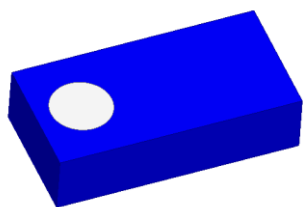


Description : 1608 2.4G Chip Antenna

PART NUMBER : ANT1608LL14R2400A

Features:

- Size : 1.6x0.8x0.4 mm
- Working Frequency : 2.4~2.5GHz
- Omni-directional Radiation
- Tape & reel automatic mounting
- Reflow process compatible
- RoHS compliant



Applications:

- 2.4GHz WiFi device
- Bluetooth device
- Zigbee 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.

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Pulse (Suzhou) Wireless Products Co, Inc.
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Suzhou New District
Jiangsu Province, Suzhou 215009 PR China
Tel: 86 512 6807 9998

Description : 1608 2.4G Chip Antenna

PART NUMBER : ANT1608LL14R2400A

ELECTRICAL SPECIFICATIONS

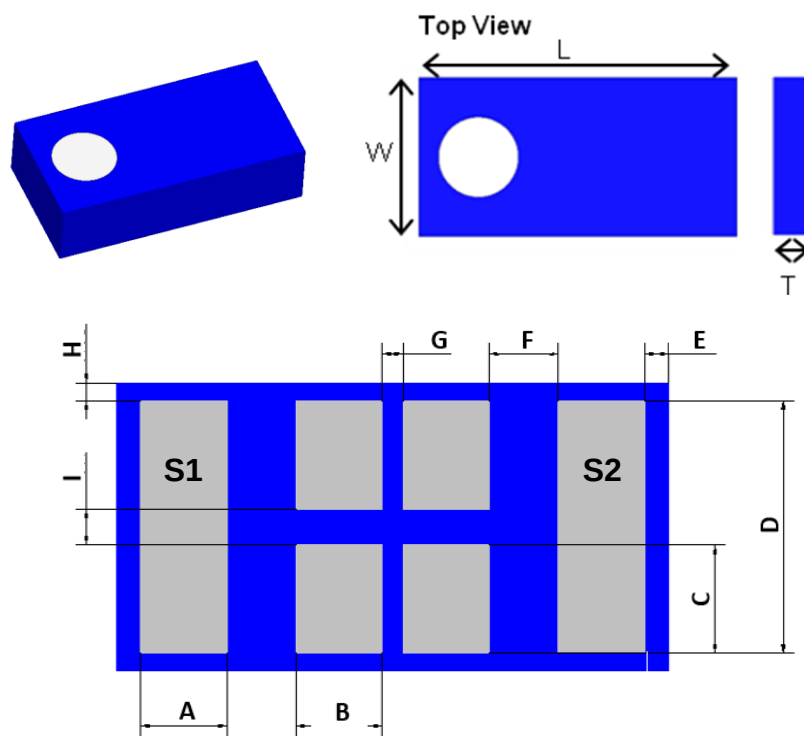
Working Frequency	2.4 ~ 2.484 GHz
Bandwidth	150 MHz(Typ.)
Return Loss	6.0 dB Max
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	2.0 dBi(Typ.)
Impedance	50 Ω
Operating Temperature	- 40~105 $^{\circ}\text{C}$
Maximum Power	1 W
Termination	Ag (Environmentally-Friendly Leadless)
Peak Reflow Temperature	260 $^{\circ}\text{C}$, 5sec.

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 (Max.)
A (mm)	0.25 ± 0.15
B (mm)	0.25 ± 0.15
C (mm)	0.30 ± 0.15
D (mm)	0.70 ± 0.15
E (mm)	0.07 ± 0.07
F (mm)	0.20 ± 0.10
G (mm)	0.06 ± 0.05
H (mm)	0.05 ± 0.05
I (mm)	0.10 ± 0.05



