

**Description**: 1608 2.4G Chip Antenna

PART NUMBER: ANT1608LL14R2400A

### Features:

Size: 1.6x0.8x0.4 mm

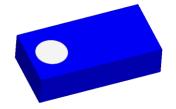
Working Frequency: 2.4~2.5GHz

· 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. CONFIDENTIAL AND PROPRIETARY INFORMATION

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### **ELECTRICAL SPECIFICATIONS**

Working Frequency
Bandwidth

**Return Loss** 

**Polarization** 

**Azimuth Beamwidth** 

Peak Gain Impedance

**Operating Temperature** 

**Maximum Power** 

Termination

**Resistance to Soldering Heats** 

2.4 ~ 2.484 GHz 150 MHz(Typ.)

6.0 dB Max

Linear

Omni-directional

2.0 dBi(Typ.)

50 Ω

- 40~105 °C

1 W

Ag (Environmentally-Friendly Leadless)

260°C , 5sec.

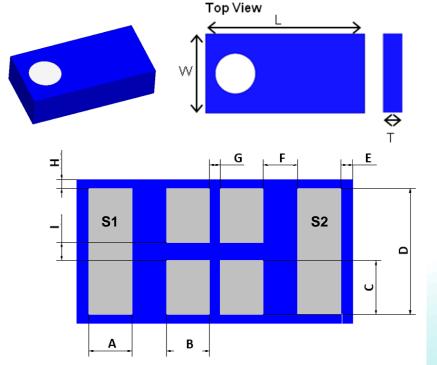
NOTE

1. The specification is defined on Pulse evaluation board

### **MECHANICAL DRAWING**

		Dimension
L	(mm)	1.60 ±0.15
W	(mm)	$0.80 \pm 0.15$
Т	(mm)	0.40 (Max.)
Α	(mm)	$0.25 \pm 0.15$
В	(mm)	$0.25 \pm 0.15$
С	(mm)	$0.30 \pm 0.15$
D	(mm)	$0.70 \pm 0.15$
Ε	(mm)	$0.07 \pm 0.07$
F	(mm)	$0.20 \pm 0.10$
G	(mm)	$0.06 \pm 0.05$
Н	(mm)	$0.05 \pm 0.05$
I	(mm)	0.10 ±0.05

Terminal name	Function	
S1	Soldering Pad	
S2	Feeding Pad	





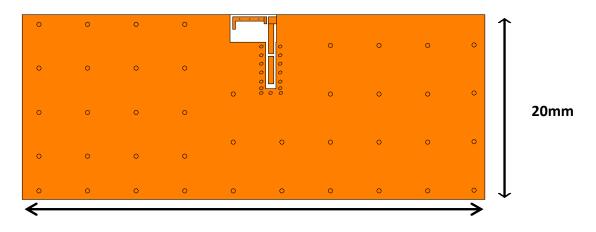


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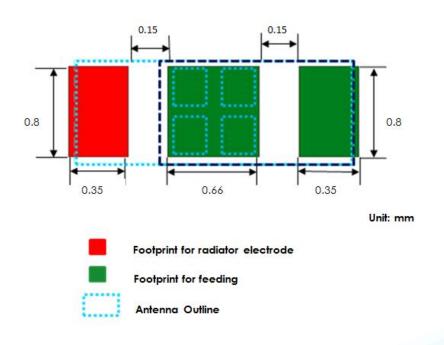
# REFERENCE DESIGN OF EVALUATION BOARD ( SCENARIO 1)

#### **♦SCENARIO 1**



#### 50mm

Outlook and dimension of evaluation board (Scenario 1)



Footprint

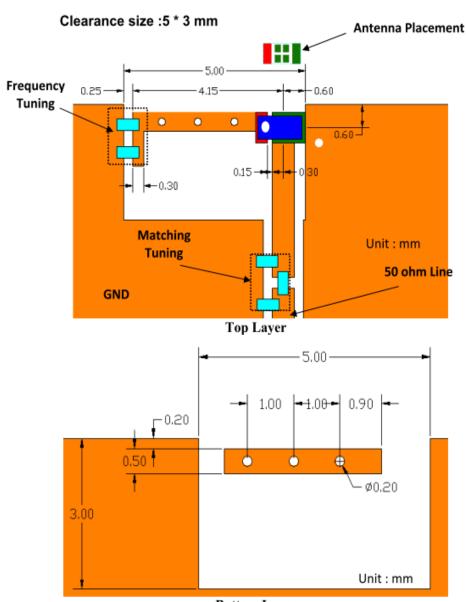




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# REFERENCE DESIGN OF EVALUATION BOARD ( SCENARIO 1)



