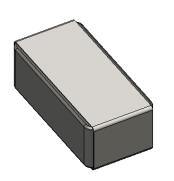


TECHNICAL DATA SHEET

Description: Ceramic Dual Band WLAN

PART NUMBER: W3079

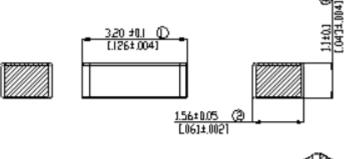
Series: Antenna

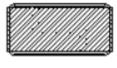


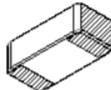


Features:

- 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: 2049

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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TECHNICAL DATA SHEET

Description: Ceramic Dual Band WLAN

PART NUMBER: W3079

Series: Antenna

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 Level 1



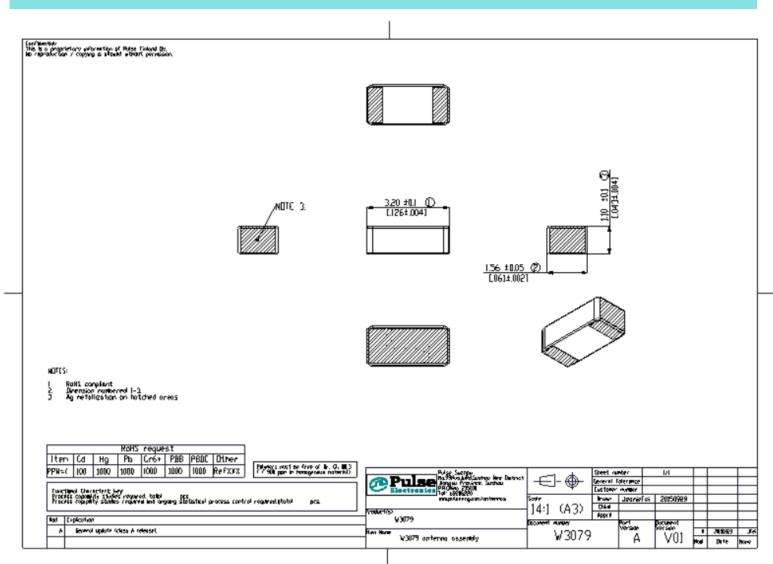


Description: Ceramic Dual Band WLAN

Series: Antenna

PART NUMBER: W3079

MECHANICAL DRAWING





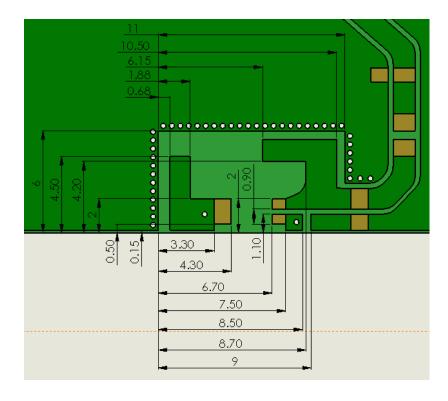


Description: Ceramic Dual Band WLAN

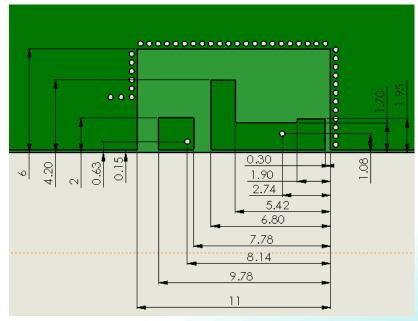
PART NUMBER: W3079

OTHER SPECIFICATIONS

