

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.

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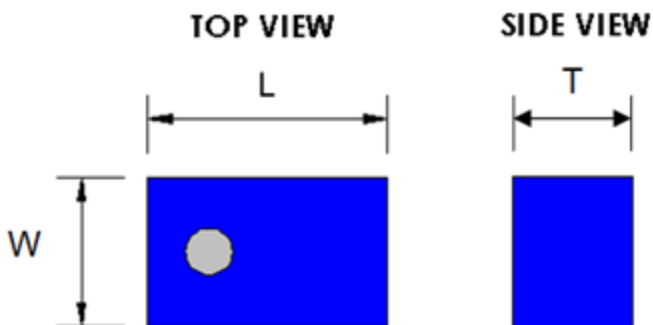
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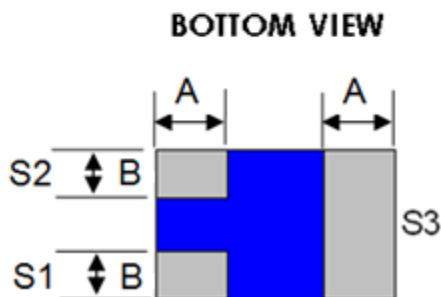
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MECHANICAL DRAWING

	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



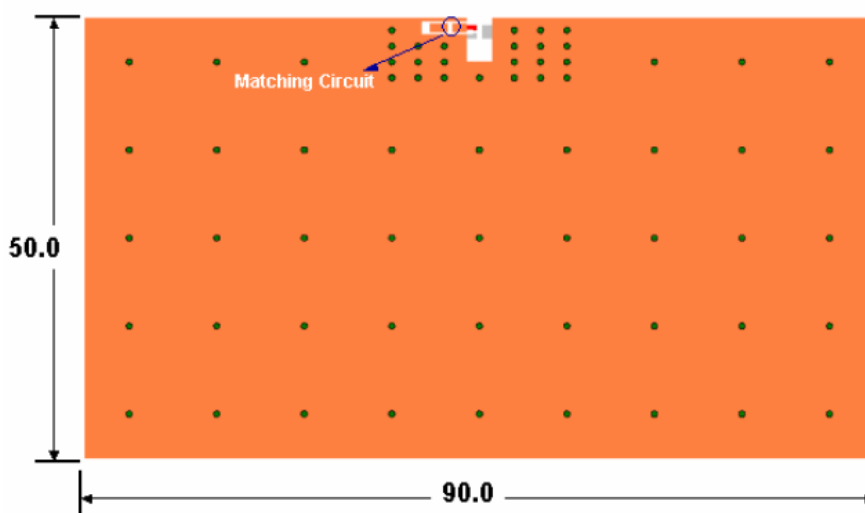
Terminal name	Function
S1	Feeding Point
S2	GND
S3	GND



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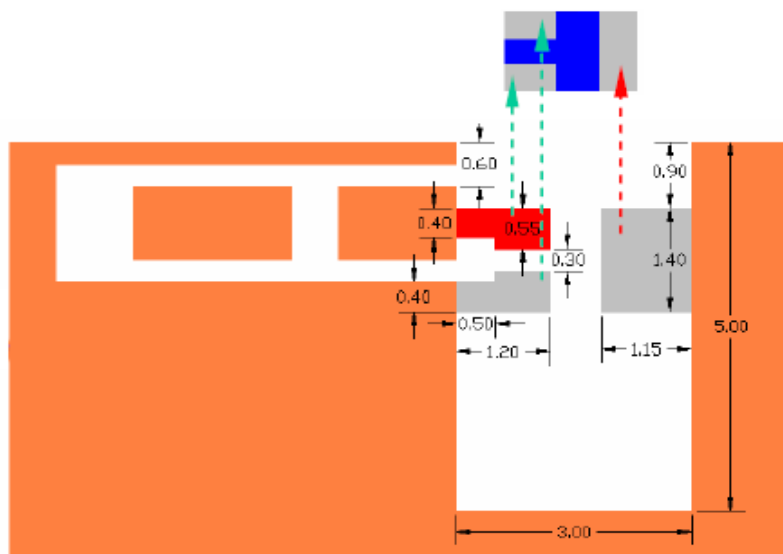
REFERENCE DESIGN OF EVALUATION BOARD



