

Description: 1608 WiFi 6E Chip Antenna

PART NUMBER: ANT1608LL14R2460A

### **Features:**

- Size: 1.6x0.8x0.4 mm
- Omni-directional Radiation
- · Dual-band design
- Tape & reel automatic mounting
- Reflow process compatible
- RoHS compliant



# **Applications:**

- WiFi 6E device
- ISM band equipment

All dimensions are in mm / inches

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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** 

2.4GHz / 5.15 ~ 7.125GHz 84MHz / 2000MHz(Typ.) 7.0 dB Min Linear Omni-directional 3.65 / 3.69 dBi(Typ.) 50 Ω

- 40~105 °C

1 W

Ni / Sn (Environmentally-Friendly Leadless)

260°C , 10sec.

#### NOTE

1. The specification is defined on Pulse evaluation board

### **MECHANICAL DRAWING**

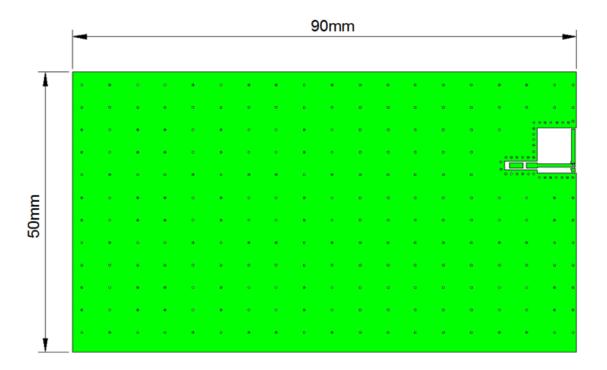
	Dimension					
L (mm)	1.60 ±0.15					
W (mm)	$0.80 \pm 0.15$					
T (mm)	$0.40 \pm 0.15$		Top View	1		Size View
A1(mm)	$0.70 \pm 0.15$			L	$\longrightarrow$	_
A2(mm)	$0.25 \pm 0.15$		$\uparrow$			
B1(mm)	$0.30 \pm 0.15$		w			
B2(mm)	$0.25 \pm 0.15$					
C1(mm)	$0.70 \pm 0.15$		$\downarrow$			
C2(mm)	$0.25 \pm 0.15$					$\stackrel{K}{\vdash}$
G1(mm)	$0.20 \pm 0.05$		Bottom Vi	ew ./ <sup>B</sup>		'
G2(mm)	$0.10 \pm 0.05$		<b>小</b>			<u></u>
						•
Terminal name	F	-unction	A1	_		<b></b> G2 C1
В	Feed	ing Point	$\downarrow$			$\int B1 \int$
A1,A2	Soldering Point for	r 2.4GHz	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	
C1,C2	Soldering Point f	for 6GHz	A2 G1	B2	C2	



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### REFERENCE DESIGN OF EVALUATION BOARD



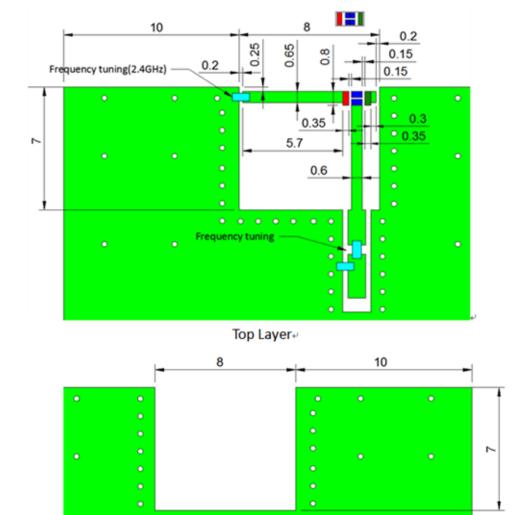
Outlook and dimension of evaluation board



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### REFERENCE DESIGN OF EVALUATION BOARD



