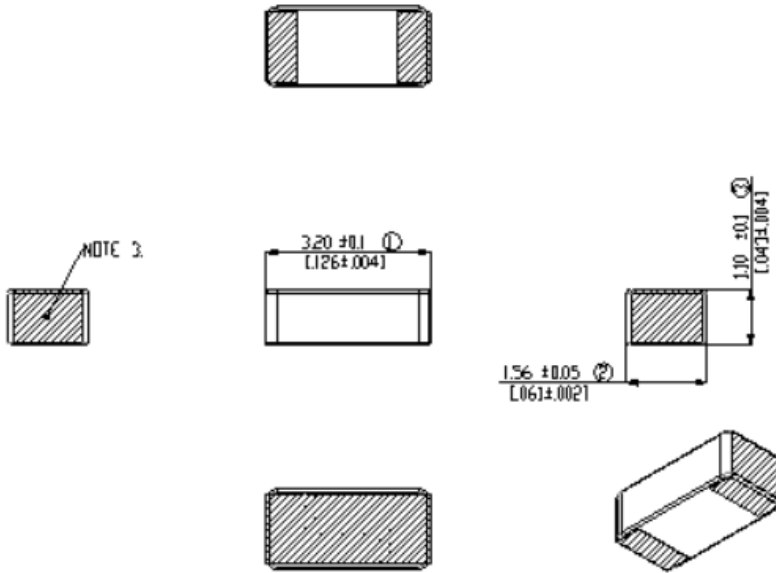
Description: Ceramic Dual Band WLAN

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	ReFlXX

(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 Systems  
Pulse Electronics  
Bangkok, Thailand  
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	Jasariet oi
		Checked	
		Approved	20150929
		Rev	Date
		Drawn	File

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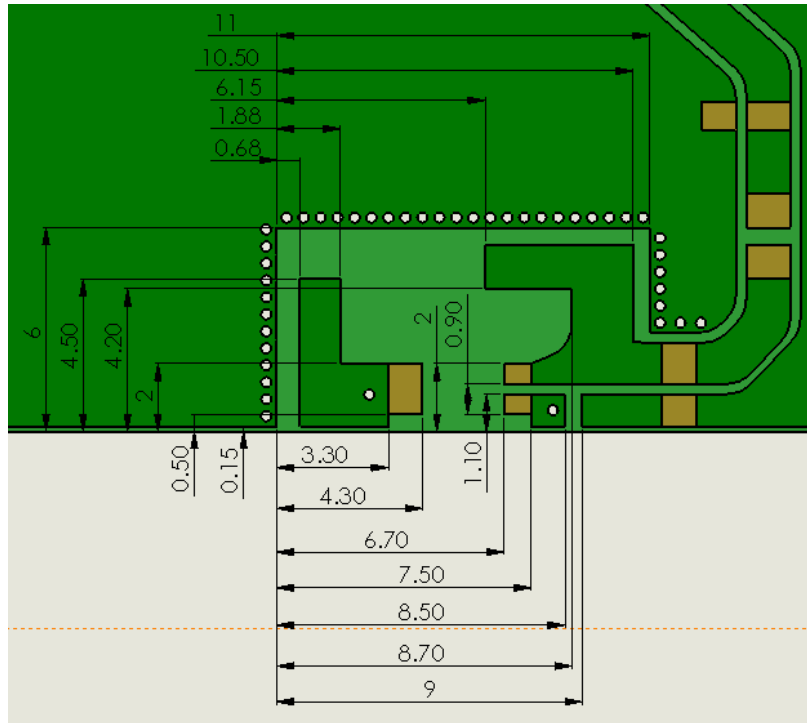
Description: Ceramic Dual Band WLAN