■ Copper
 ● Ground via hole
 ■ Feed contact
 ■ Ground contact

Unit: mm

Outlook and dimension of evaluation board



Unit: mm

Dimension of footprint

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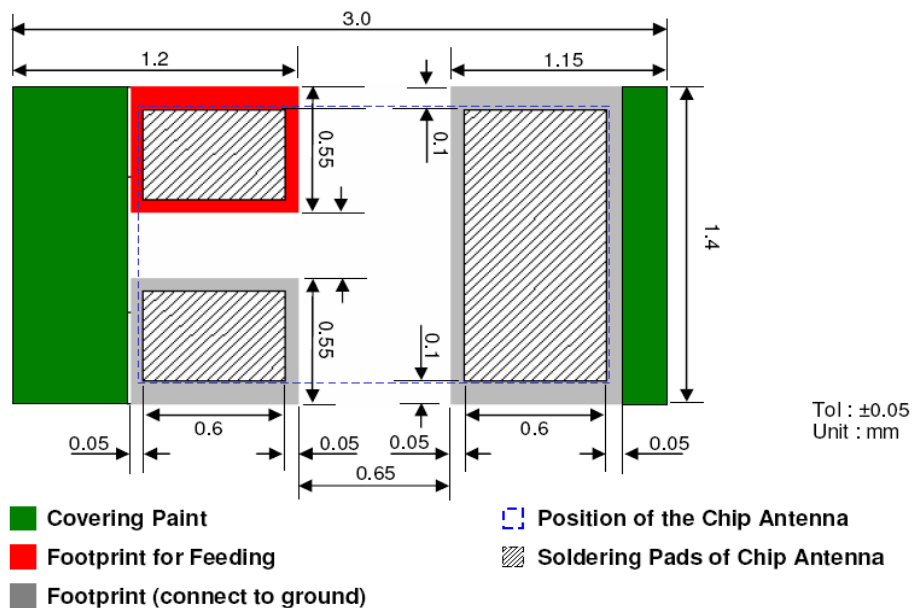
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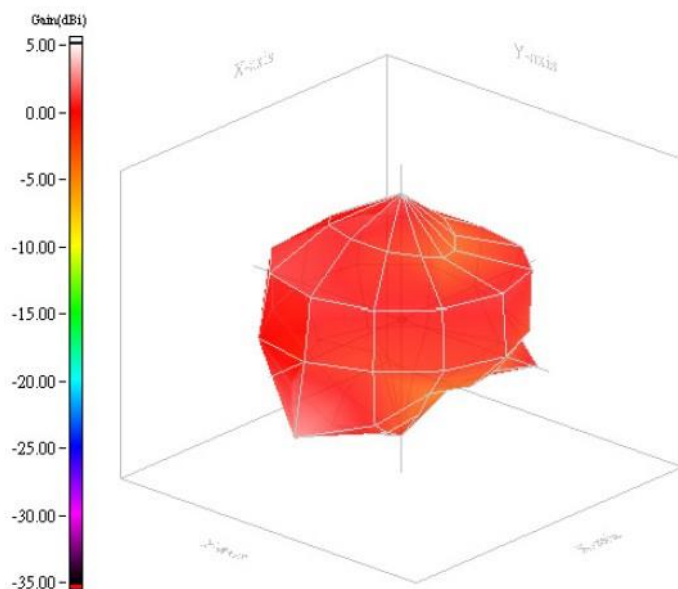
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REFERENCE DESIGN OF EVALUATION BOARD



Details of soldering pad



Radiation pattern

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%

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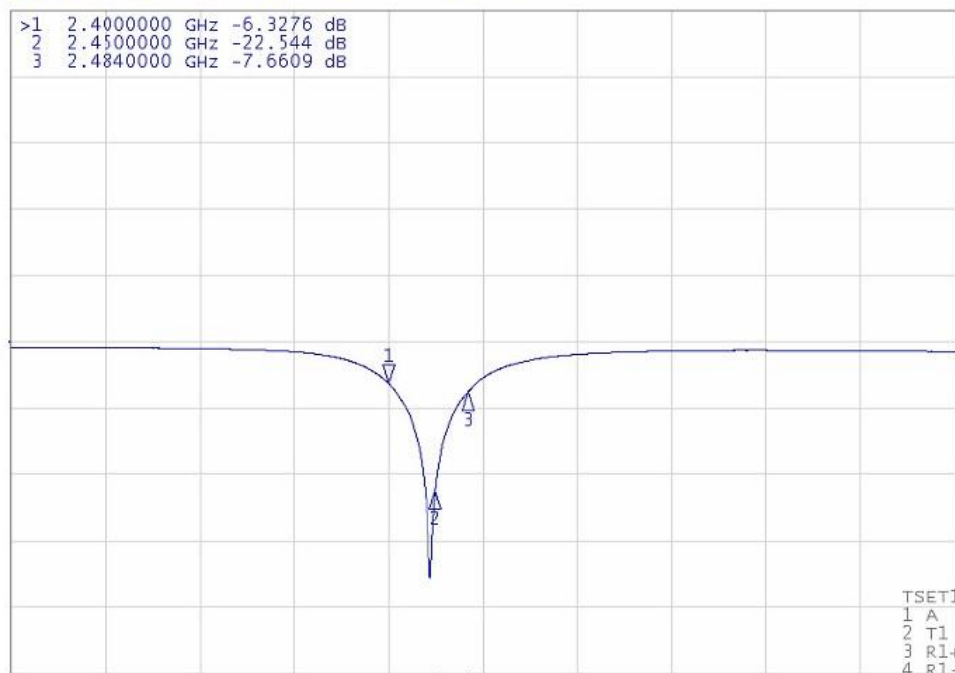
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ELECTRICAL PERFORMANCES

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

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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