**Bottom Layer** 

Details of soldering Pad of Scenario 1

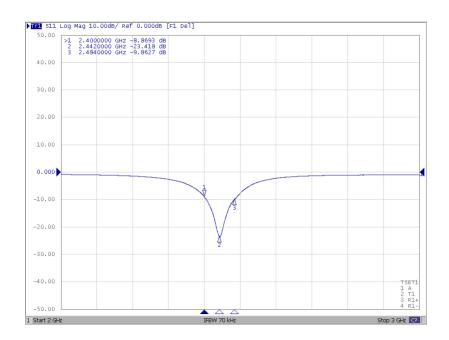




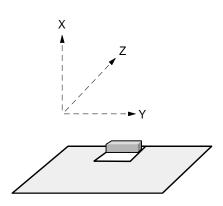
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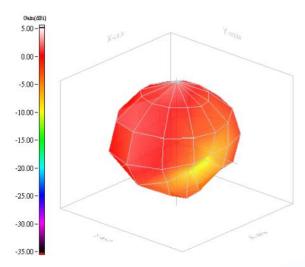
## **ELECTRICAL PERFORMANCES** (SCENARIO 1)



Return loss of Scenario 1



Evaluation board and XYZ direction



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

Radiation pattern of Scenario 1



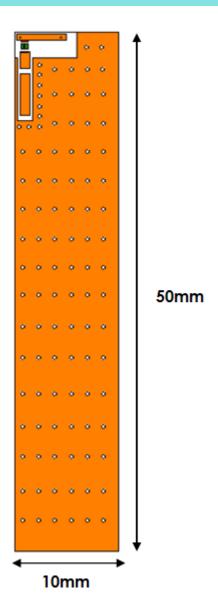


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# REFERENCE DESIGN OF EVALUATION BOARD ( SCENARIO 2)

**♦SCENARIO 2** 



Outlook and dimension of evaluation board (Scenario 2)





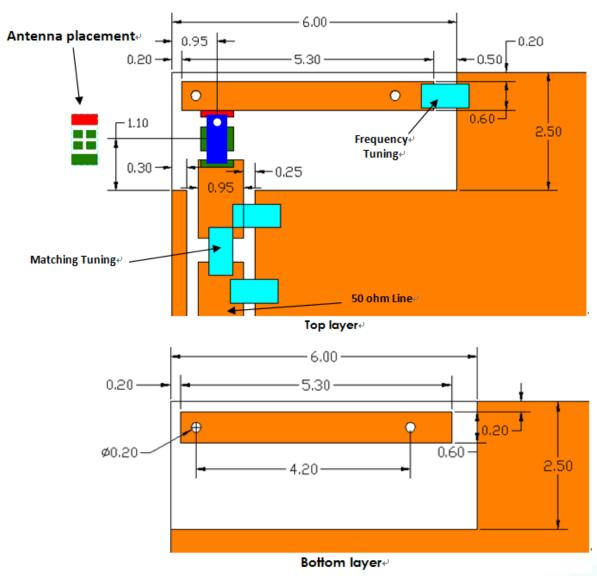
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### **REFERENCE DESIGN OF EVALUATION BOARD (SCENARIO 2)**

#### **♦SCENARIO 2**

Clearance size: 6 \* 2.5 mm



Details of soldering Pad of Scenario 2

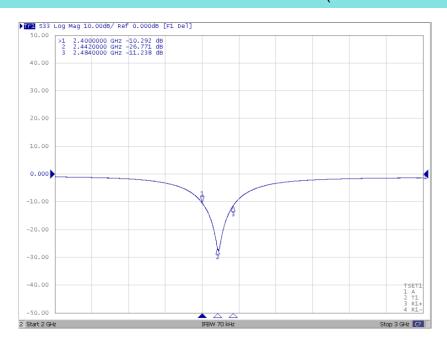




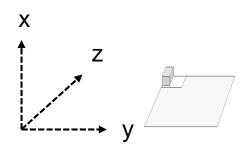
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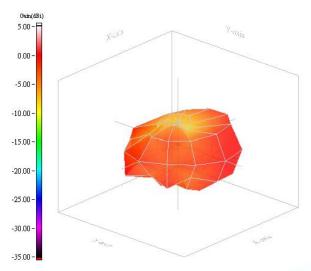
## **ELECTRICAL PERFORMANCES** (SCENARIO 2)



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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REVISION HISTORY				
Revision	Date	Description		
Version 1	Sep. 30, 2020	- New issue		
Version 2	Aug. 30, 2021	- Added Dimension E, G, H.		

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