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Pulse | LARSEN Antennas
A YAGEO Company

TECHNICAL DATA SHEET

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 ℃
Maximum Power	1 W
Termination	Ag (Environmentally-Friendly Leadless)
Resistance to Soldering Heats	260℃ , 10sec.

NOTE
1. The specification is defined on Pulse evaluation board

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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

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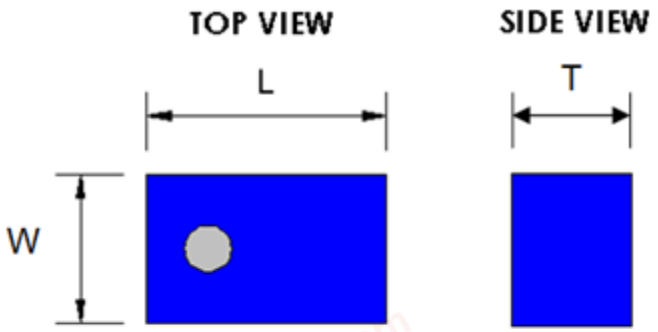
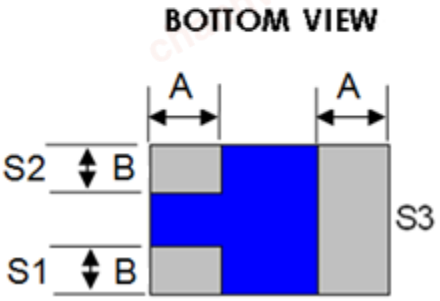
MECHANICAL DRAWING

	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



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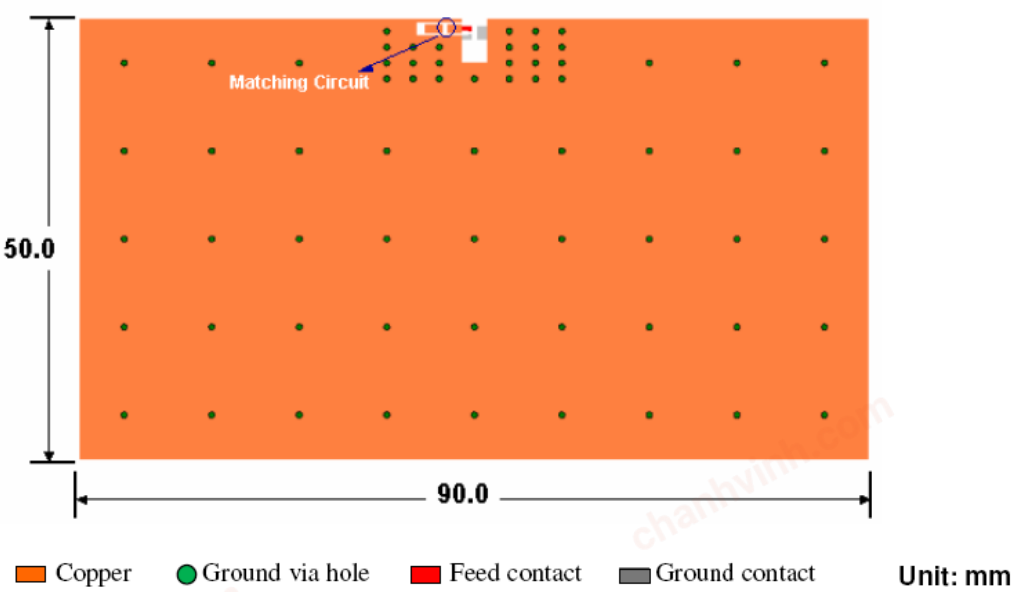
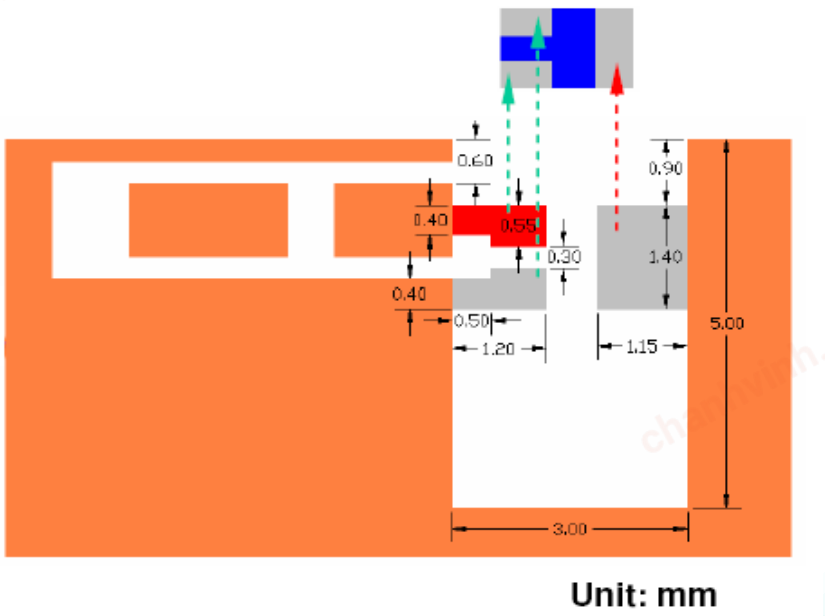
REFERENCE DESIGN OF EVALUATION BOARD