Terminal name	Function
S1	Soldering Pad
S2	Feeding Pad

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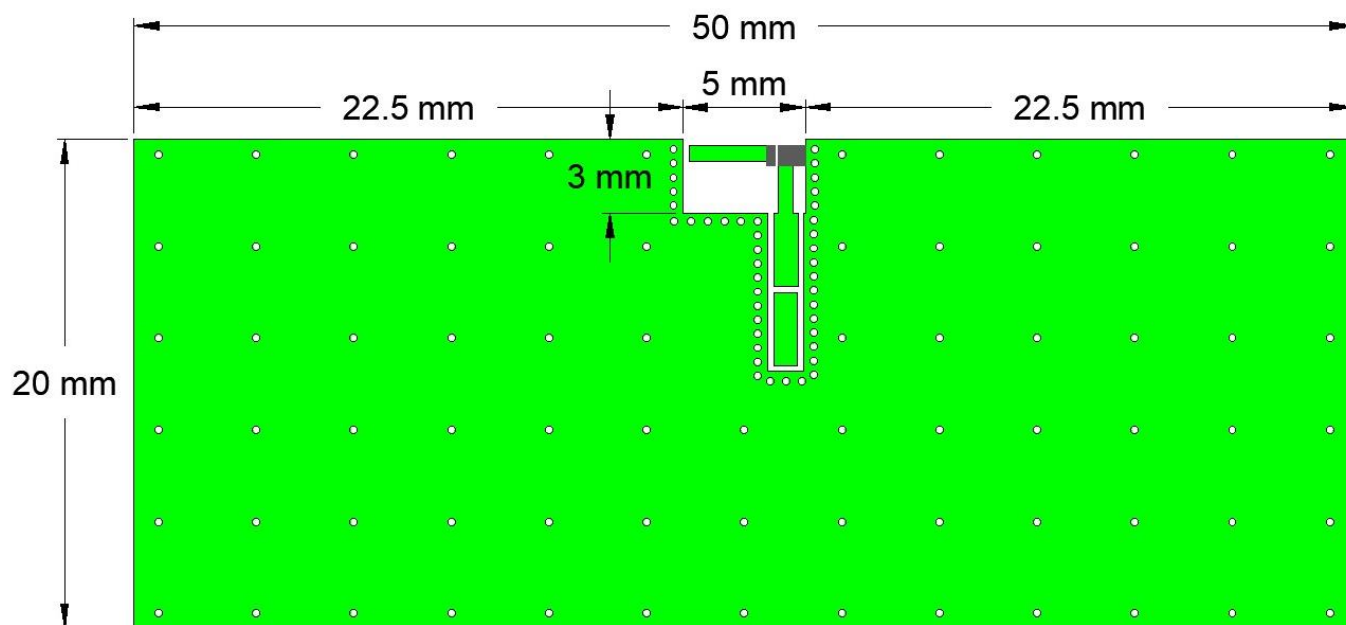
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Description : 1608 2.4G Chip Antenna

PART NUMBER : ANT1608LL14R2400A

REFERENCE DESIGN OF EVALUATION BOARD (SCENARIO 1)

