

**Description:** 1204 870MHz Chip Antenna

**PART NUMBER:** ANT1204LL08R0870A

### Features:

- Size : 12.1x4.1x1.6 mm
- Omni-directional Radiation
- Tape & reel automatic mounting
- Reflow process compatible
- RoHS compliant



### Applications:

- Smart meter
- Industrial remote control
- ISM band equipment

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

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**ELECTRICAL SPECIFICATIONS**

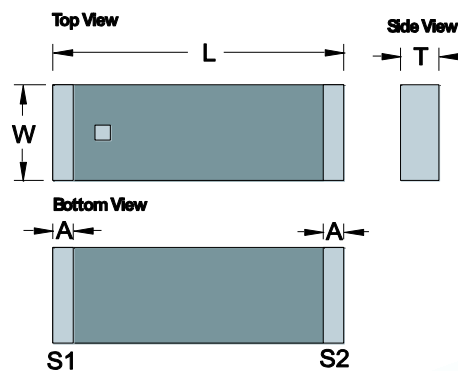
<b>Working Frequency</b>	870 MHz
<b>Bandwidth</b>	34 MHz(Typ.)
<b>Return Loss</b>	10.0 dB Min
<b>Polarization</b>	Linear
<b>Azimuth Beamwidth</b>	Omni-directional
<b>Peak Gain</b>	1.51 dBi(Typ.)
<b>Impedance</b>	50 Ω
<b>Operating Temperature</b>	- 40~105 °C
<b>Maximum Power</b>	1 W
<b>Termination</b>	Ni / Sn (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)	12.1 ±0.20
W (mm)	4.10 ±0.20
T (mm)	1.60 ±0.20
A (mm)	0.85 ±0.35



YNH0060

<b>Terminal name</b>	<b>Function</b>
S1	Feeding Point
S2	Soldering Point

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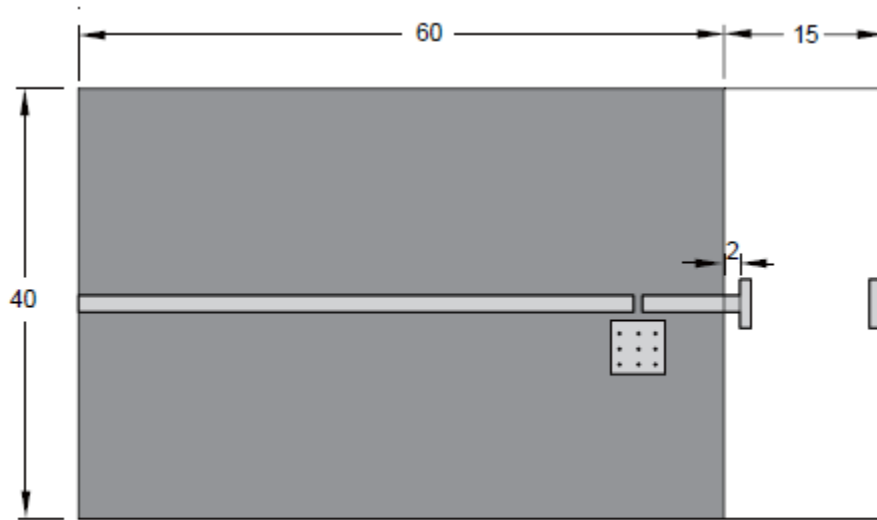
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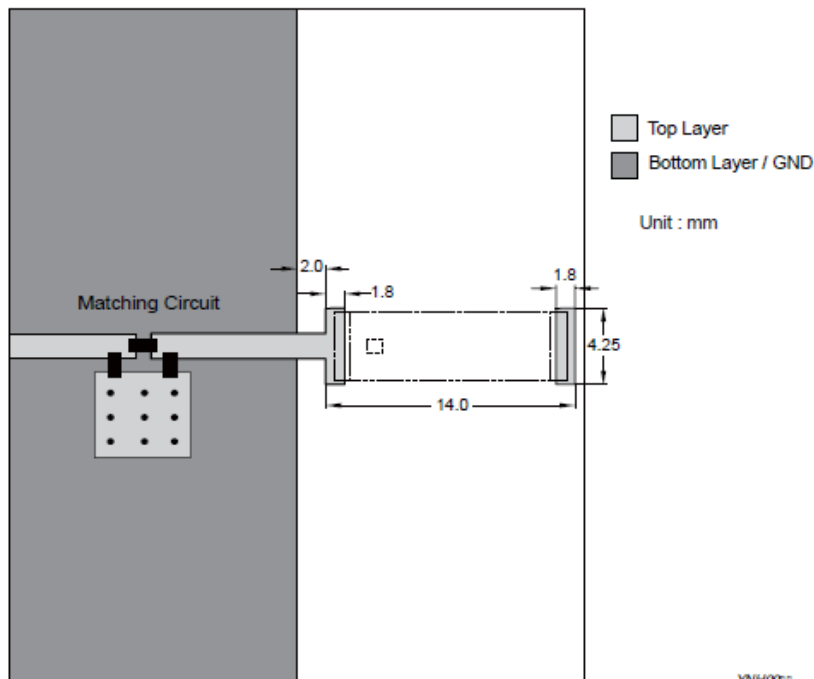
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**REFERENCE DESIGN OF EVALUATION BOARD**



