

Description: 2012 2.4-2.5GHz Chip Antenna

PART NUMBER: ANT2012LL13R2400A

Features:

- Size : 2.00x1.25x1.00 mm
- Omni-directional radiation
- Tape & reel automatic mounting
- Reflow process compatible
- RoHS compliant

Applications:

- 2.4 GHz WiFi device
- Bluetooth gadget
- Zigbee device
- ISM band equipment

ELECTRICAL SPECIFICATIONS

Working Frequency	2.45 GHz
Bandwidth	85 MHz(Typ.)
Return Loss	6dBi min.
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	2.72 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

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 & Co, KG
 Zeppelinstrasse 15
 Herrenberg, Germany
 Tel: 49 7032 7806 0

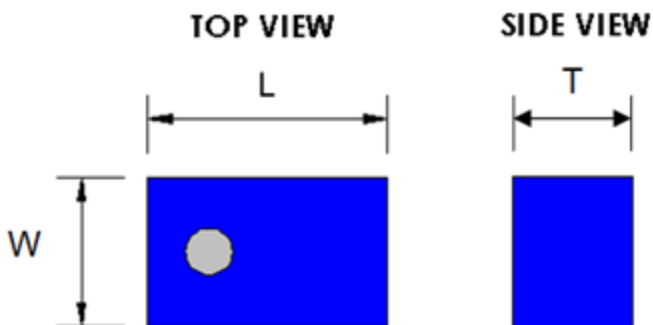
 Pulse (Suzhou) Wireless Products Co, Inc.
 99 Huo Ju Road(#29 Bldg,4th Phase
 Suzhou New District
 Jiangsu Province, Suzhou 215009 PR China
 Tel: 86 512 6807 9998

Description: 2012 2.4-2.5GHz Chip Antenna

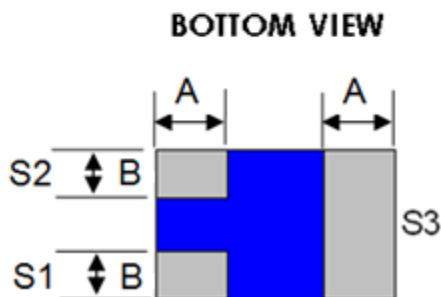
PART NUMBER: ANT2012LL13R2400A

MECHANICAL DRAWING

	Dimension
L (mm)	2.00 ± 0.20
W (mm)	1.25 ± 0.20
T (mm)	1.00 ± 0.20
A (mm)	0.60 ± 0.10
B (mm)	0.40 ± 0.10



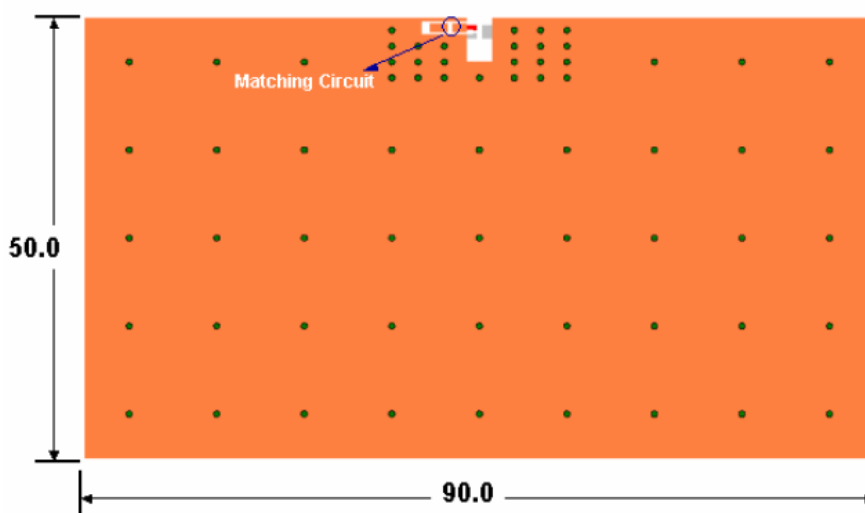
Terminal name	Function
S1	Feeding Point
S2	GND
S3	GND