◇SCENARIO 1

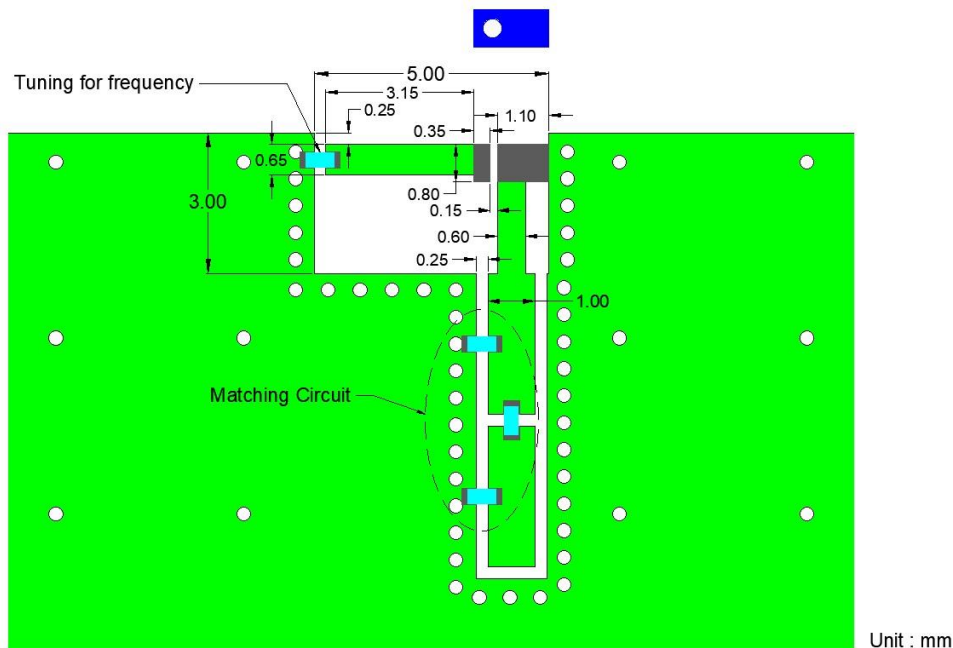


Outlook and dimension of evaluation board

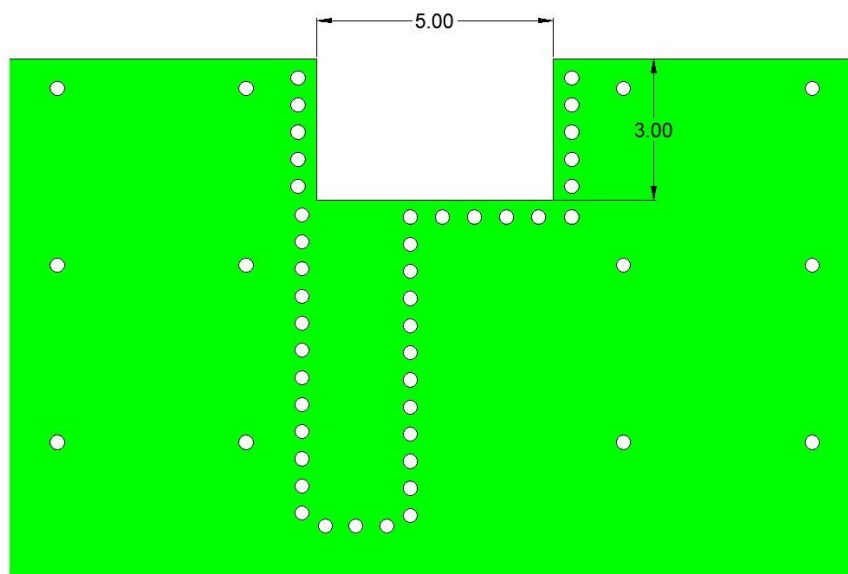
Description : 1608 2.4G Chip Antenna

PART NUMBER : ANT1608LL14R2400A

REFERENCE DESIGN OF EVALUATION BOARD (SCENARIO 1)



Top layer



Bottom layer

Details of clearance

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

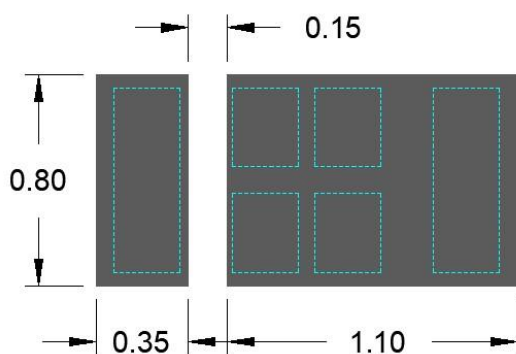
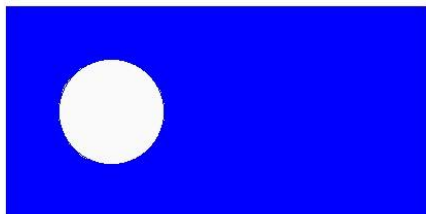
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Description : 1608 2.4G Chip Antenna

PART NUMBER : ANT1608LL14R2400A

REFERENCE DESIGN OF EVALUATION BOARD (SCENARIO 1)