Series: Antenna

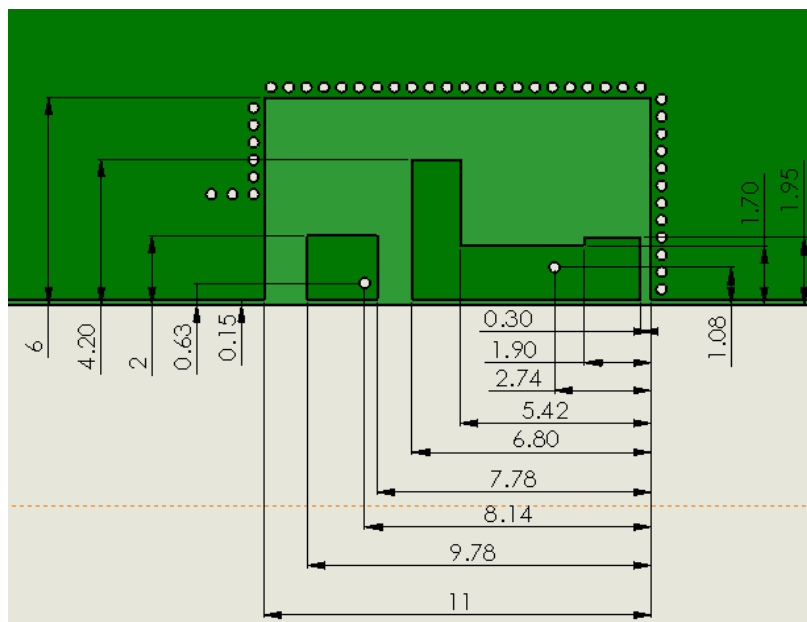
PART NUMBER: W3079

OTHER SPECIFICATIONS

Top side



Bottom side



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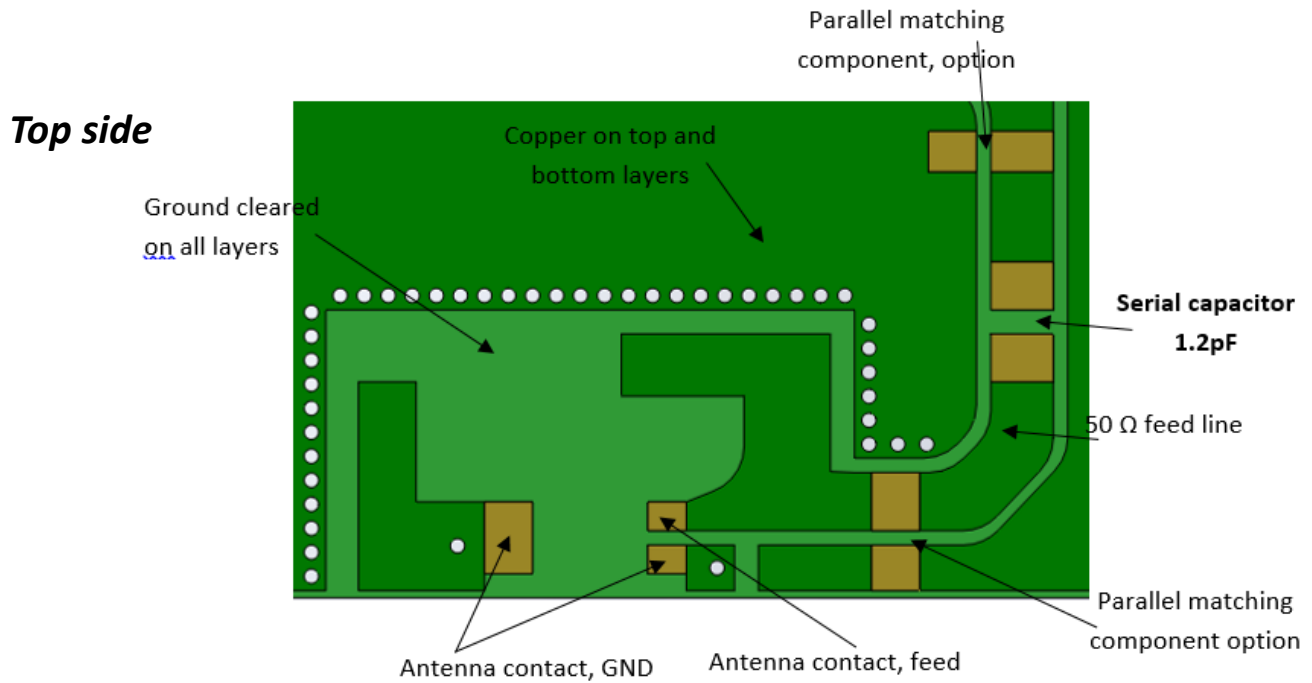
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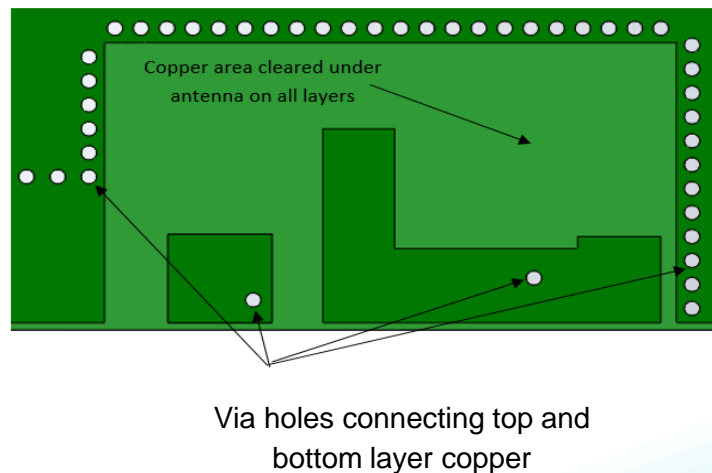
Series: Antenna

