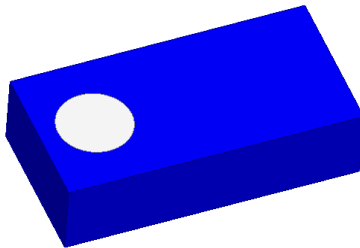


Description: 1608 2.4G&5G Chip Antenna

PART NUMBER: ANT1608LL14R2455A

Features:

- Size : 1.6x0.8x0.4 mm
- Omni-directional Radiation
- Dual-band design
- Tape & reel automatic mounting
- Reflow process compatible
- RoHS compliant



Applications:

- 2.4&5GHz WiFi device
- ISM band equipment

All dimensions are in mm / inches

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
15255 Innovation Drive #100
San Diego, CA 92128
USA
Tel: 1-858-674-8100

Pulse/Larsen Antennas
18110 SE 34th St Bldg 2 Suite 250
Vancouver, WA 98683
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,4th Phase
Suzhou New District
Jiangsu Province, Suzhou 215009 PR China
Tel: 86 512 6807 9998

Description: 1608 2.4G&5G Chip Antenna

PART NUMBER: ANT1608LL14R2455A

ELECTRICAL SPECIFICATIONS

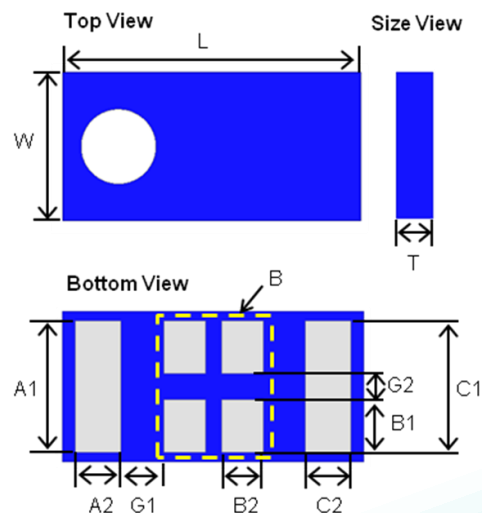
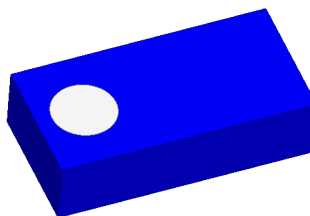
Working Frequency	2.45G / 5.5G Hz
Bandwidth	120 / 900M Hz(Typ.)
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	3.11 / 3.43 dBi(Typ.)
Impedance	50 Ω
Operating Temperature	- 40~105 °C
Maximum Power	1 W
Termination	Ag (Environmentally-Friendly Leadless)
Resistance to Soldering Heats	260°C , 10sec.

NOTE

1. The specification is defined on Pulse evaluation board

MECHANICAL DRAWING

	Dimension
L (mm)	1.60 ±0.15
W (mm)	0.80 ±0.15
T (mm)	0.40 ±0.15
A1(mm)	0.70 ±0.15
A2(mm)	0.25 ±0.15
B1(mm)	0.30 ±0.15
B2(mm)	0.25 ±0.15
C1(mm)	0.70 ±0.15
C2(mm)	0.25 ±0.15
G1(mm)	0.20 ±0.05
G2(mm)	0.10 ±0.05



Terminal name	Function
B	Feeding Point
A1,A2	Soldering Point for 2.4GHz
C1,C2	Soldering Point for 5GHz

