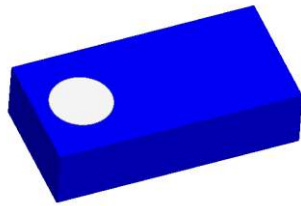


**Description: 1608 2.4G Chip Antenna**

**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**

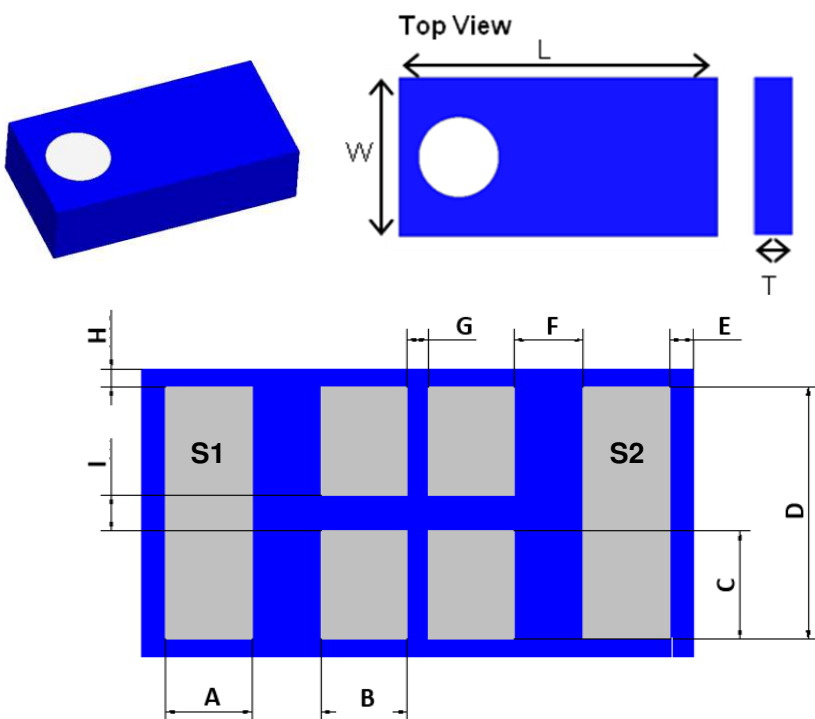
<b>Working Frequency</b>	2.4 ~ 2.484 GHz
<b>Bandwidth</b>	150 MHz(Typ.)
<b>Return Loss</b>	6.0 dB Max
<b>Polarization</b>	Linear
<b>Azimuth Beamwidth</b>	Omni-directional
<b>Peak Gain</b>	2.0 dBi(Typ.)
<b>Impedance</b>	50 Ω
<b>Operating Temperature</b>	- 40~105 °C
<b>Maximum Power</b>	1 W
<b>Termination</b>	Ag (Environmentally-Friendly Leadless)
<b>Resistance to Soldering Heats</b>	260°C , 5sec.

NOTE

1. The specification is defined on Pulse evaluation board

**MECHANICAL DRAWING**

	<b>Dimension</b>
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



<b>Terminal name</b>	<b>Function</b>
S1	Soldering Pad
S2	Feeding Pad

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

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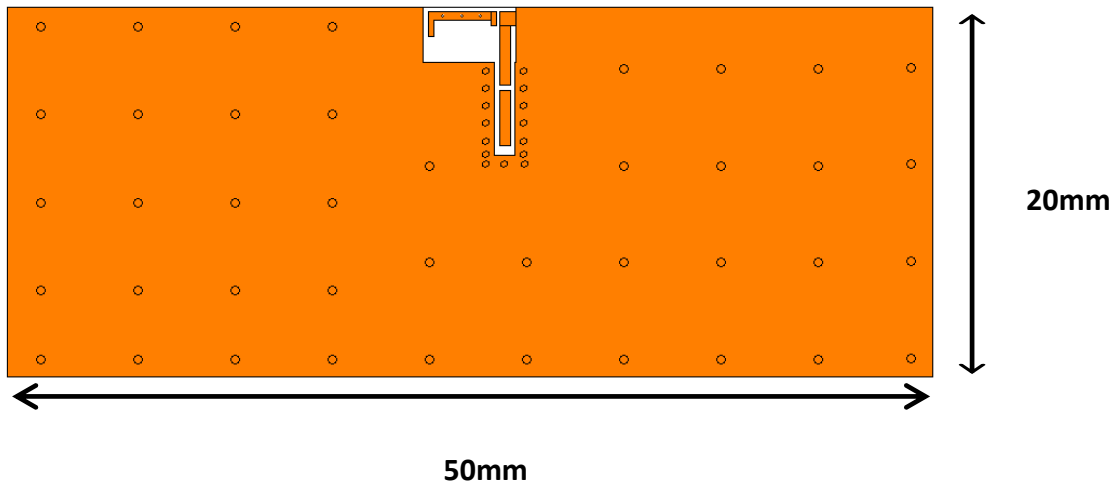
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**Description: 1608 2.4G Chip Antenna**