Outlook and dimension of evaluation board



Dimension of footprint

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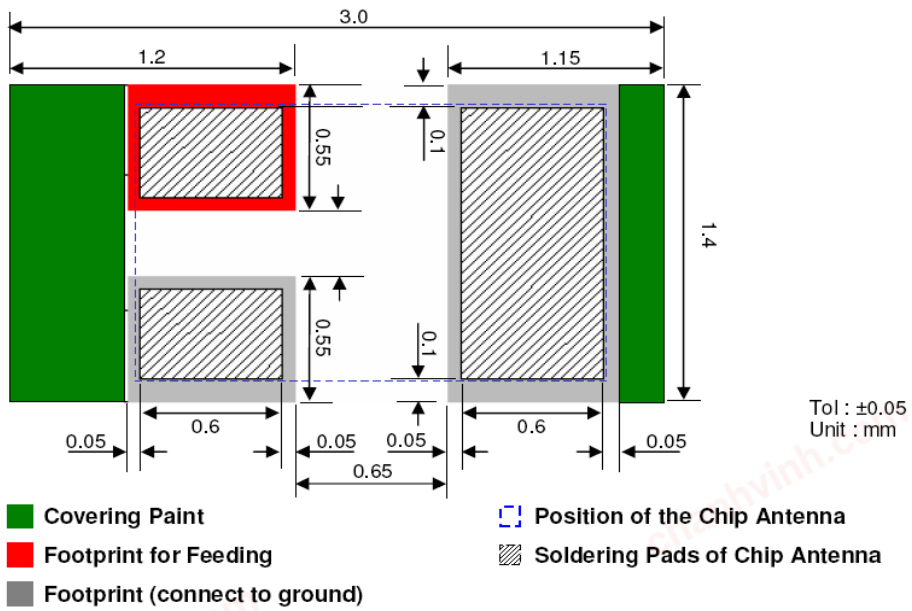
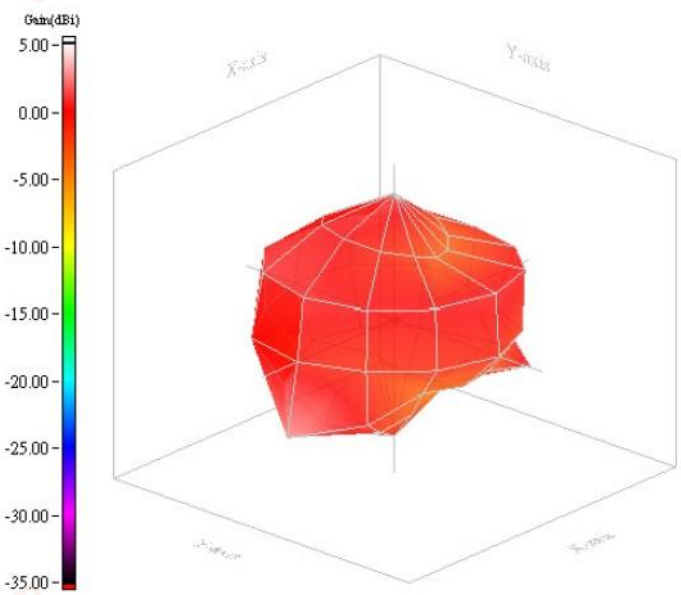


Details of soldering pad



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

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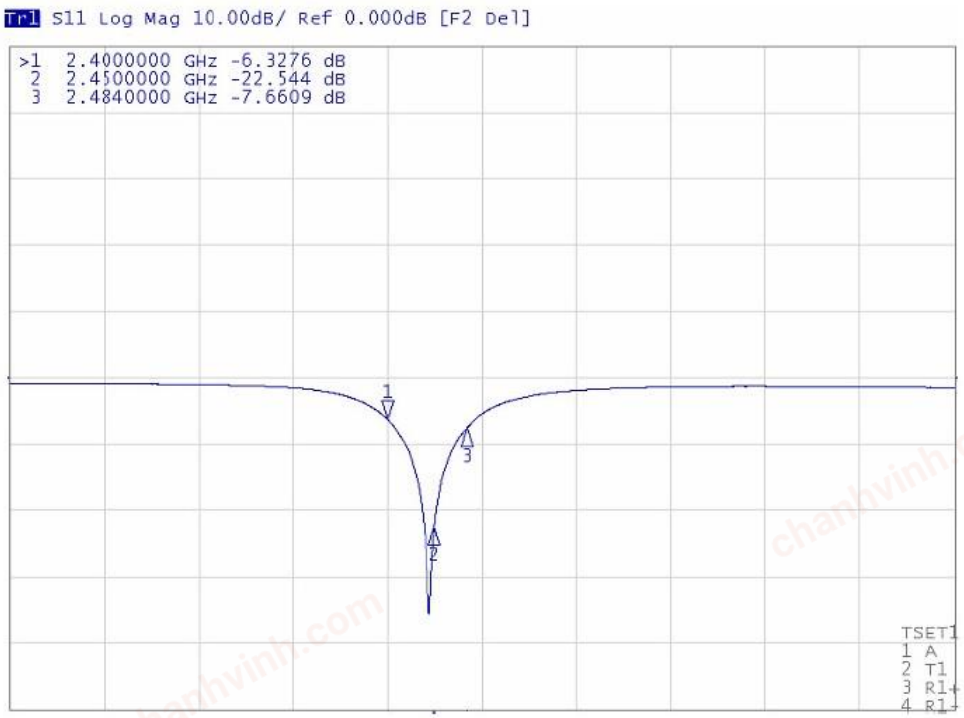
ELECTRICAL PERFORMANCES



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

Return loss

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REVISION HISTORY

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

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