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

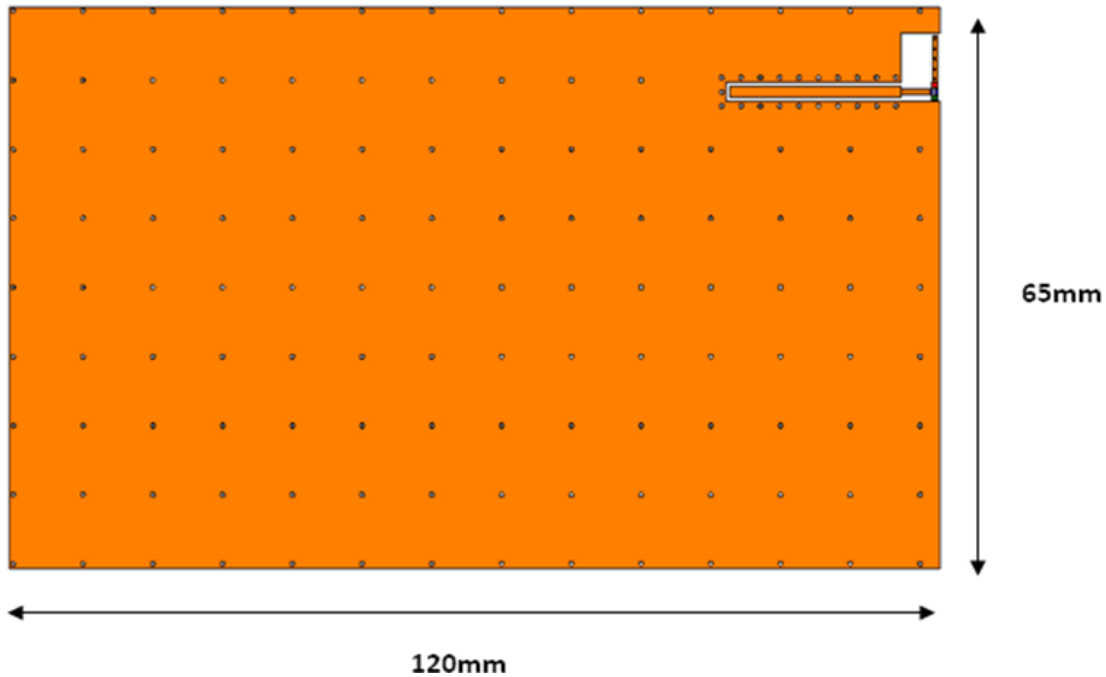
CONFIDENTIAL AND PROPRIETARY INFORMATION

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: 1608 2.4G&5G Chip Antenna

PART NUMBER: ANT1608LL14R2455A

REFERENCE DESIGN OF EVALUATION BOARD



Outlook and dimension of evaluation board

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

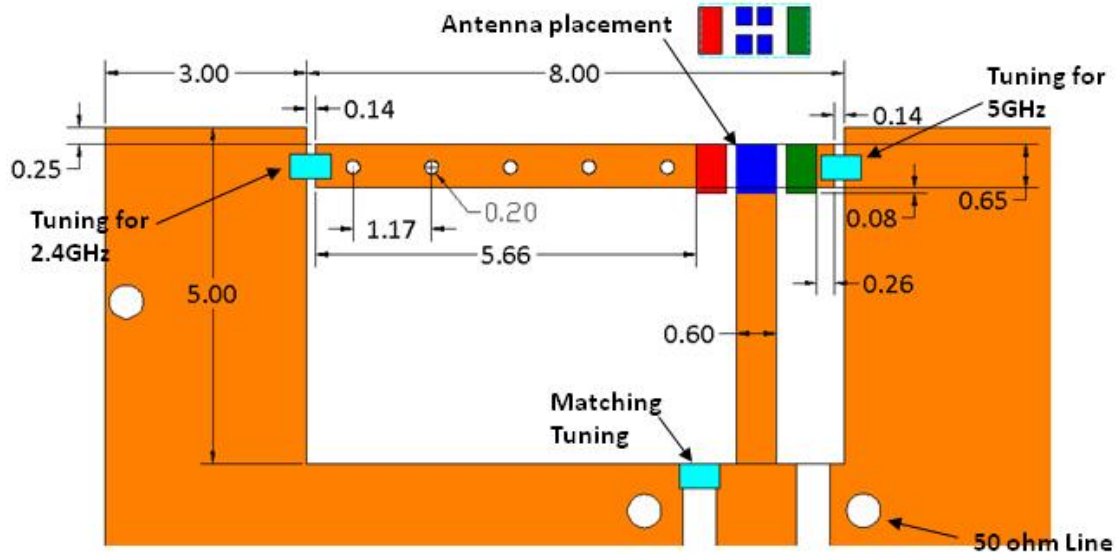
CONFIDENTIAL AND PROPRIETARY INFORMATION

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.