■ : Footprint

□ : Antenna pad

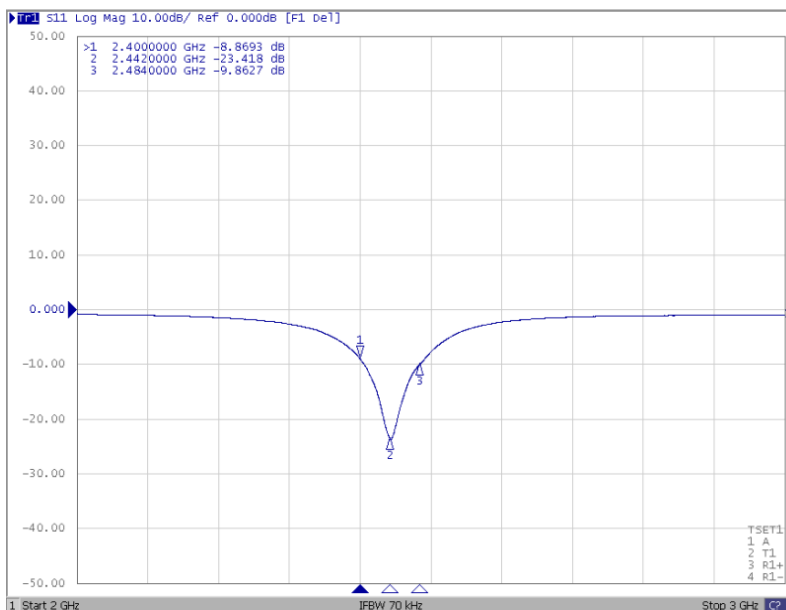
Unit : mm

[Footprint

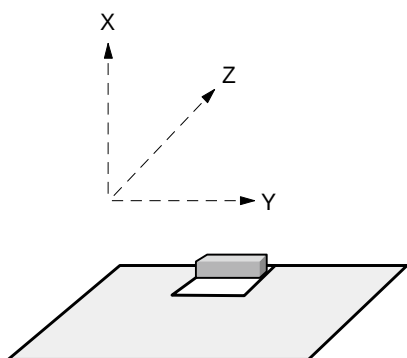
Description : 1608 2.4G Chip Antenna

PART NUMBER : ANT1608LL14R2400A

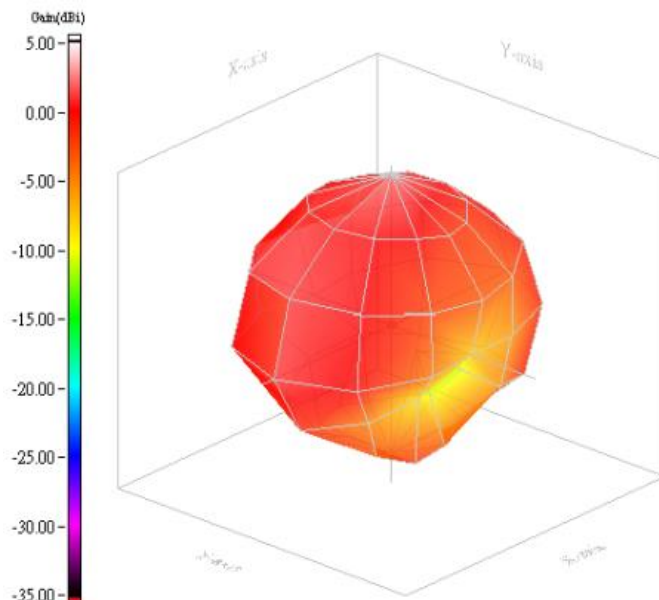
ELECTRICAL PERFORMANCES (SCENARIO 1)