PART NUMBER: W3079

OTHER SPECIFICATIONS



**Bottom side**



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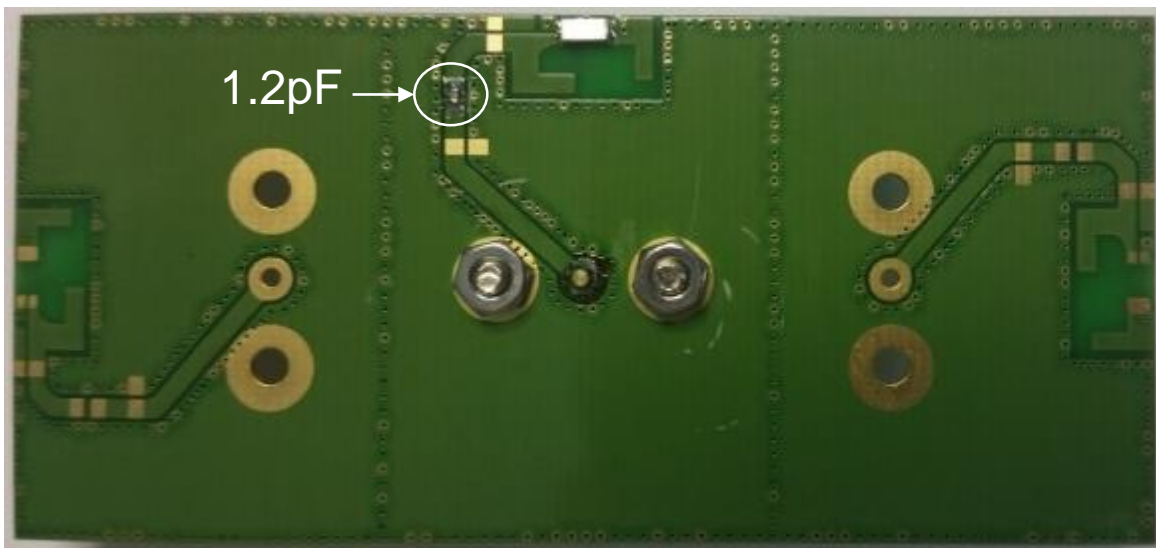
**Description: Ceramic Dual Band WLAN**