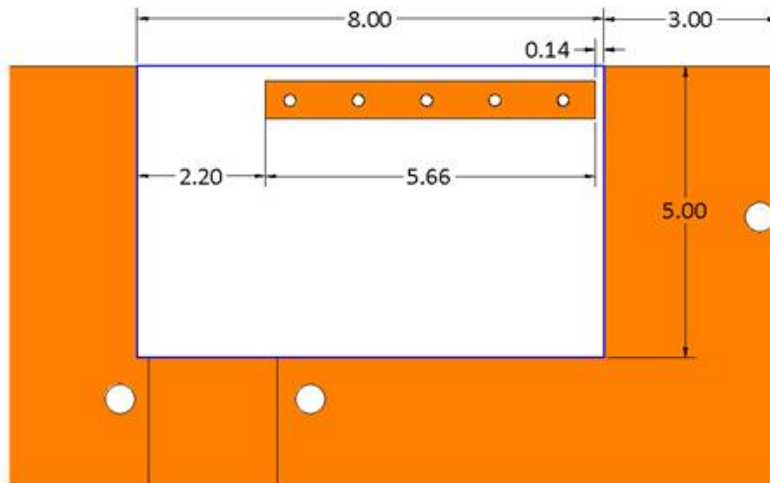
Description: 1608 2.4G&5G Chip Antenna

PART NUMBER: ANT1608LL14R2455A

REFERENCE DESIGN OF EVALUATION BOARD



Top Layer



Bottom Layer

Unit : mm

Details of soldering Pad

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

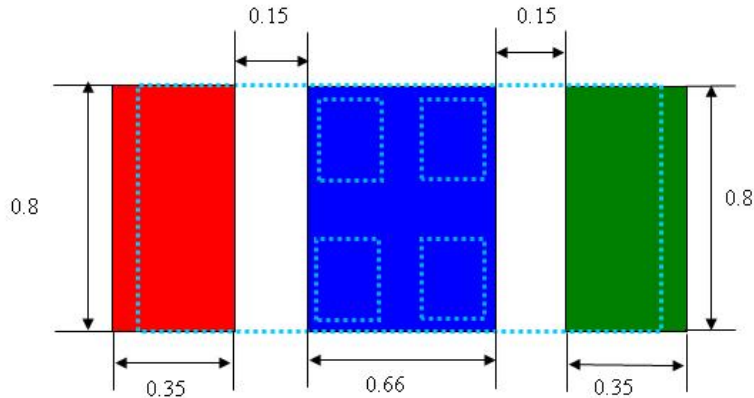
CONFIDENTIAL AND PROPRIETARY INFORMATION

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: 1608 2.4G&5G Chip Antenna

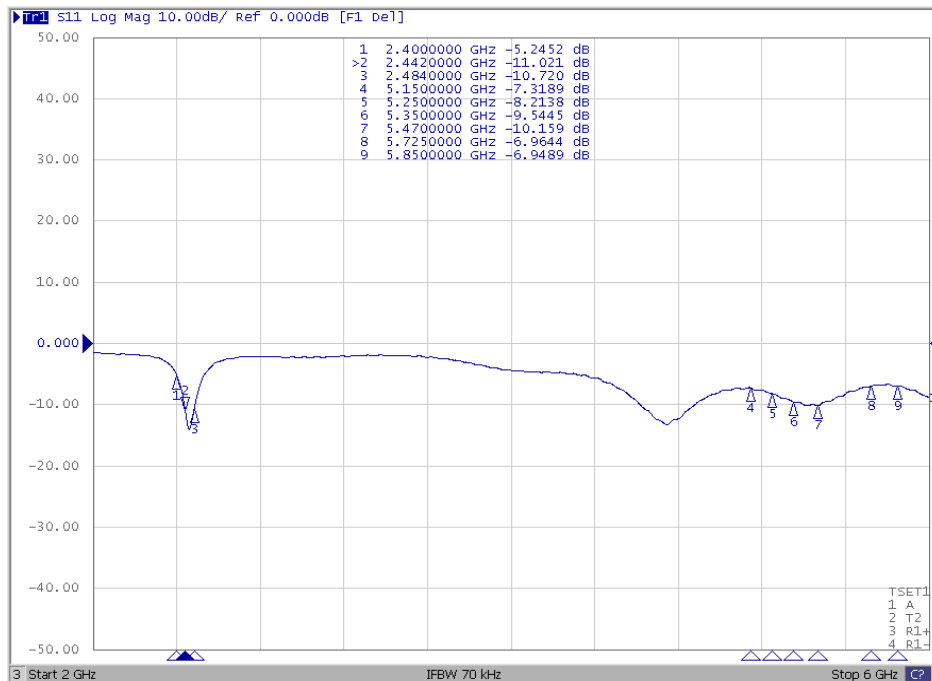
PART NUMBER: ANT1608LL14R2455A

REFERENCE DESIGN OF EVALUATION BOARD



- Footprint for 2.4GHz