Return loss



Evaluation board and XYZ direction



Max Gain = 2.03dBi
Efficiency = -2.08dB, 61.88%

Radiation pattern

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

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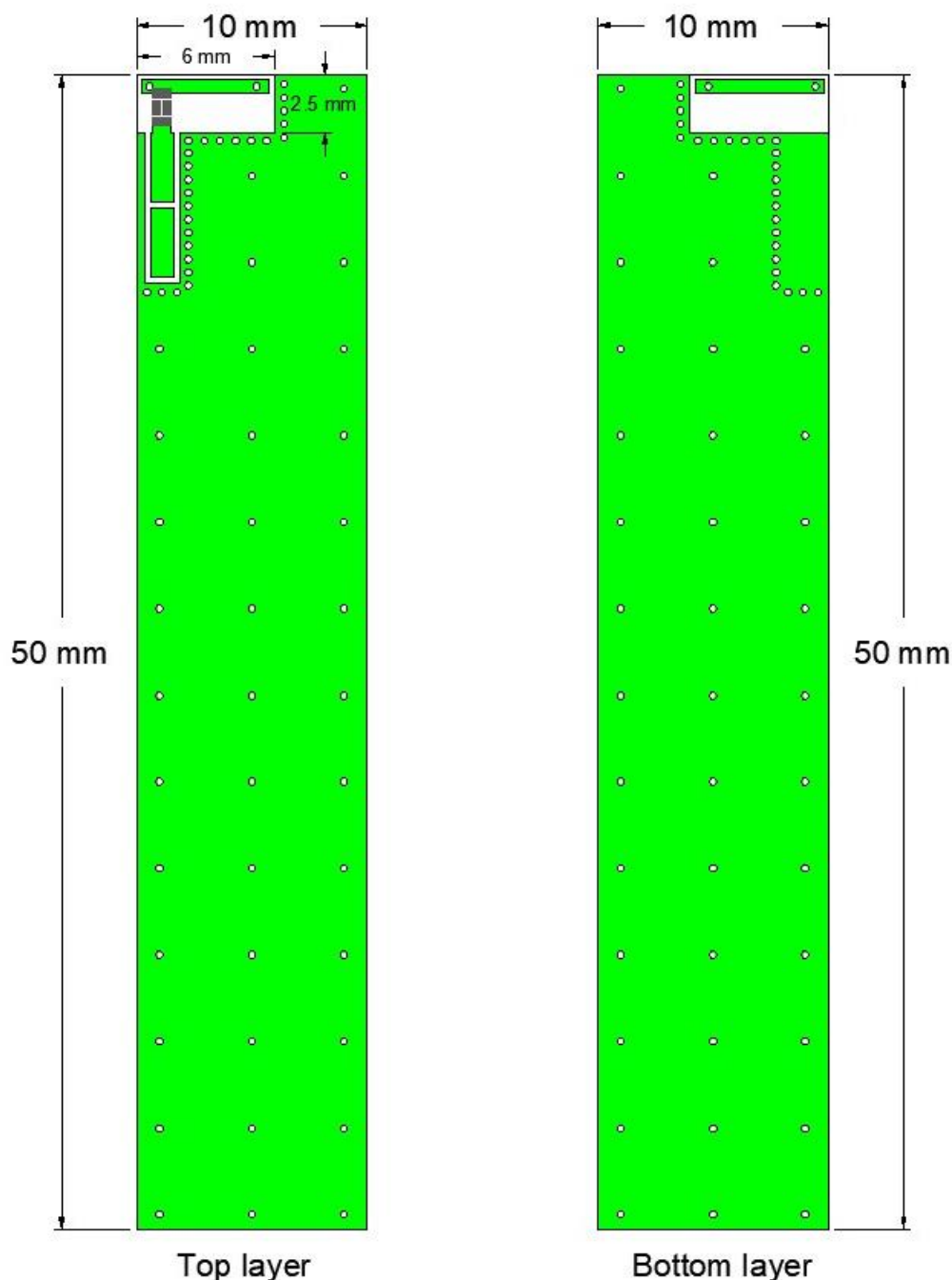
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Description : 1608 2.4G Chip Antenna

PART NUMBER : ANT1608LL14R2400A

REFERENCE DESIGN OF EVALUATION BOARD (SCENARIO 2)