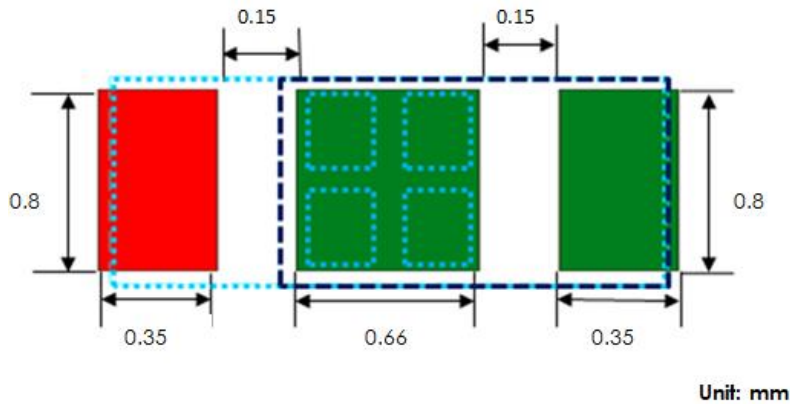
**PART NUMBER: ANT1608LL14R2400A**

**REFERENCE DESIGN OF EVALUATION BOARD ( SCENARIO 1 )**

◇SCENARIO 1



Outlook and dimension of evaluation board (Scenario 1)



- Footprint for radiator electrode
- Footprint for feeding
- Antenna Outline

Footprint

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

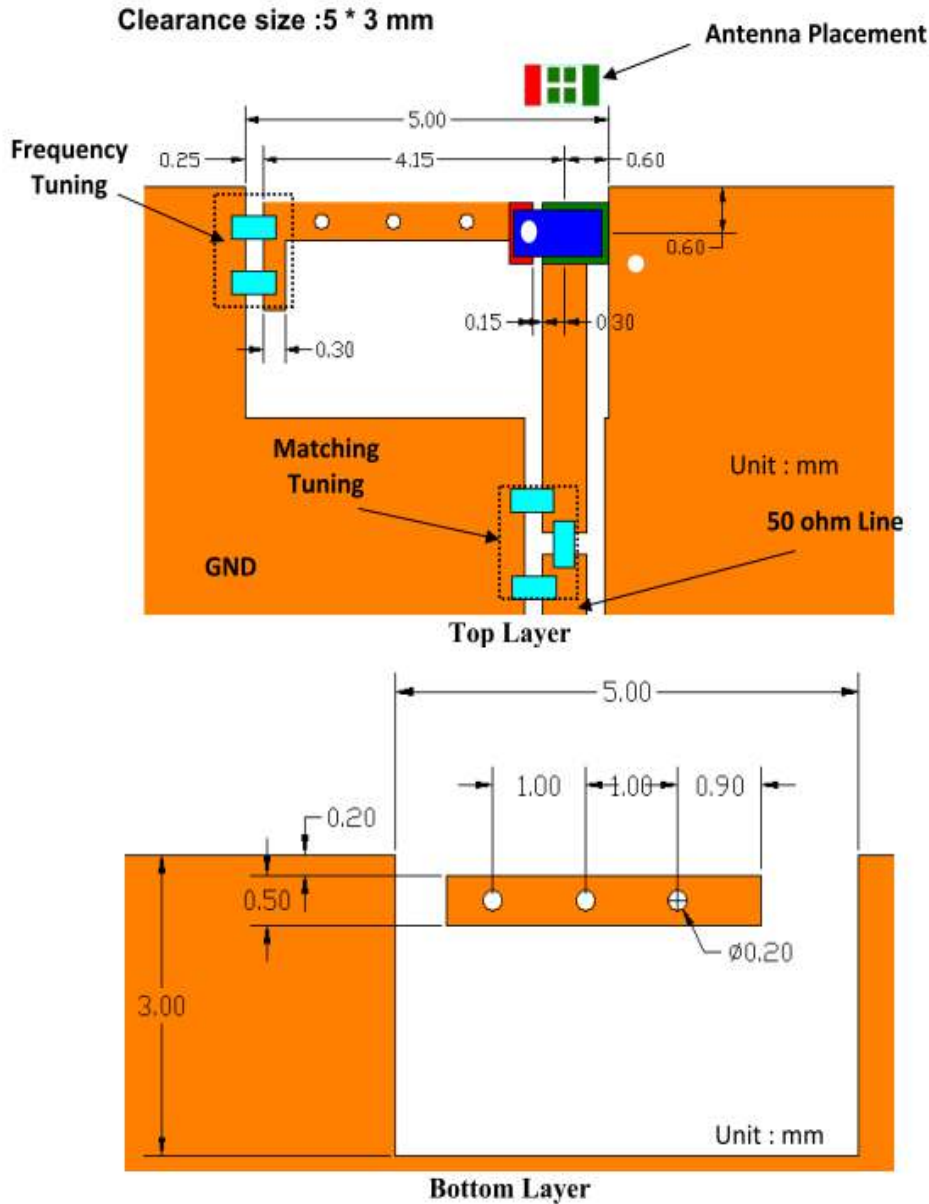
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**Description: 1608 2.4G Chip Antenna**