**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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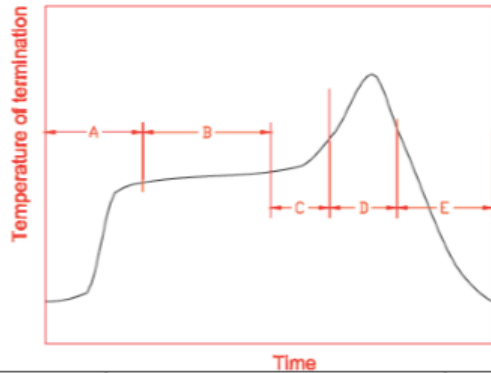
Description: Ceramic Dual Band WLAN

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.

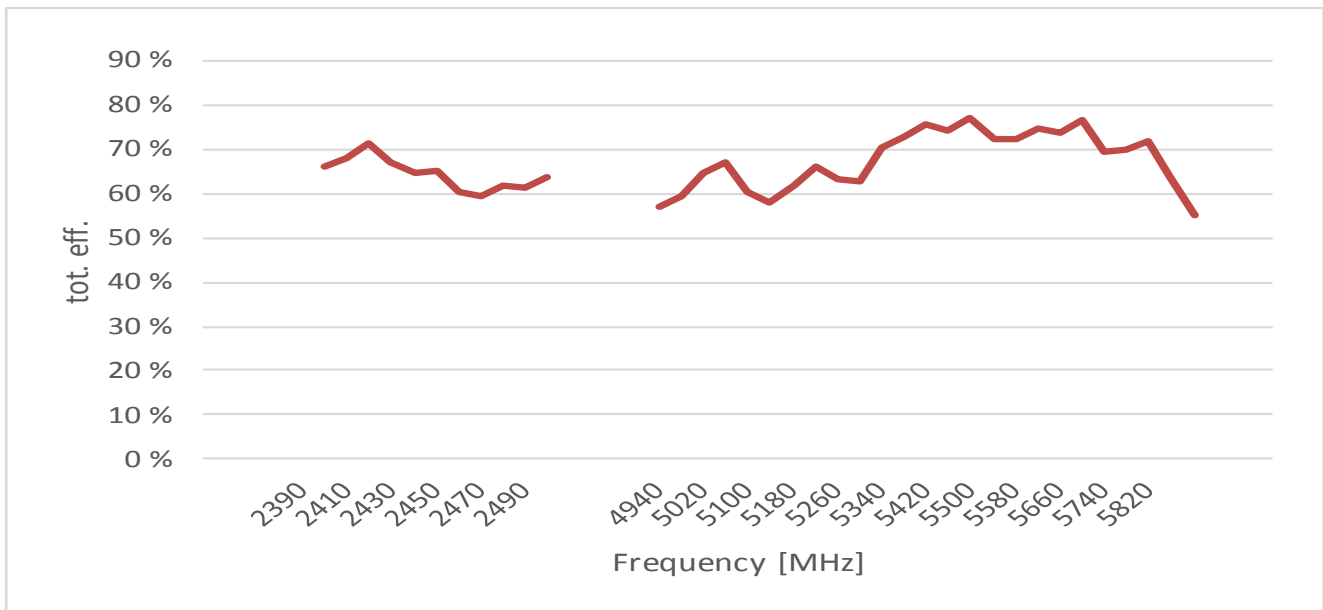
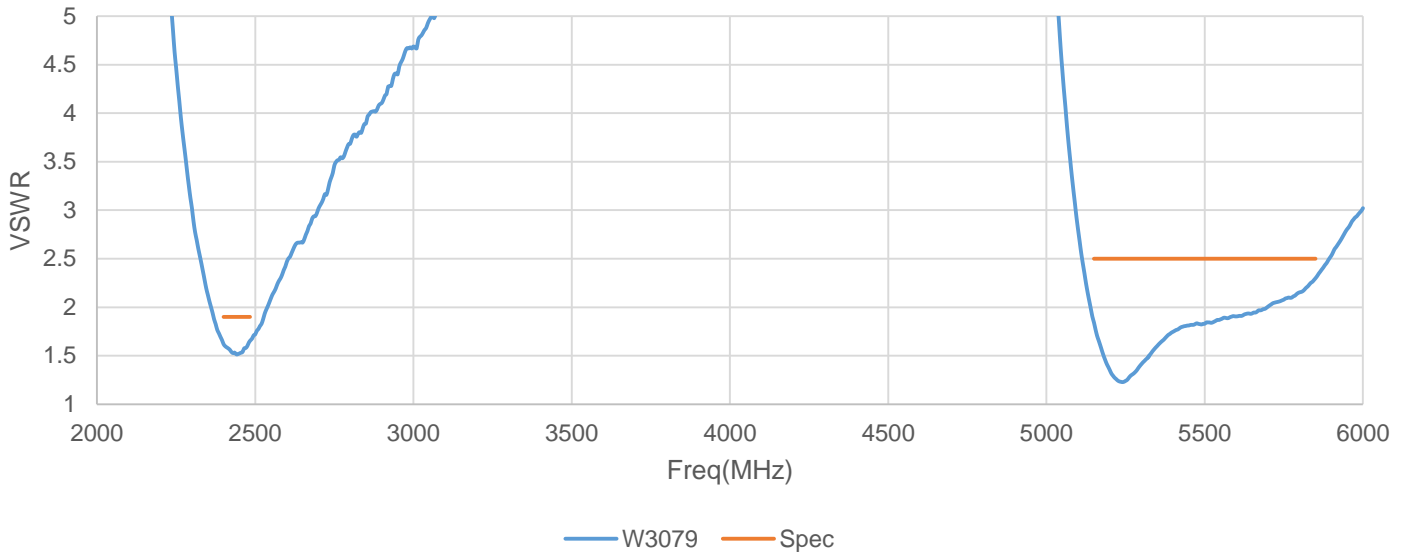
Description: Ceramic Dual Band WLAN

