

**Description**: 1204 870MHz Chip Antenna

PART NUMBER: ANT1204LL16R0870A

### **Features:**

- Size: 12.0x4.0x1.2 mm
- Omni-directional Radiation
- Tape & reel automatic mounting
- Reflow process compatible
- RoHS compliant

# **Applications:**

- Smart meter
- Industrial remote control
- ISM band equipment

# **ELECTRICAL SPECIFICATIONS**

**Working Frequency** Bandwidth **Return Loss Polarization Azimuth Beamwidth** Peak Gain **Impedance Operating Temperature Maximum Power Termination Resistance to Soldering Heats** 

870 MHz 15 MHz(Typ.) 6.49 dB Min Linear Omni-directional 1.05 dBi(Typ.) 50 Ω - 40~105 °C

Ni / Sn (Environmentally-Friendly Leadless) 260°C , 10sec.

NOTE

1. The specification is defined on Pulse evaluation board

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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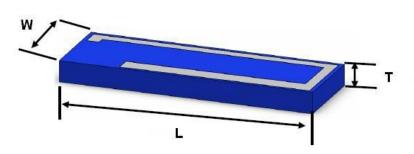


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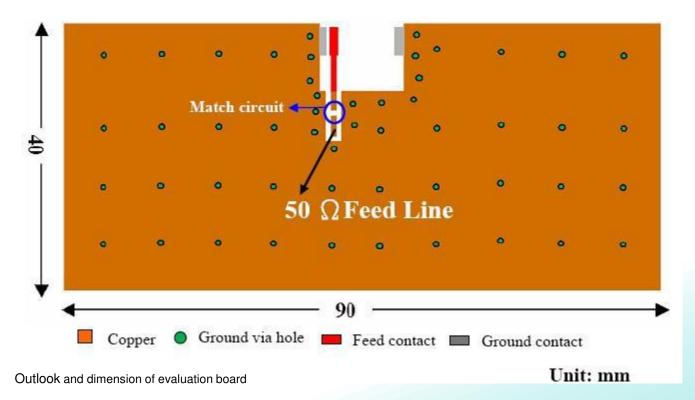
# **MECHANICAL DRAWING**

|        | Dimension       |  |
|--------|-----------------|--|
| L (mm) | 12.0 ±0.10      |  |
| W (mm) | $4.00 \pm 0.10$ |  |
| T (mm) | 1.20 ±0.10      |  |



Unit: mm

# REFERENCE DESIGN OF EVALUATION BOARD



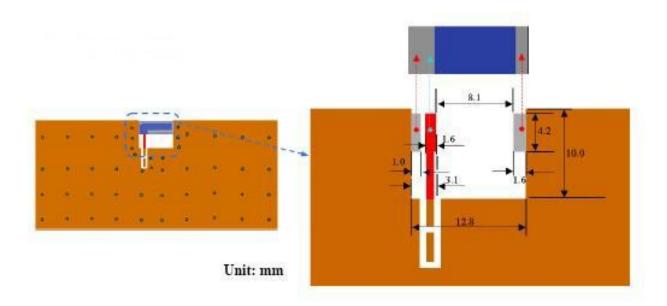
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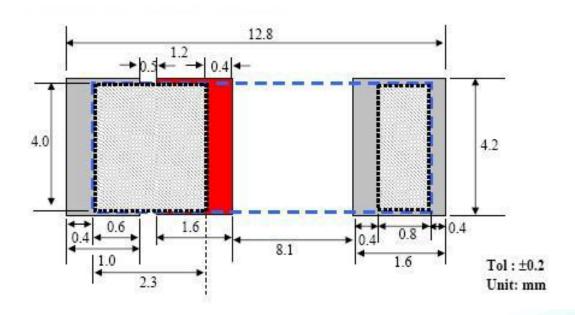


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Details of soldering Pad



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### **ELECTRICAL PERFORMANCES**



Marker data 1. 861MHz, -6.5000dB 2. 870MHz, -18.375dB

3. 878MHz, -6.5000dB

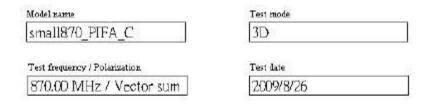
Return loss

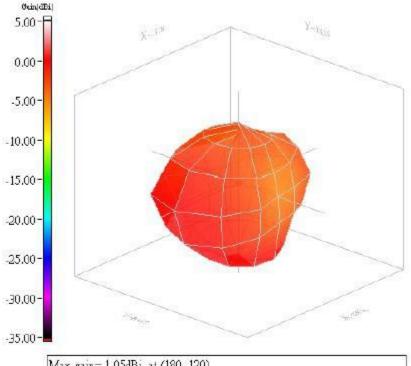


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### **ELECTRICAL PERFORMANCES**





Max gain= 1.05dBi, at (180, 120)
MEG(mean effective gain)= -1.80dBi
Directivity(dB)= 3.38
Efficiency= -2.33dB, 58.49%

Frequency= 870MHz Max gain = 1.05 dBi, at (180, 120) MEG (mean effective gain)= -1.80 dBi Directivity (dB) = 3.38 Efficiency = -2.33 dB, 58.49 %

Radiation pattern



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|-----|-----|--------|---|-----|----|
| RE\ |     | $\sim$ | 9 | 111 | RV |
|     |     |        |   |     |    |

RevisionDateDescriptionVersion 1Oct. 14, 2020- New issue