

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

 $2.4 \sim 2.484$ GHz 150 MHz(Typ.) 6.0 dB Max Linear Omni-directional 2.0 dBi(Typ.) 50 Ω $-40\sim105$ $^{\circ}$ C

Ag (Environmentally-Friendly Leadless)

260°C , 5sec.

1 W

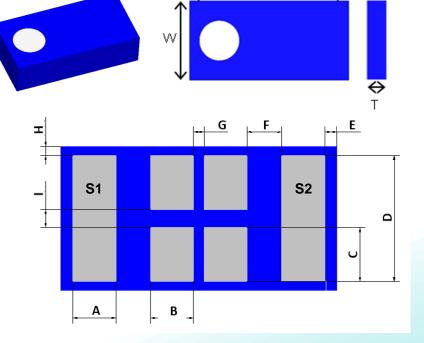
NOTE

1. The specification is defined on Pulse evaluation board

MECHANICAL DRAWING

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

Terminal name	Function
S1	Soldering Pad
S2	Feeding Pad



Top View



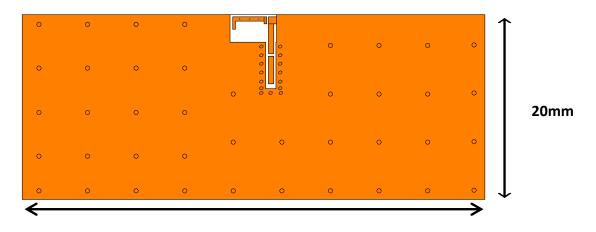


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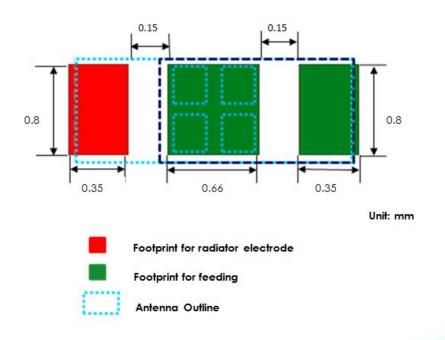
REFERENCE DESIGN OF EVALUATION BOARD (SCENARIO 1)

♦SCENARIO 1



50_{mm}

Outlook and dimension of evaluation board (Scenario 1)



Footprint

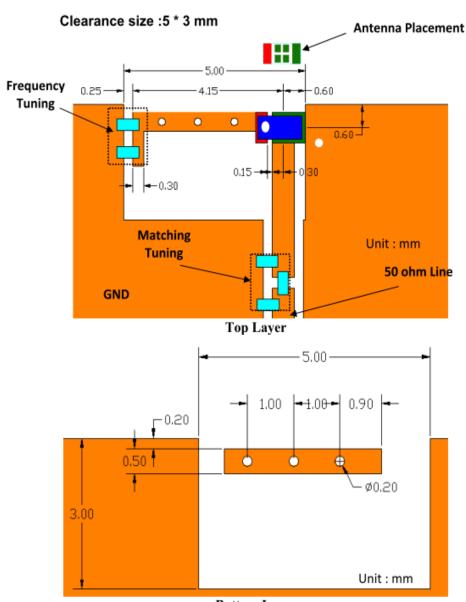




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REFERENCE DESIGN OF EVALUATION BOARD (SCENARIO 1)



Bottom Layer

Details of soldering Pad of Scenario 1

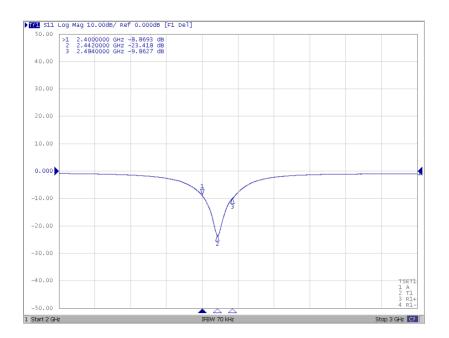




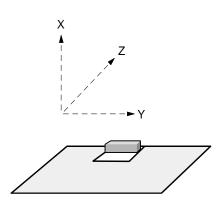
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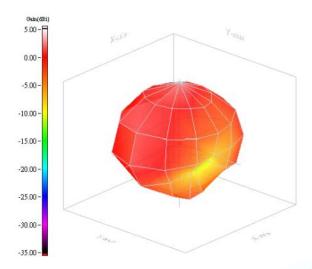
ELECTRICAL PERFORMANCES (SCENARIO 1)



Return loss of Scenario 1



Evaluation board and XYZ direction



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

Radiation pattern of Scenario 1



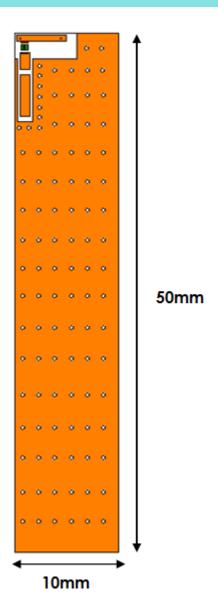


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REFERENCE DESIGN OF EVALUATION BOARD (SCENARIO 2)

♦SCENARIO 2



Outlook and dimension of evaluation board (Scenario 2)





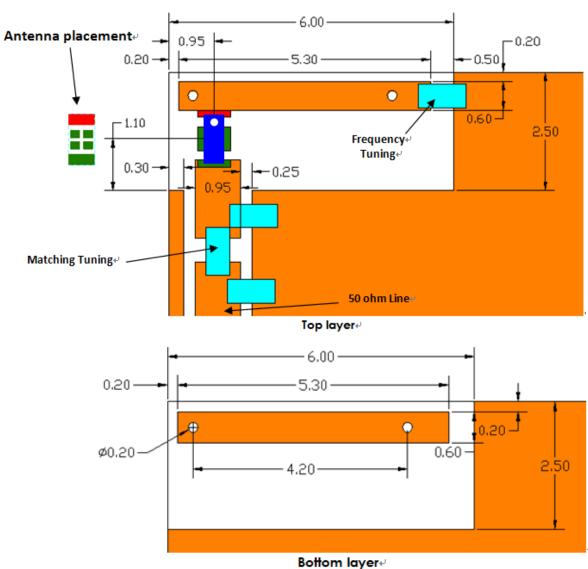
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REFERENCE DESIGN OF EVALUATION BOARD (SCENARIO 2)

♦SCENARIO 2

Clearance size: 6 * 2.5 mm



Details of soldering Pad of Scenario 2

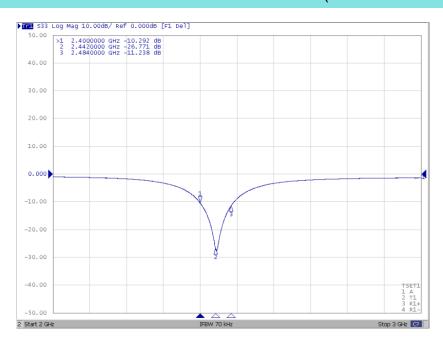




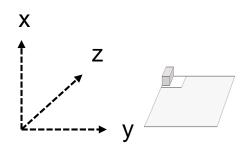
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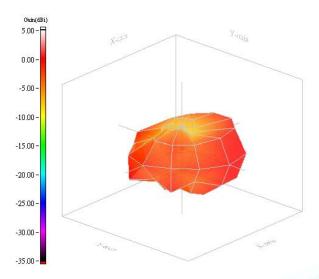
ELECTRICAL PERFORMANCES (SCENARIO 2)



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.		