Pulse A YAGEO Company | LARSEN Antennas

TECHNICAL DATA SHEET

Description: 5010 2.4-2.5GHz Chip Antenna

PART NUMBER: ANT5010LL04R2400A

Features:

- Size : 5.10x1.00x1.00 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	210 MHz(Typ.)
Return Loss	6.5 dB Max.
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	2.28 dBi (Typ.)
Impedance	50 Ω
Operating Temperature	- 40~105 ℃
Maximum Power	1 W
Termination	Ni / Sn (Environmentally-Friendly Leadless)
Resistance to Soldering Heats	260℃ , 10sec.

NOTE
1. The specification is defined on Pulse evaluation board

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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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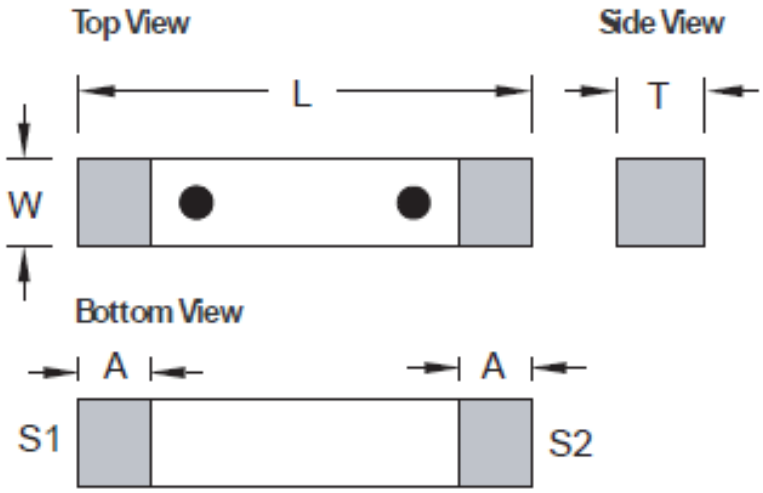
MECHANICAL DRAWING



	Dimension
L (mm)	5.10 ±0.10
W (mm)	1.00 ±0.10
T (mm)	1.00 ±0.10
A (mm)	0.85 ±0.15

Terminal name	Function
S1	Feeding / Soldering
S2	Soldering / Feeding

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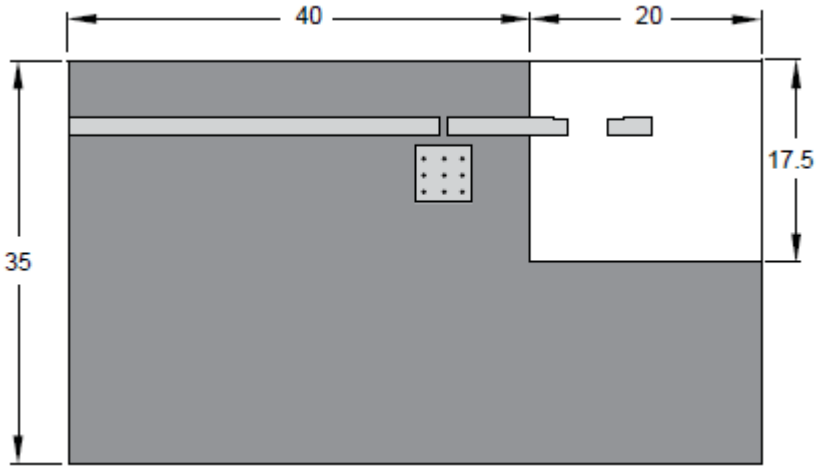
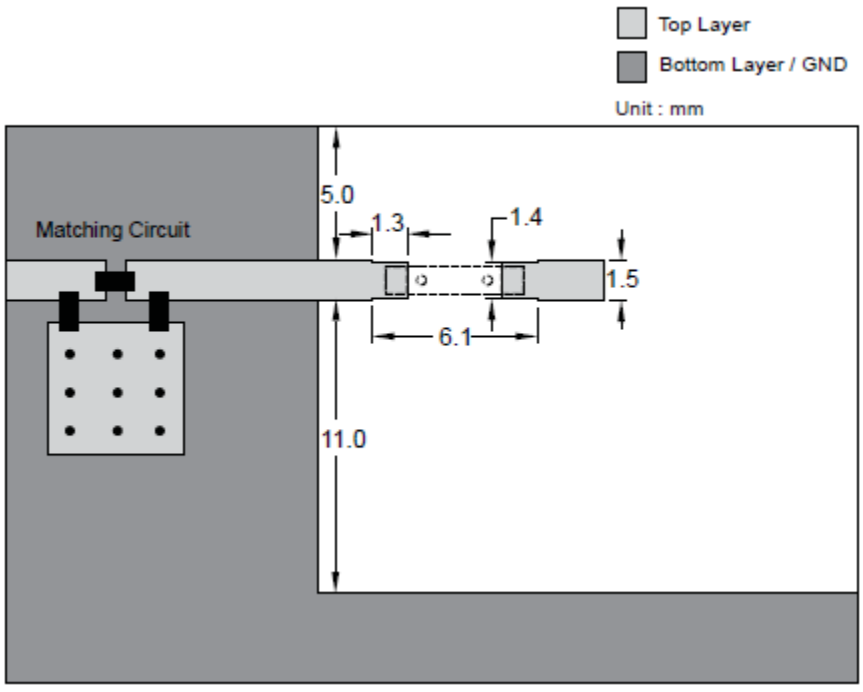
REFERENCE DESIGN OF EVALUATION BOARD