Unit : mm

Outlook and dimension of evaluation board



YNH0001

Details of soldering Pad

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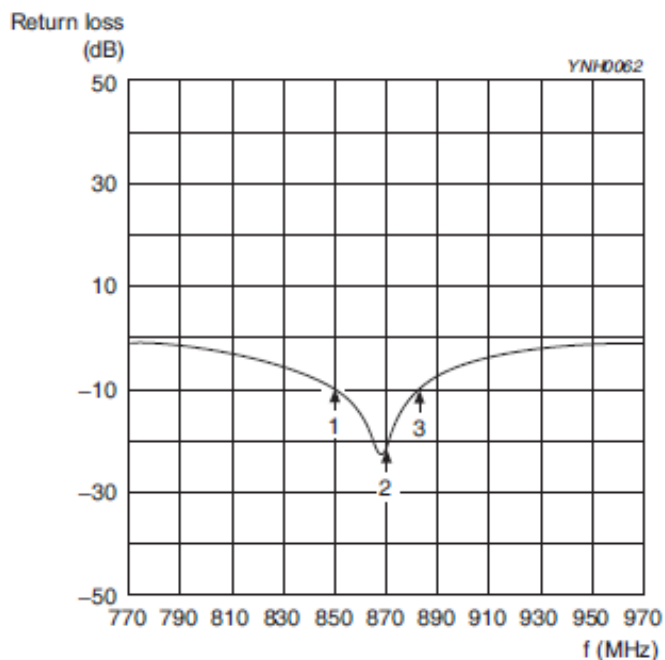
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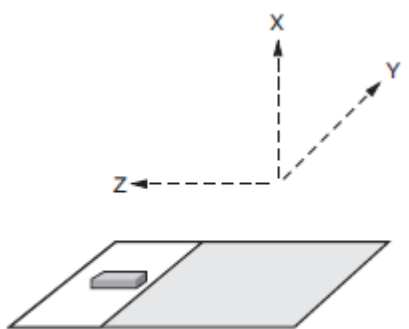
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**ELECTRICAL PERFORMANCES**

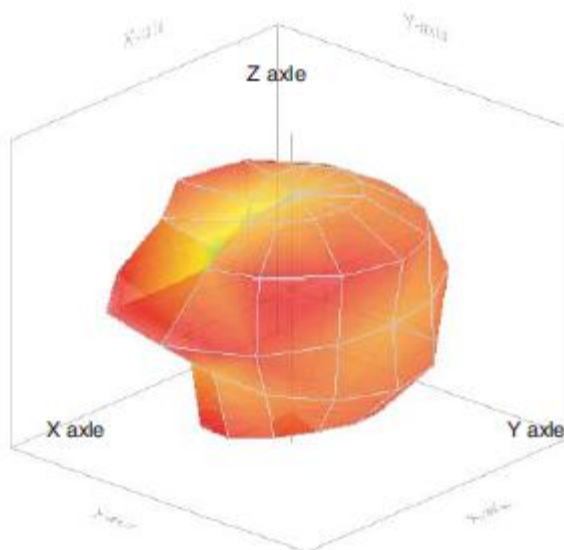
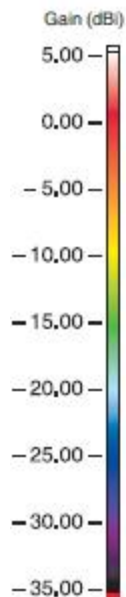


Marker data  
 1. 849MHz, -10dB  
 2. 870MHz, -21.6dB  
 3. 883MHz, -10dB

Return loss



Evaluation board and XYZ direction



Radiation pattern

Frequency= 870MHz  
 Max gain = 1.51 dBi, at (90, 330)  
 MEG (mean effective gain)= -2.64 dBi  
 Directivity (dB) = 3.58  
 Efficiency = -2.07 dB, 62.06 %

YNH0063

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### REVISION HISTORY

Revision	Date	Description
Version 1	Oct. 14, 2020	- New issue

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