◇SCENARIO 2



Outlook and dimension of evaluation board

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

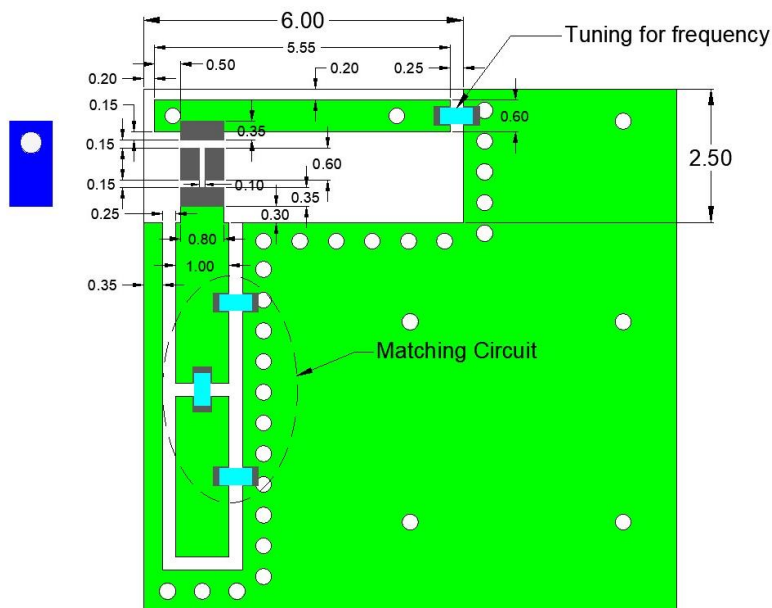
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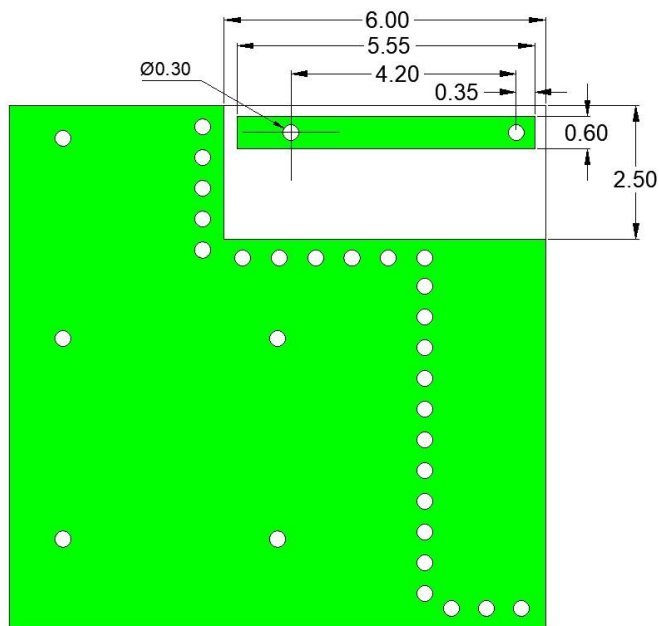
Description : 1608 2.4G Chip Antenna

PART NUMBER : ANT1608LL14R2400A

REFERENCE DESIGN OF EVALUATION BOARD (SCENARIO 2)



Top layer



Bottom layer

Details of clearance

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

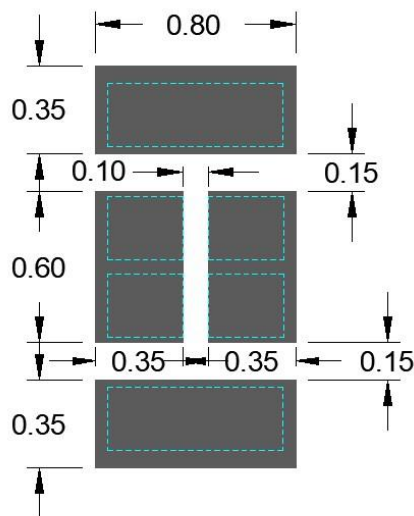
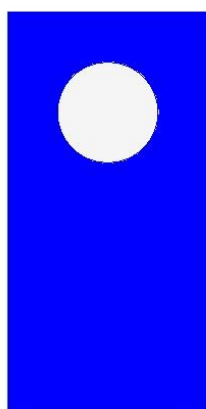
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Description : 1608 2.4G Chip Antenna

PART NUMBER : ANT1608LL14R2400A

REFERENCE DESIGN OF EVALUATION BOARD (SCENARIO 2)



