

**Description:** 1204 UHF 870MHz Chip Antenna

**PART NUMBER:** ANT1204F007R0870A

### Features:

- Size : 12.2 x 4.0 x 1.6 mm
- Omni-directional Radiation
- Tape & reel automatic mounting
- Reflow process compatible
- RoHS compliant



### Applications:

- Smart meter
- Industrial remote control

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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**ELECTRICAL SPECIFICATIONS**

<b>Centre Frequency</b>	870 MHz
<b>Bandwidth</b>	30 MHz (Typ.)
<b>Return Loss</b>	10 dB Min
<b>Polarization</b>	Linear
<b>Azimuth Beamwidth</b>	Omni-directional
<b>Peak Gain</b>	1.67 dBi(Typ.)
<b>Impedance</b>	50 Ω
<b>Operating Temperature</b>	- 40~85 °C
<b>Maximum Power</b>	1 W
<b>Termination</b>	Cu / Au (Environmentally-Friendly Leadless)
<b>Resistance to Soldering Heats</b>	260°C , 10sec.

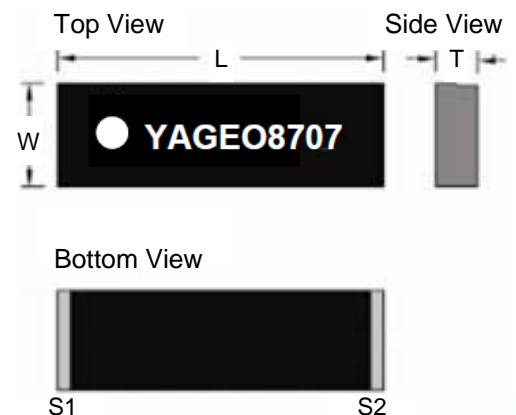
NOTE

1. The specification is defined on Pulse evaluation board

**MECHANICAL DRAWING**

	<b>Dimension</b>
L (mm)	12.2 ±0.2
W (mm)	4.0 ±0.2
T (mm)	1.6 ±0.2

<b>TERMINATION</b>	<b>Function</b>
S1	Feeding Point
S2	Soldering Point



Antenna outlines

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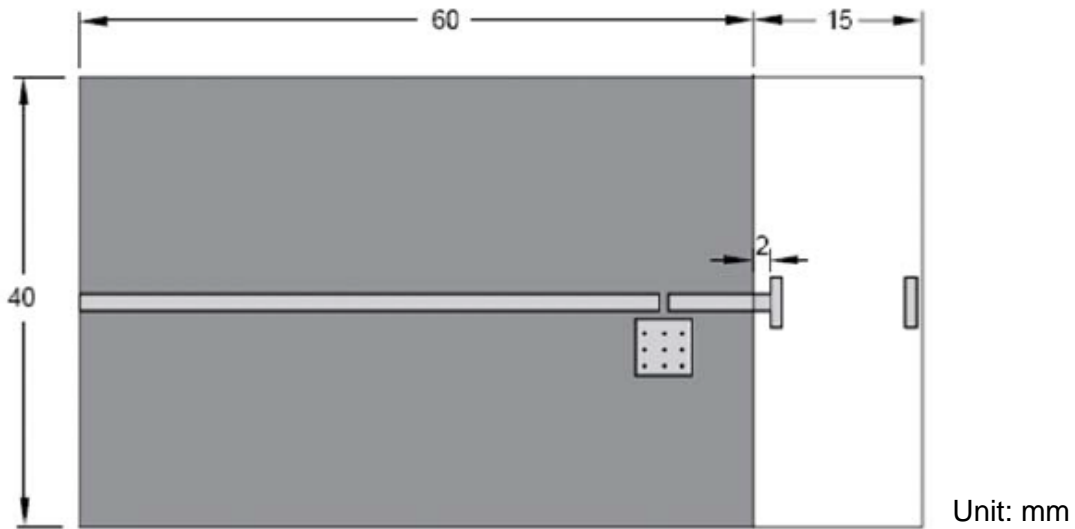
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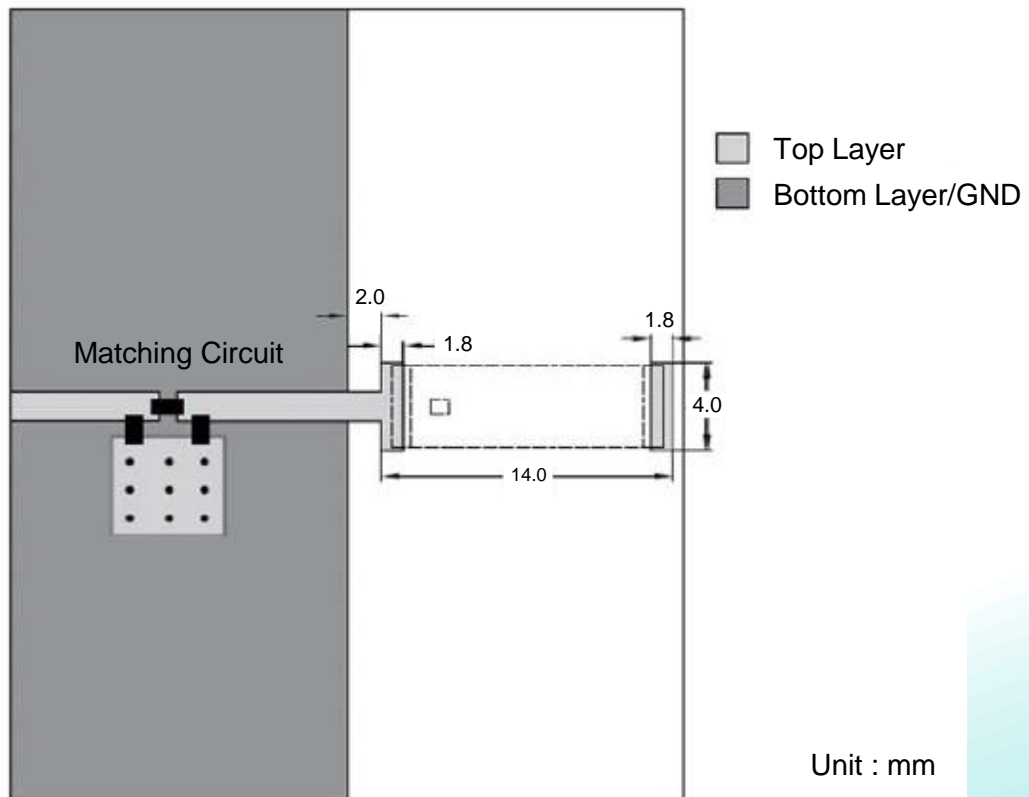
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**REFERENCE DESIGN OF EVALUATION BOARD**