Details of soldering Pad

Unit: mm

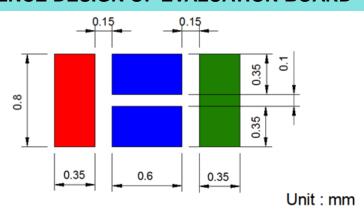
**Bottom Layer** 



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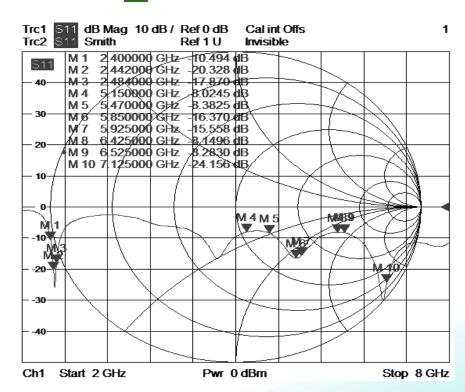
: Footprint for 2.4GHz

: Footprint for Feeding

: Footprint for 6GHz

Footprint

Return loss



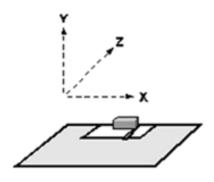
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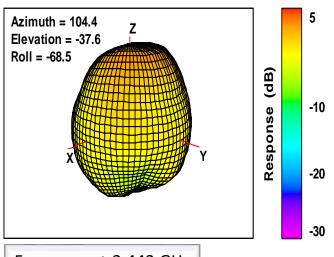
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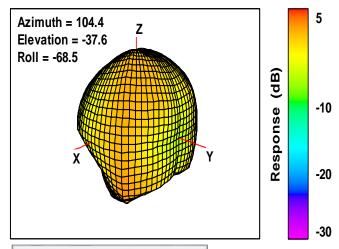
### **ELECTRICAL PERFORMANCES**



Evaluation board and XYZ direction



Frequency: 2.442 GHz Efficiency: 71.2 %



Frequency: 5.470 GHz Efficiency: 62.8 %

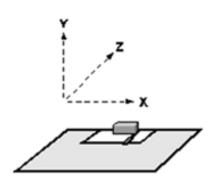
Radiation pattern



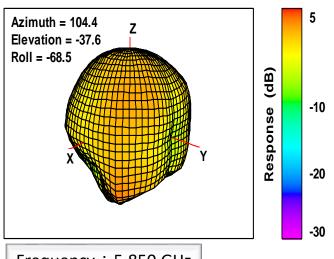
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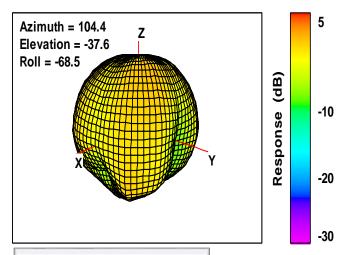
### **ELECTRICAL PERFORMANCES**



Evaluation board and XYZ direction



Frequency: 5.850 GHz Efficiency: 76.2 %



Frequency: 6.425 GHz Efficiency: 66.9 %

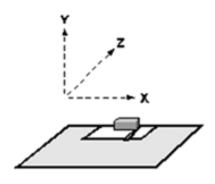
Radiation pattern



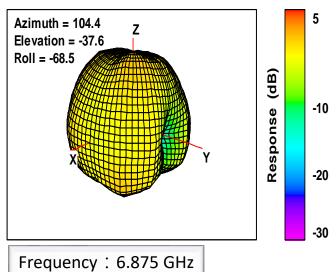
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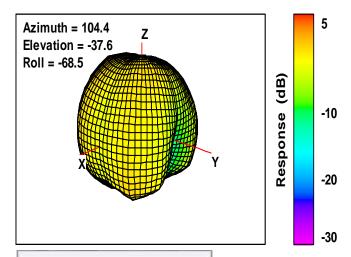
### **ELECTRICAL PERFORMANCES**



Evaluation board and XYZ direction



Frequency: 6.875 GHz Efficiency: 63.8 %



Frequency: 7.125 GHz Efficiency: 60.8 %

Radiation pattern



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REVISION HISTORY						
evision	Date	Description				
Version 1	Apr. 28, 2021	- New issue				

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## Pulse:

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