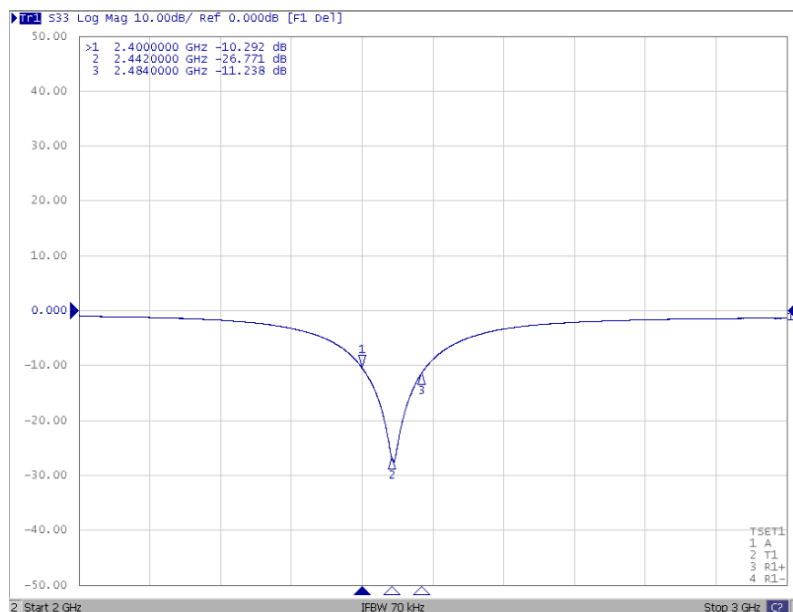
■ : Footprint
□ : Antenna pad
Unit : mm

Footprint

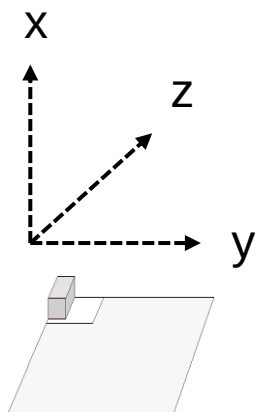
Description : 1608 2.4G Chip Antenna

PART NUMBER : ANT1608LL14R2400A

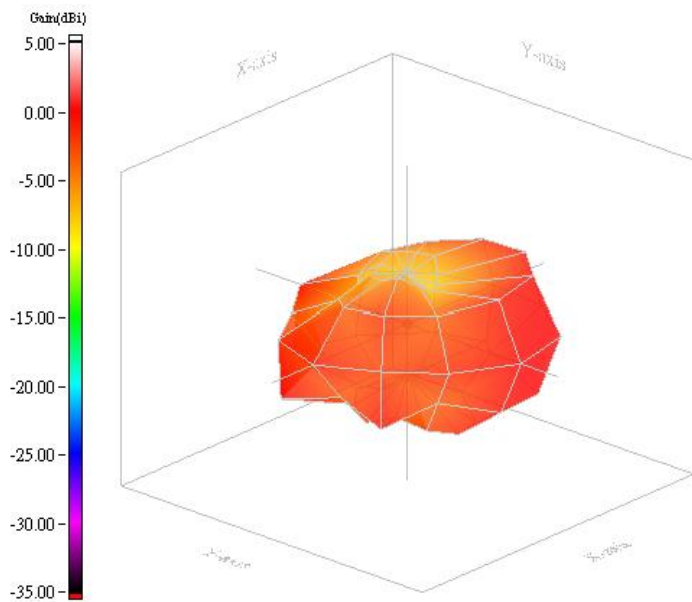
ELECTRICAL PERFORMANCES (SCENARIO 2)



Return loss



Evaluation board and XYZ direction



Max Gain = 3.38dBi
Efficiency = -2.17dB, 60.64%

Radiation pattern

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Description : 1608 2.4G Chip Antenna

PART NUMBER : ANT1608LL14R2400A

REVISION HISTORY

Revision	Date	Description
Version 1	Sep. 30, 2020	- New issue
Version 2	Aug. 30, 2021	- Added Dimension E, G, H.
Version 3	Oct. 2023	- Modified EVB drawing and added footprint drawing