Top side



Bottom side



Issue: 2049





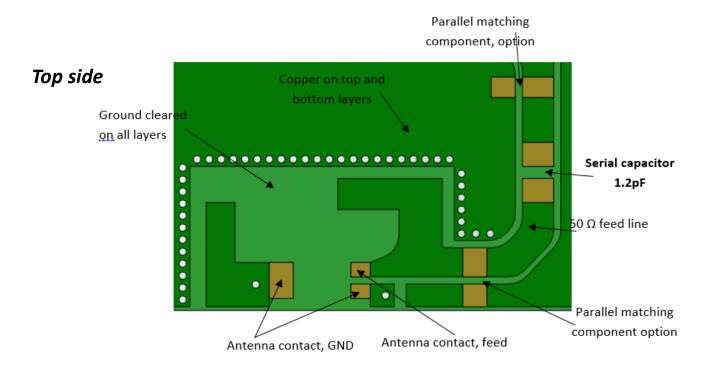


Description: Ceramic Dual Band WLAN

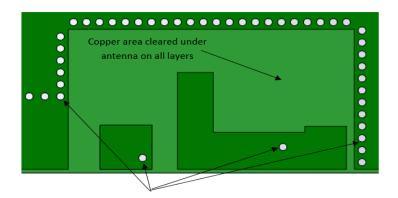
Series: Antenna

PART NUMBER: W3079

OTHER SPECIFICATIONS



Bottom side



Via holes connecting top and bottom layer copper



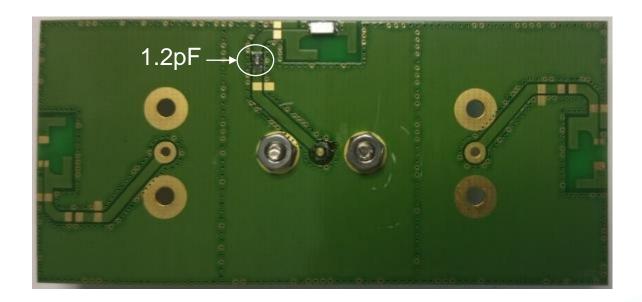


Description: Ceramic Dual Band WLAN

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.





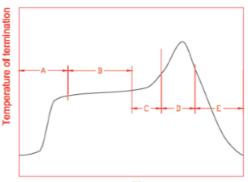


Description: Ceramic Dual Band WLAN

Series: Antenna
PART NUMBER: W3079

OTHER SPECIFICATIONS

Recommended reflow soldering



		Time	
Α	1 st rising temperature	The normal to Preheating temperature	30s to 60s
В	Preheating	140℃ to 160℃	60s to 120s
С	2 nd rising temperature	Preheating to 200℃	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
		if 260°C	20s~40s
Ε	Regular cooling	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.