Description: 2012 2.4-2.5GHz Chip Antenna

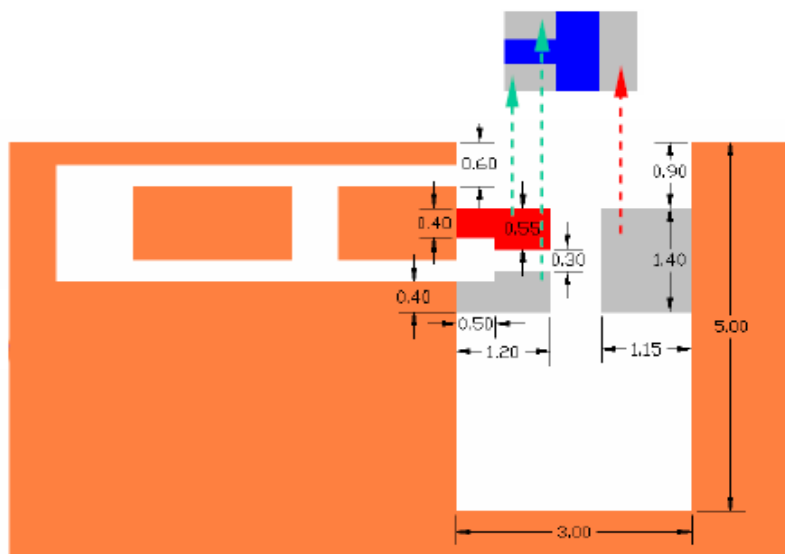
PART NUMBER: ANT2012LL13R2400A

REFERENCE DESIGN OF EVALUATION BOARD



■ Copper
 ● Ground via hole
 ■ Feed contact
 ■ Ground contact
 Unit: mm

Outlook and dimension of evaluation board



Unit: mm

Dimension of footprint

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

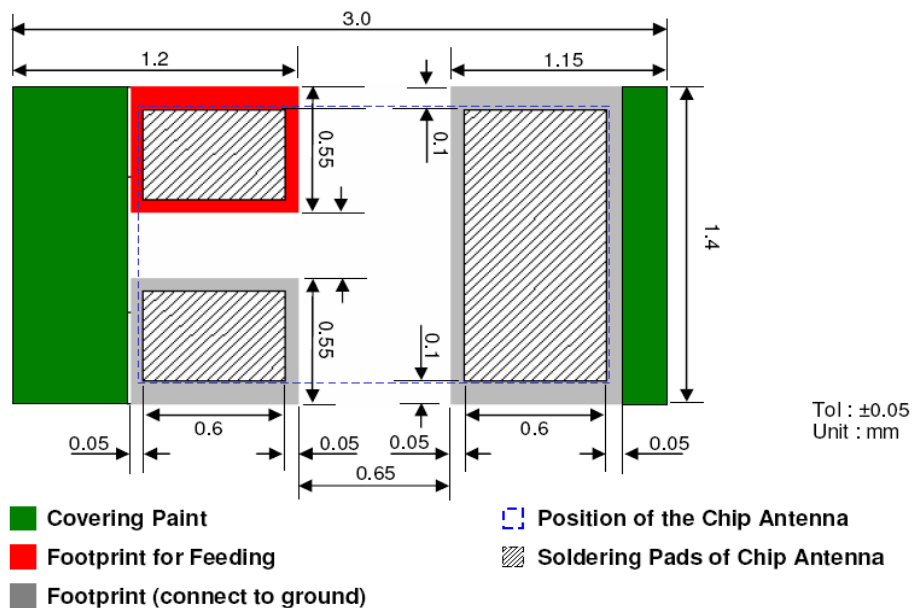
CONFIDENTIAL AND PROPRIETARY INFORMATION

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.