 - Footprint for Feeding
 - Footprint for 5GHz
 - Antenna outline
- Unit : mm

Footprint



Return loss

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

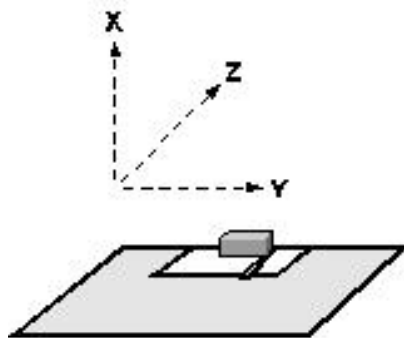
This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything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

Description: 1608 2.4G&5G Chip Antenna

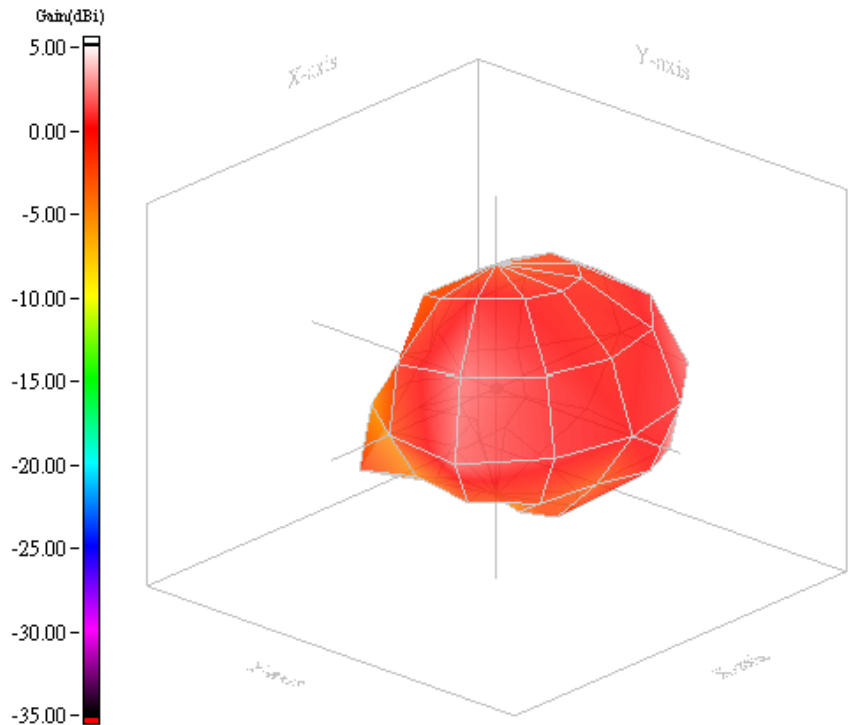
PART NUMBER: ANT1608LL14R2455A

ELECTRICAL PERFORMANCES

Model name	1608	Test mode	DB
Test frequency / Polarization	2450.00 MHz / Vector	Test date	2014/11/6