Series: Antenna

PART NUMBER: W3079

CHARTS

W3079\*



\* Free space measurements on Pulse reference test PCB

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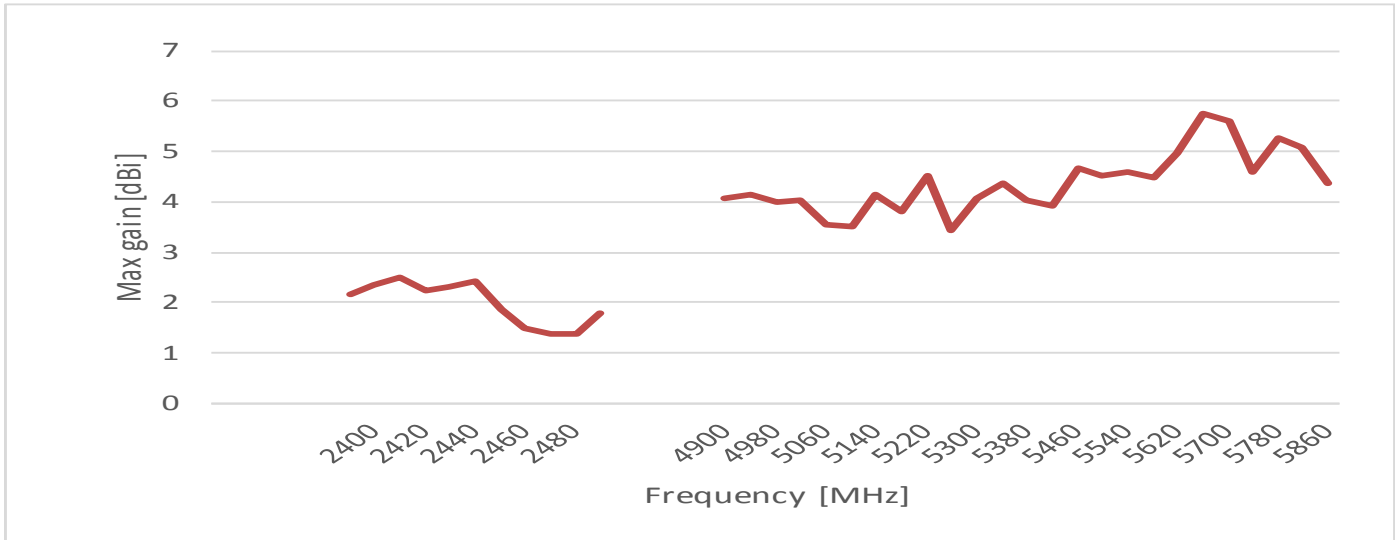