**PART NUMBER: ANT1608LL14R2400A**

**REFERENCE DESIGN OF EVALUATION BOARD ( SCENARIO 1)**



Details of soldering Pad of Scenario 1

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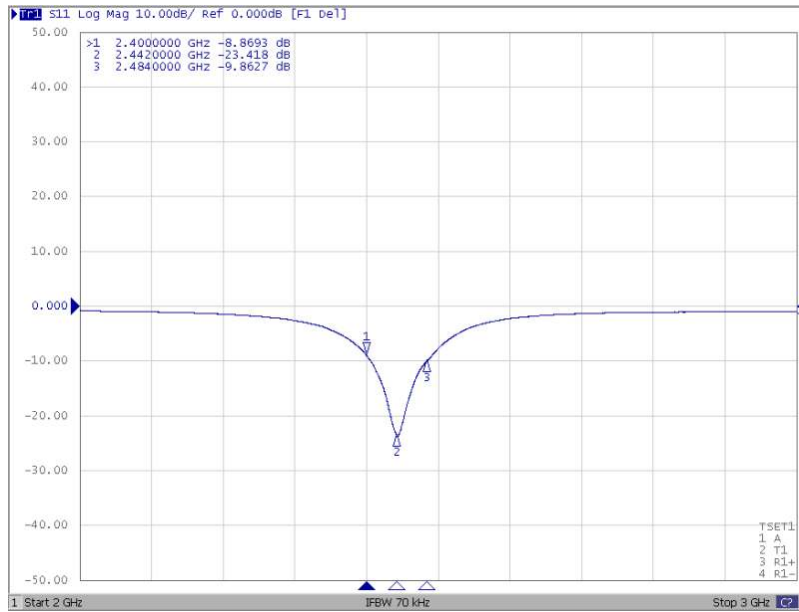
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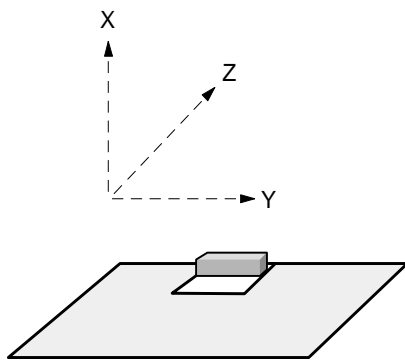
**Description: 1608 2.4G Chip Antenna**