Evaluation board and XYZ direction



Max gain= 3.11dBi, at (120, 150)
MEG (mean effective gain)= -2.69dBi
Directivity(dB)= 5.31
Efficiency=-2.20dB, 60.28%

Radiation pattern

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

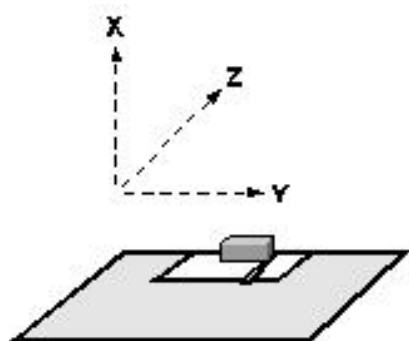
This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything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

Description: 1608 2.4G&5G Chip Antenna

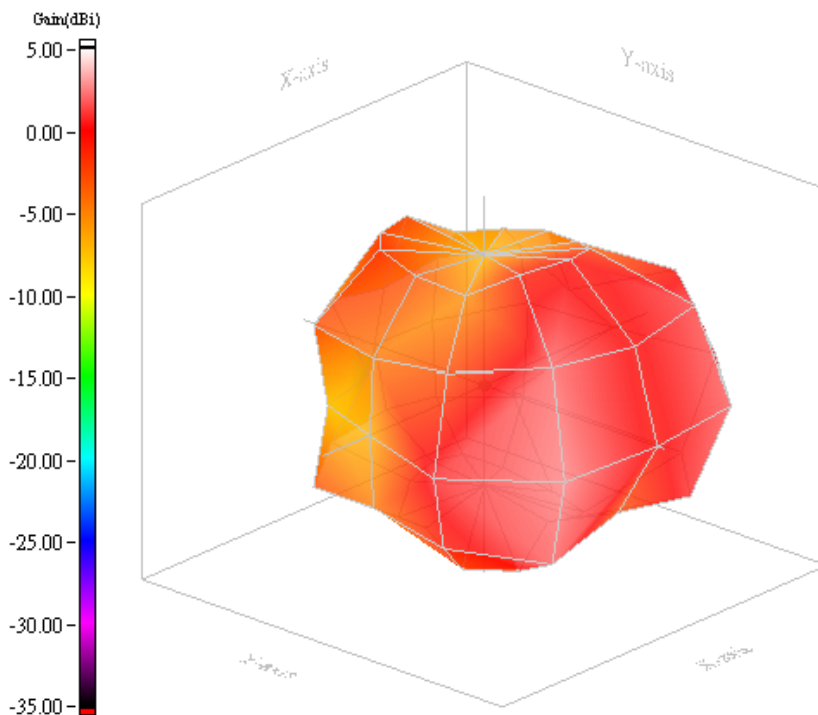
PART NUMBER: ANT1608LL14R2455A

ELECTRICAL PERFORMANCES

Model name	1608	Test mode	DB
Test frequency / Polarization	5470.00 MHz / Vector	Test date	2014/11/6



Evaluation board and XYZ direction



Max gain= 2.50dBi, at (90, 60)
MEG (mean effective gain)= -3.79dBi
Directivity(dB)= 5.07
Efficiency= -2.57dB, 55.28%

Radiation pattern

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: 1608 2.4G&5G Chip Antenna

PART NUMBER: ANT1608LL14R2455A

REVISION HISTORY

Revision	Date	Description
Version 1	Oct. 13, 2020	- New issue

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.