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Series: Antenna

PART NUMBER: W3079

CHARTS



\* Free space measurements on Pulse reference test PCB

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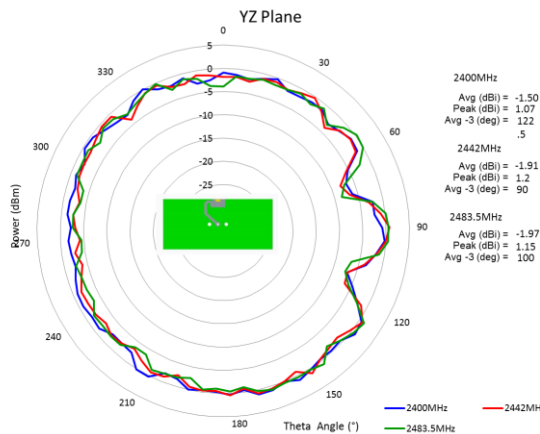
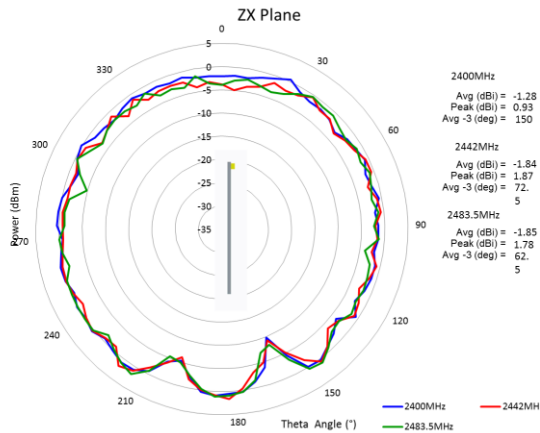
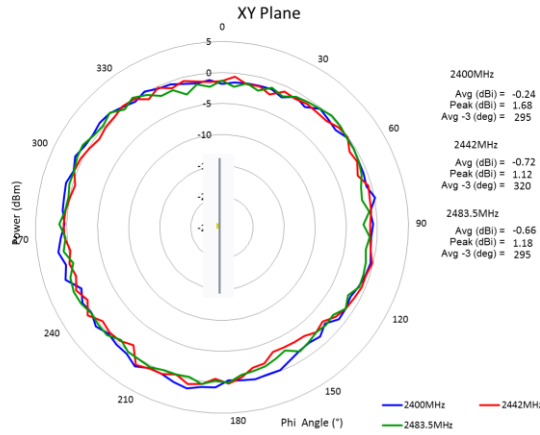
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Description: Ceramic Dual Band WLAN