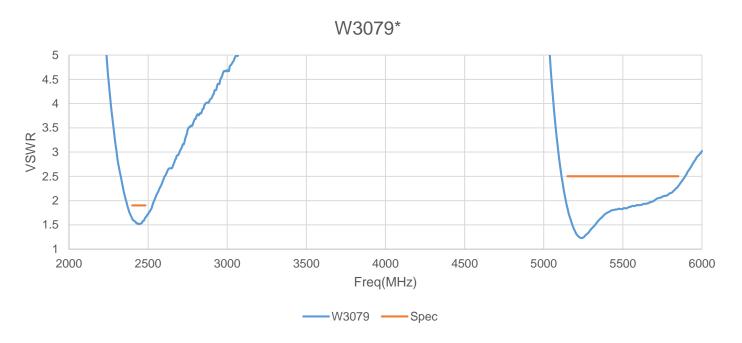


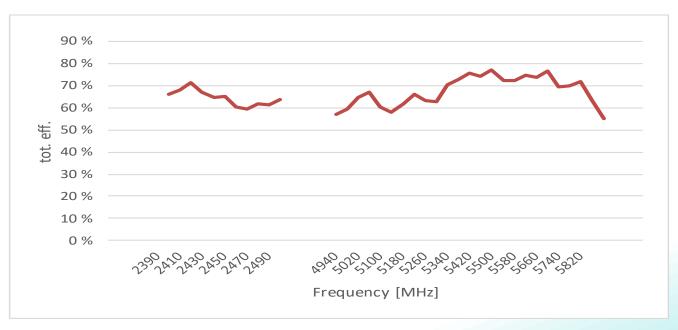


Description: Ceramic Dual Band WLAN

PART NUMBER: W3079

CHARTS





^{*} Free space measurements on Pulse reference test PCB

Issue: 2049

ROHS



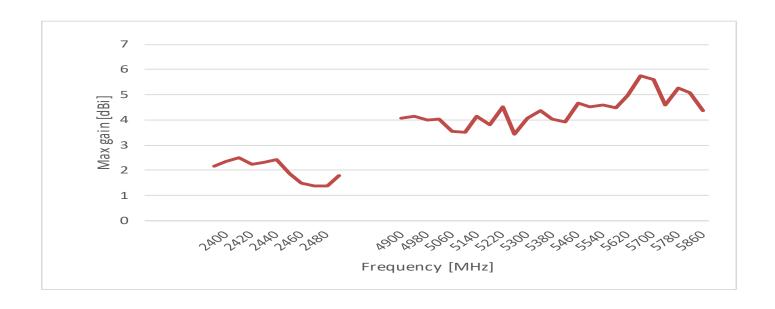
TECHNICAL DATA SHEET

Description: Ceramic Dual Band WLAN

PART NUMBER: W3079

Series: Antenna

CHARTS



* Free space measurements on Pulse reference test PCB

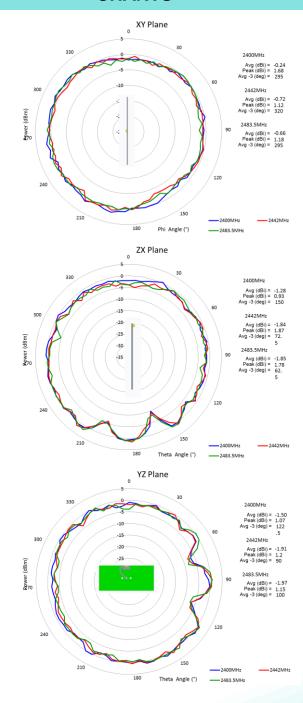




Description: Ceramic Dual Band WLAN

PART NUMBER: W3079

CHARTS



^{*} Free space measurements on Pulse reference test PCB

Issue: 2049

ROHS

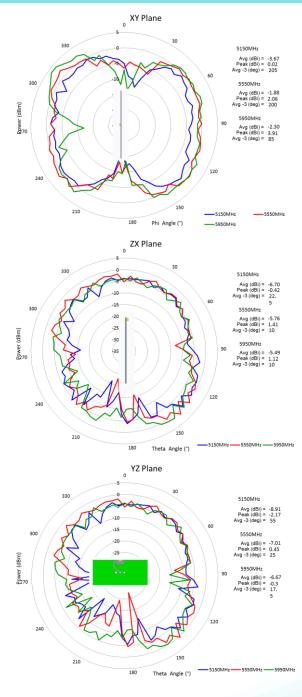




Description: Ceramic Dual Band WLAN

PART NUMBER: W3079

CHARTS



^{*} Free space measurements on Pulse reference test PCB







Description: Ceramic Dual Band WLAN

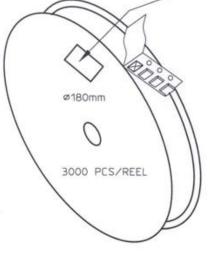
PART NUMBER: W3079

PACKAGING



REEL LABEL INFORMATION:

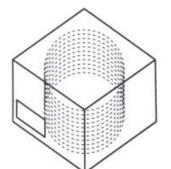
- TRACEABILITY
- QUANTITY
- PRODUCT CODE



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

10 pcs

(D180, W12)

- REEL LABEL

1 pcs/REEL

ASSEMBLY

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Pulse:

<u>W3079</u> <u>W3079-K</u>