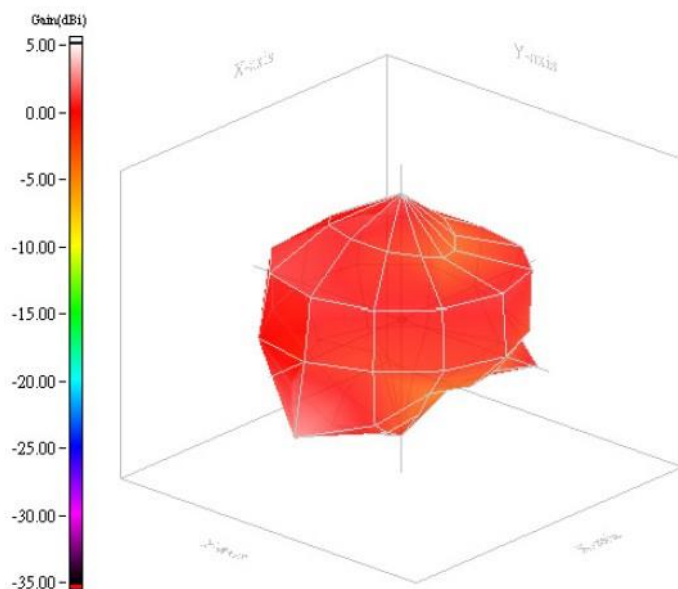
Description: 2012 2.4-2.5GHz Chip Antenna

PART NUMBER: ANT2012LL13R2400A

REFERENCE DESIGN OF EVALUATION BOARD



Details of soldering pad



Frequency = 2.45 GHz
Max gain = 2.72dBi, at (120,0)
MEG (mean effective gain) = -0.69 dBi
Directivity (dB) = 3.88
Efficiency = -1.16dB, 76.56%

Radiation pattern

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

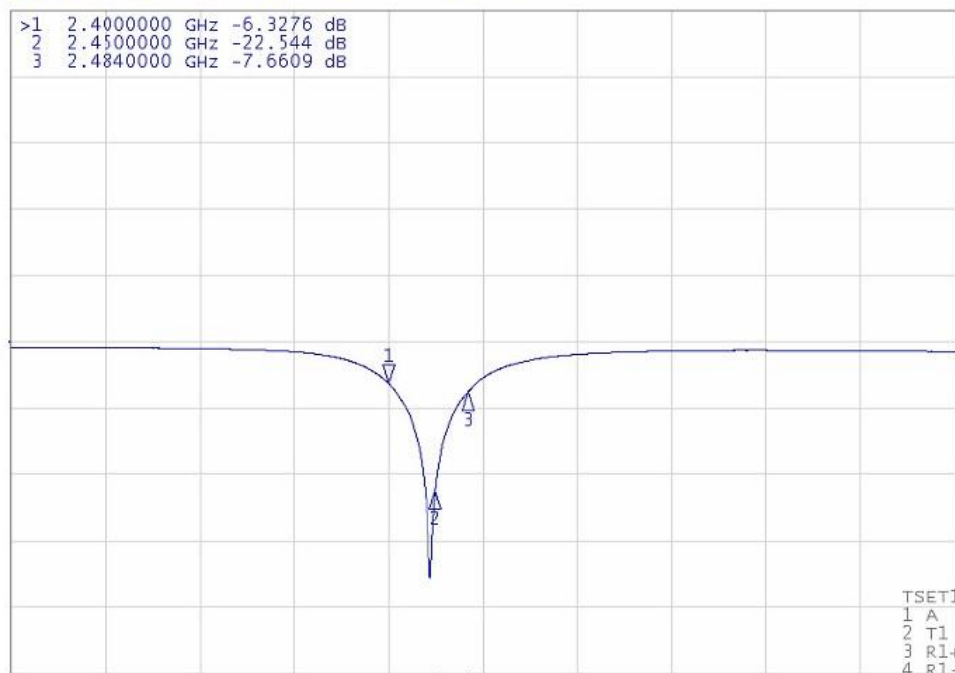
This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything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

Description: 2012 2.4-2.5GHz Chip Antenna

PART NUMBER: ANT2012LL13R2400A

ELECTRICAL PERFORMANCES

Tr1 S11 Log Mag 10.00dB/ Ref 0.000dB [F2 Del]



Maker data

1. 2.40GHz, -6.3276dB
2. 2.45GHz, -22.544dB
3. 2.48GHz, -7.6609dB

Return loss

Description: 2012 2.4-2.5GHz Chip Antenna

PART NUMBER: ANT2012LL13R2400A

REVISION HISTORY

Revision	Date	Description
Version 1	Nov. 19, 2020	- New issue
Version 2	April. 6, 2021	- Modified MECHANICAL DRAWING: S1 and S2 label