Outlook and dimension of evaluation board



Details of soldering Pad

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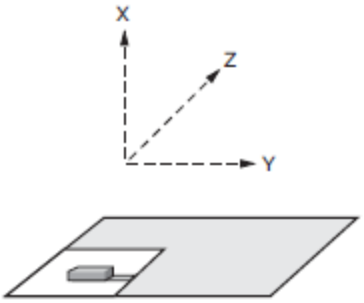
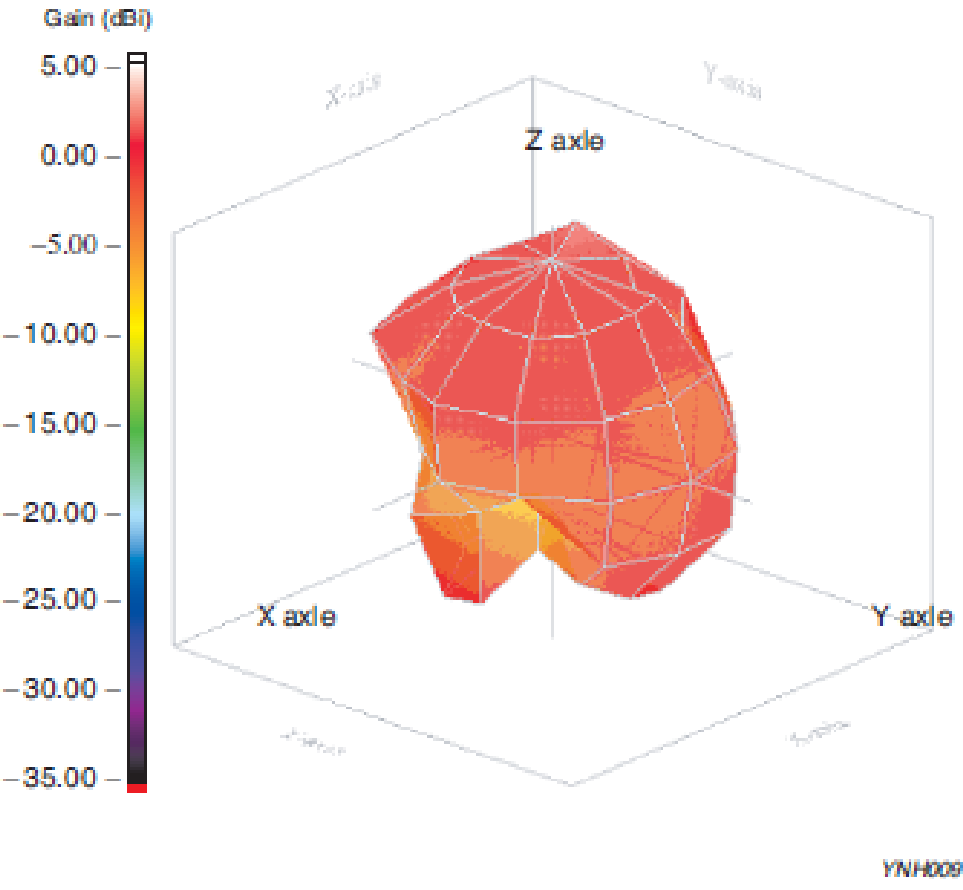


