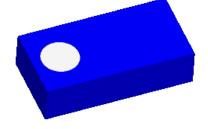


**Description**: 1608 2.4G&5G Chip Antenna

PART NUMBER: ANT1608LL14R2455A

## Features:

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



# **Applications:**

- 2.4&5GHz WiFi 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 2.45G / 5.5G Hz Bandwidth 120 / 900M Hz(Typ.)

Polarization Linear Azimuth Beamwidth Omni-directional

 Peak Gain
 3.11 / 3.43 dBi(Typ.)

 Impedance
 50 Ω

Operating Temperature -  $40 \sim 105 \,^{\circ}\mathrm{C}$  Maximum Power 1 W

**Termination** Ag (Environmentally-Friendly Leadless) **Resistance to Soldering Heats** 260°C , 10sec.

NOTE

## **MECHANICAL DRAWING**

|               | Dimension       | _        |                    |                   |
|---------------|-----------------|----------|--------------------|-------------------|
| L (mm)        | 1.60 ±0.15      | _        | Top View           | Size View         |
| W (mm)        | $0.80 \pm 0.15$ |          |                    | <del>-</del>      |
| T (mm)        | $0.40 \pm 0.15$ |          |                    |                   |
| A1(mm)        | $0.70 \pm 0.15$ |          | w ( )              |                   |
| A2(mm)        | 0.25 ±0.15      |          |                    |                   |
| B1(mm)        | $0.30 \pm 0.15$ |          | $\underline{\Psi}$ | $\leftrightarrow$ |
| B2(mm)        | 0.25 ±0.15      |          | <b>Bottom</b> View | Т                 |
| C1(mm)        | $0.70 \pm 0.15$ |          | Bottom view        |                   |
| C2(mm)        | 0.25 ±0.15      |          | $\uparrow$         | 1                 |
| G1(mm)        | $0.20 \pm 0.05$ |          | A1                 | <b>⊉</b> G2 C1    |
| G2(mm)        | $0.10 \pm 0.05$ |          |                    | <b>1</b> B1 ↓     |
|               |                 |          | $\leftrightarrow$  | *                 |
| Terminal name |                 | Junction | A2 G1 B2 C2        | )                 |

| Terminal name | Function                   |
|---------------|----------------------------|
| В             | Feeding Point              |
| A1,A2         | Soldering Point for 2.4GHz |
| C1,C2         | Soldering Point for 5GHz   |

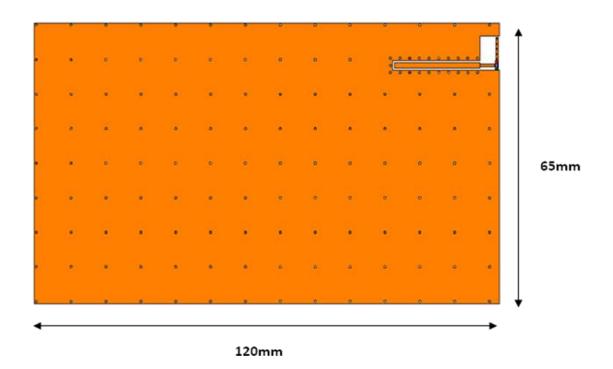
<sup>1.</sup> The specification is defined on Pulse evaluation board



Description: 1608 2.4G&5G Chip Antenna

PART NUMBER: ANT1608LL14R2455A

# REFERENCE DESIGN OF EVALUATION BOARD



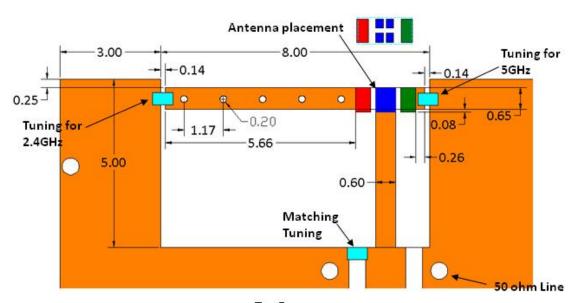
Outlook and dimension of evaluation board



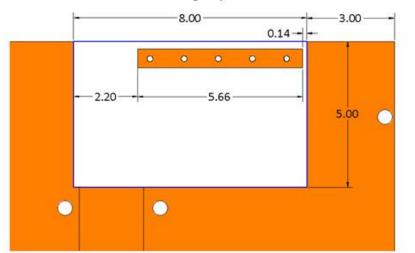
**Description**: 1608 2.4G&5G Chip Antenna

PART NUMBER: ANT1608LL14R2455A

## REFERENCE DESIGN OF EVALUATION BOARD



Top Layer



Unit: mm

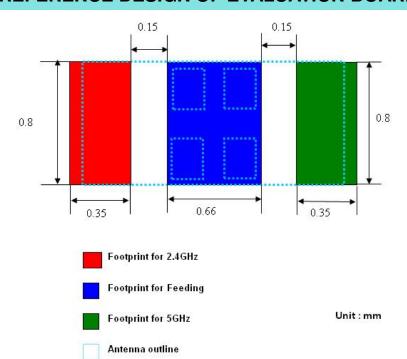
**Bottom Layer** 

Details of soldering Pad

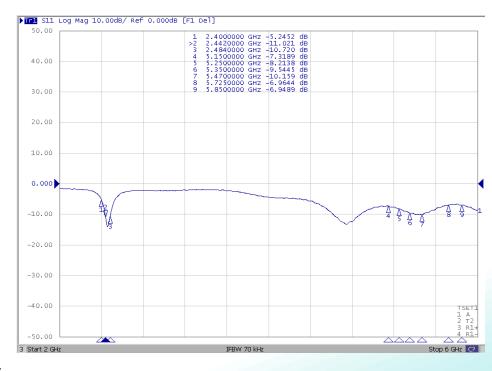
**Description**: 1608 2.4G&5G Chip Antenna

PART NUMBER: ANT1608LL14R2455A

## REFERENCE DESIGN OF EVALUATION BOARD



Footprint



Return loss

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**Description**: 1608 2.4G&5G Chip Antenna

PART NUMBER: ANT1608LL14R2455A

## **ELECTRICAL PERFORMANCES**

Model name Test mode DΒ 1608 Test frequency / Polarization Test date 2450.00 MHz / Vector 2014/11/6 Gain(dBi) 5.00 - $Y_{\text{-maj}_3}$ X-1313 0.00 --5.00 · -10.00 --15.00 -20.00 -25.00 -Evaluation board and XYZ direction -30.00-35.00 -Max gain= 3.11dBi, at (120, 150) MEG (mean effective gain)= -2.69dBi Directivity(dB)= 5.31 Efficiency= -2.20dB, 60.28%

Radiation pattern



**Description**: 1608 2.4G&5G Chip Antenna

PART NUMBER: ANT1608LL14R2455A

## **ELECTRICAL PERFORMANCES**

Model name Test mode DB 1608 Test frequency / Polarization Test date 5470.00 MHz / Vector 2014/11/6 Gain(dBi) 5.00 - $Y_{\cdot \eta \chi_{\tilde{k}_3}}$ 8-15 0.00 --5.00 --10.00 -15.00 ·  $-20.00 \cdot$ -25.00 -Evaluation board and XYZ direction -30.00 · -35.00 -Max gain= 2.50dBi, at (90, 60) MEG (mean effective gain)= -3.79dBi Directivity(dB)= 5.07 Efficiency= -2.57dB, 55.28%

Radiation pattern



Description: 1608 2.4G&5G Chip Antenna

PART NUMBER: ANT1608LL14R2455A

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RevisionDateDescriptionVersion 1Oct. 13, 2020- New issue