**PART NUMBER: ANT1608LL14R2400A**

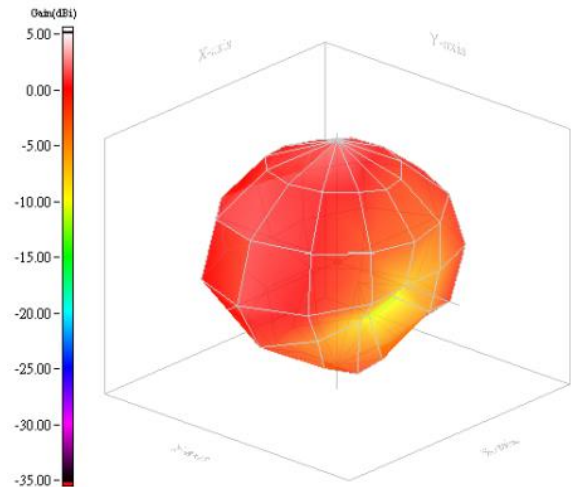
**ELECTRICAL PERFORMANCES ( SCENARIO 1)**



Return loss of Scenario 1



Evaluation board and XYZ direction



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

Radiation pattern of Scenario 1

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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 (Scenario 2)

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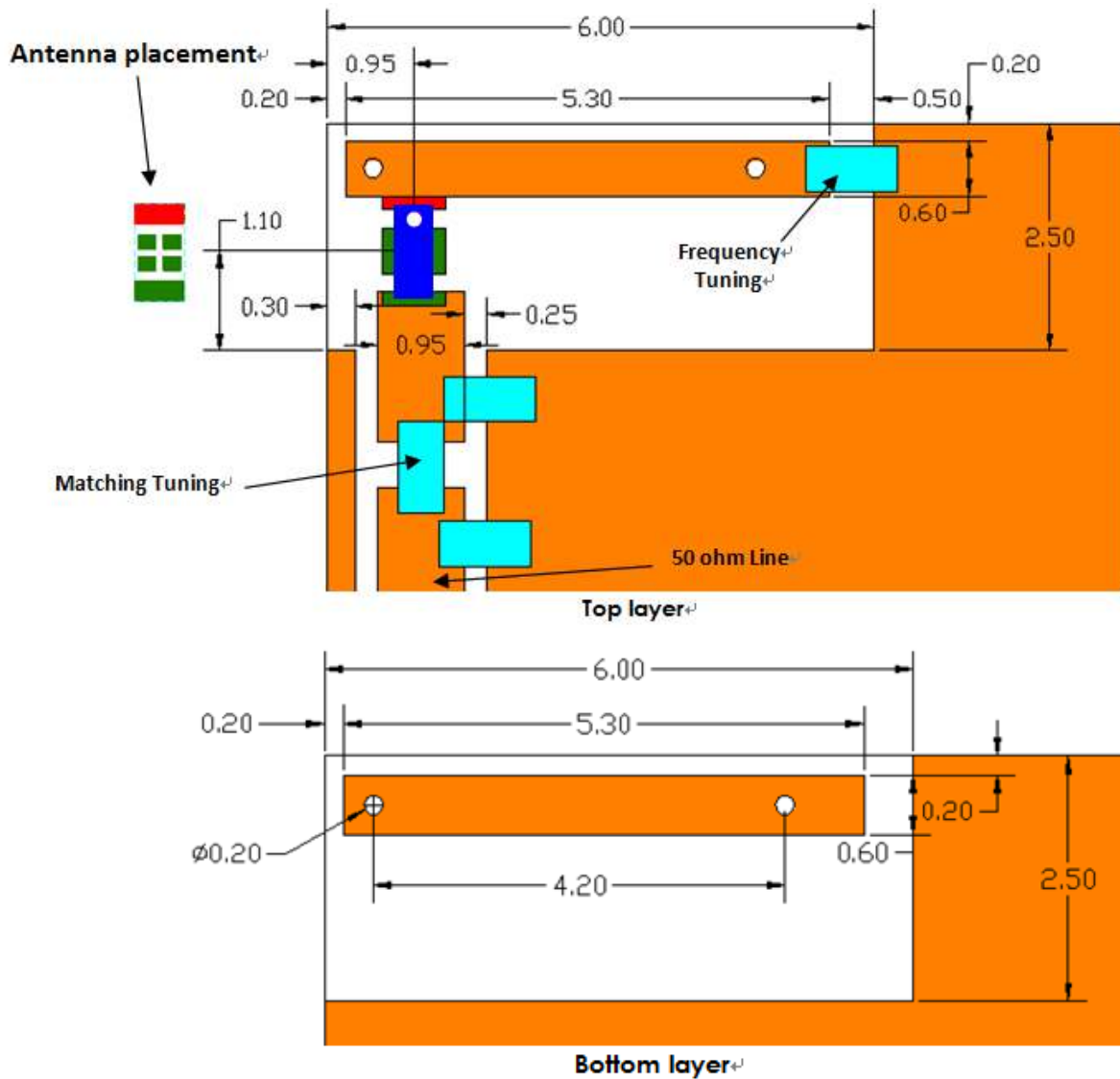
**Description: 1608 2.4G Chip Antenna**