Evaluation board and XYZ direction



Frequency= 2.45 GHz
Max gain = 2.28 dBi, at (90, 210)
MEG (mean effective gain)= -0.96 dBi
Directivity (dB) = 3.24
Efficiency = -0.82 dB, 82.80 %

Radiation pattern

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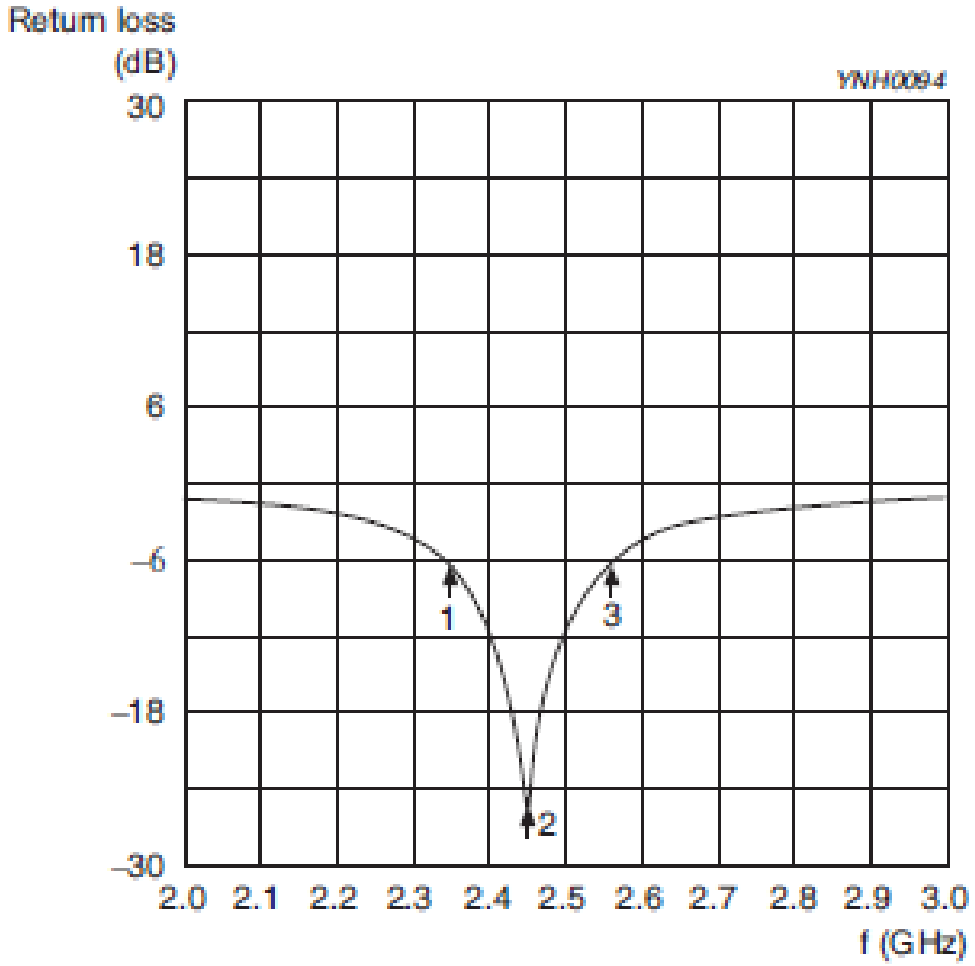
ELECTRICAL PERFORMANCES



Marker data
1. 2.35GHz, -6.5dB
2. 2.45GHz, -27.45dB
3. 2.56GHz, -6.5dB

Return loss

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REVISION HISTORY

Revision	Date	Description
Version 1	Nov. 20, 2020	- New issue