Outlook and dimension of evaluation board



Details of soldering Pad

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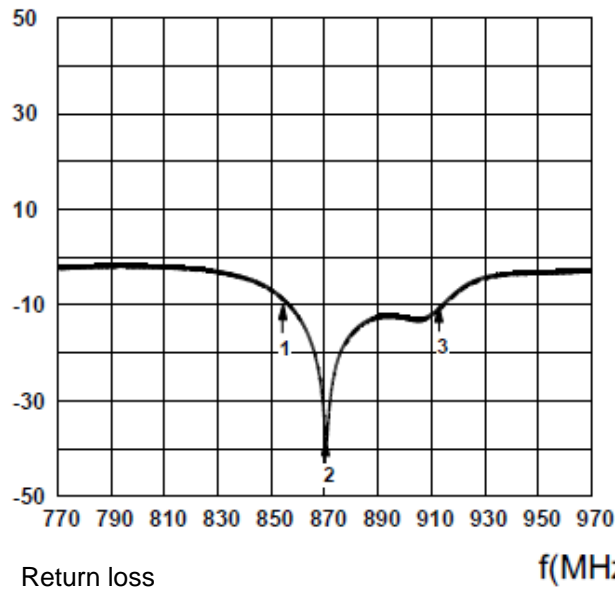
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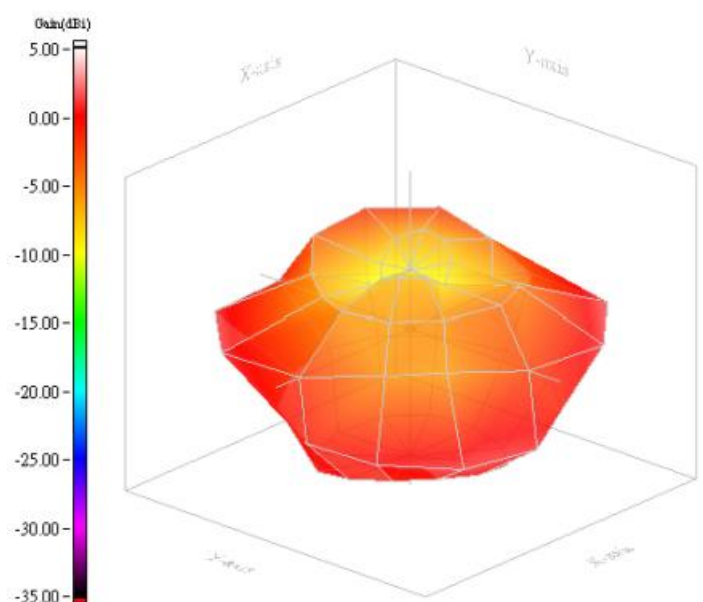
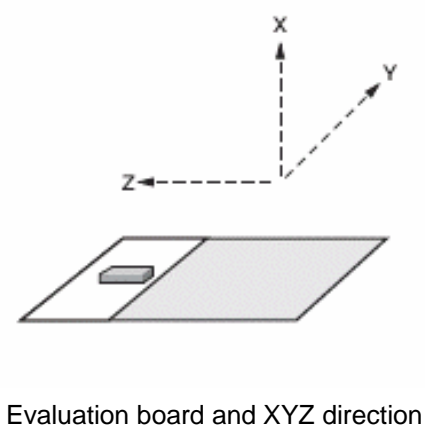
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**ELECTRICAL PERFORMANCES**



- Marker data
- 1. 856 MHz, -10dB
  - 2. 870 MHz, -34dB
  - 3. 914 MHz, -10dB



Max gain = 1.67dBi, at (90,150)  
 MEG (mean effective gain) = -2.69dBi  
 Directivity (dB) = 3.87  
 Efficiency = -2.20dB, 60.3%

Radiation pattern

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