**PART NUMBER: ANT1608LL14R2400A**

**REFERENCE DESIGN OF EVALUATION BOARD ( SCENARIO 2)**

◇SCENARIO 2

Clearance size : 6 \* 2.5 mm



Details of soldering Pad of Scenario 2

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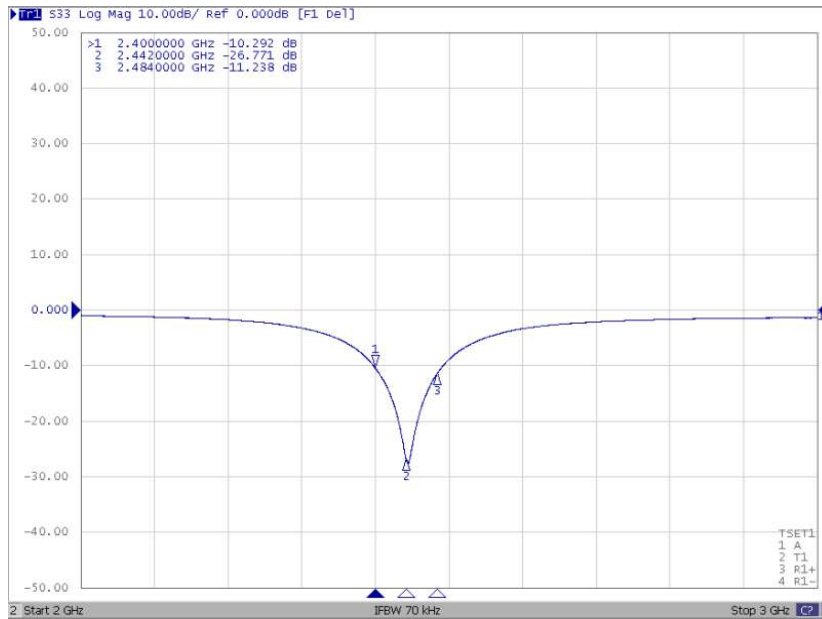
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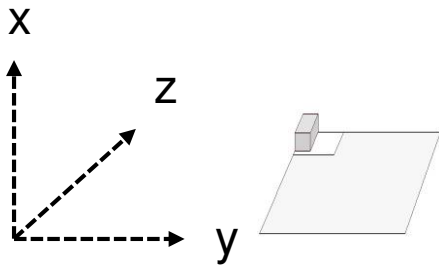
**Description: 1608 2.4G Chip Antenna**

**PART NUMBER: ANT1608LL14R2400A**

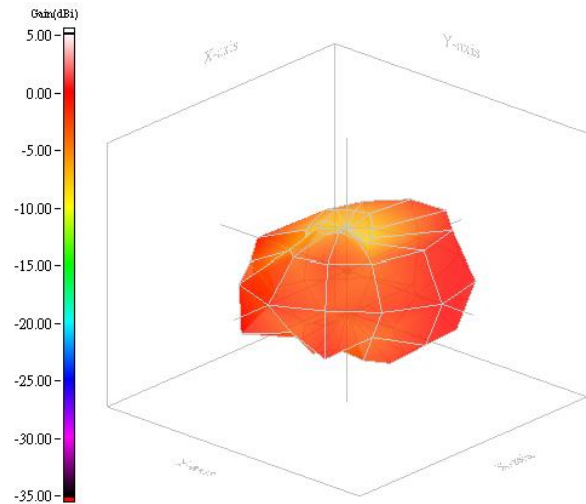
**ELECTRICAL PERFORMANCES ( SCENARIO 2)**



Return loss of Scenario 2



Evaluation board and XYZ direction



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

Radiation pattern of Scenario 2

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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.

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

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