Series: Antenna

PART NUMBER: W3079

CHARTS



\* Free space measurements on Pulse reference test PCB

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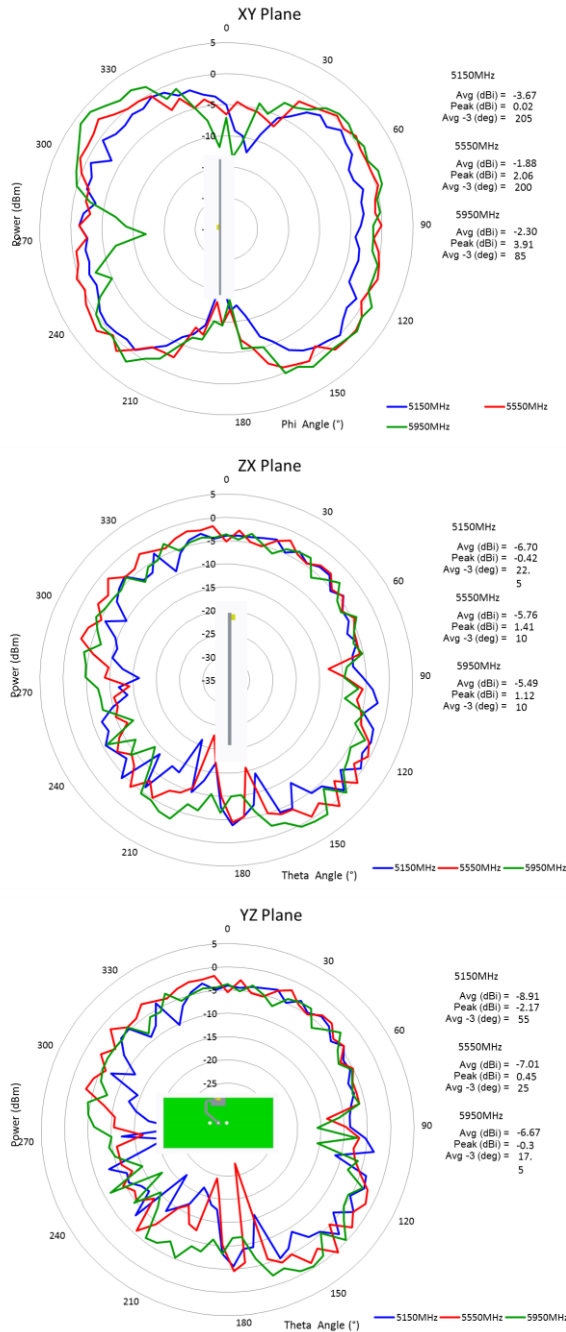
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# Description: Ceramic Dual Band WLAN

Series: Antenna

PART NUMBER: W3079

## CHARTS



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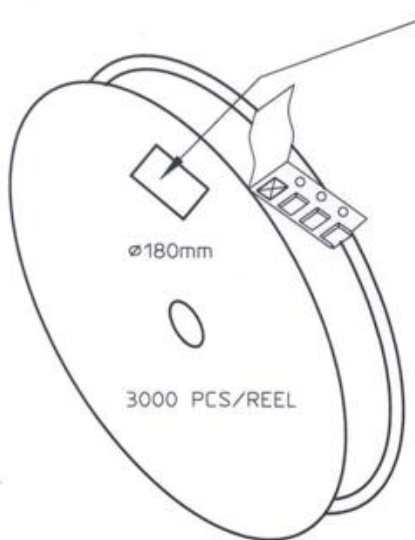
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**Description: Ceramic Dual Band WLAN**

**Series: Antenna**

**PART NUMBER: W3079**

**PACKAGING**



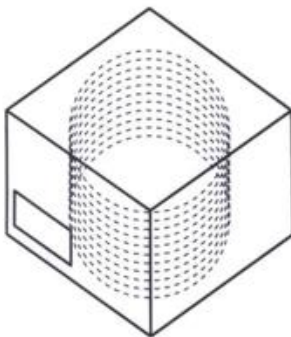
REEL LABEL INFORMATION:  
 - TRACEABILITY  
 - QUANTITY  
 - PRODUCT CODE

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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