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Pulse A YAGEO Company | LARSEN Antennas

TECHNICAL DATA SHEET

Description: 7020 870MHz Chip Antenna

PART NUMBER: ANT7020LL05R0870A

Features:

- Size : 7.00x2.05x0.78 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

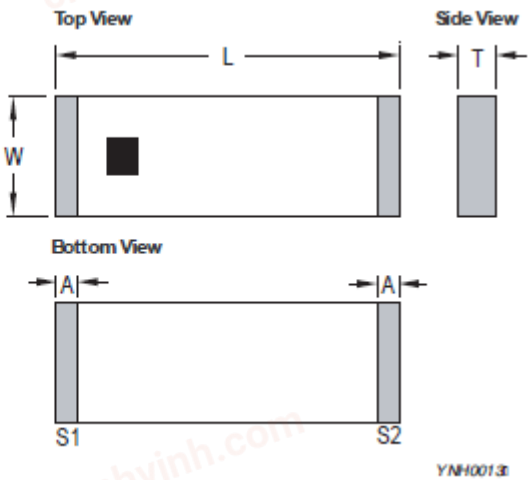
Working Frequency	870 MHz
Bandwidth	37 MHz(Typ.)
Return Loss	10 dB Min.
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	1.83 dBi(Typ.)
Impedance	50 Ω
Operating Temperature	- 40~105 ℃
Maximum Power	1 W
Termination	Ni / Sn (Environmentally-Friendly Leadless)
Resistance to Soldering Heats	260℃ , 10sec.

NOTE
1. The specification is defined on Pulse evaluation board

MECHANICAL DRAWING

	Dimension
L (mm)	7.00 ±0.20
W (mm)	2.05 ±0.20
T (mm)	0.78 ±0.20
A (mm)	0.45 ±0.20





Terminal name	Function
S1	Feeding Point
S2	Soldering Point

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RoHS COMPLIANT

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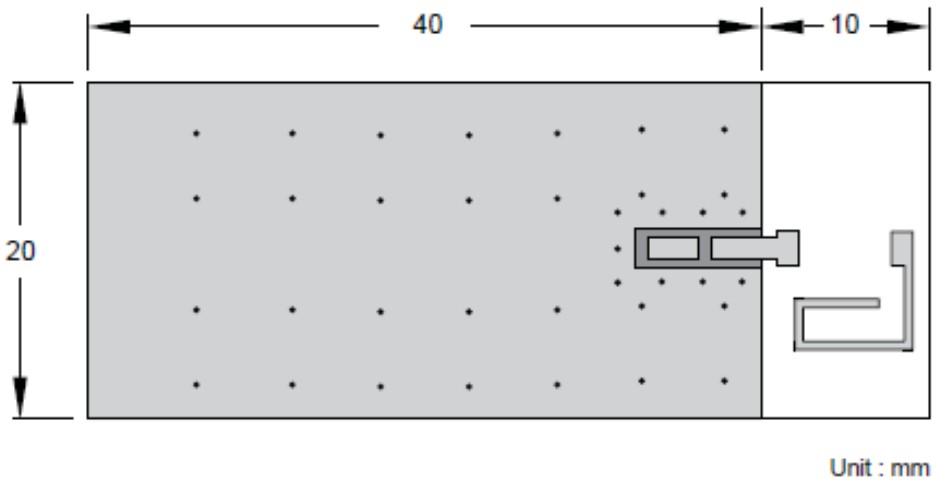
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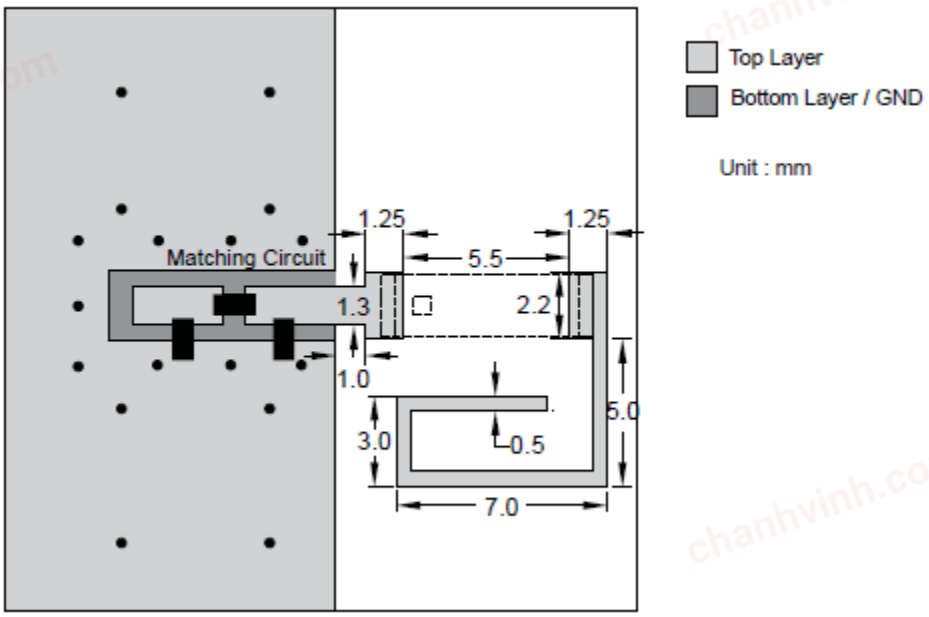
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REFERENCE DESIGN OF EVALUATION BOARD



Outlook and dimension of evaluation board



Details of soldering Pad

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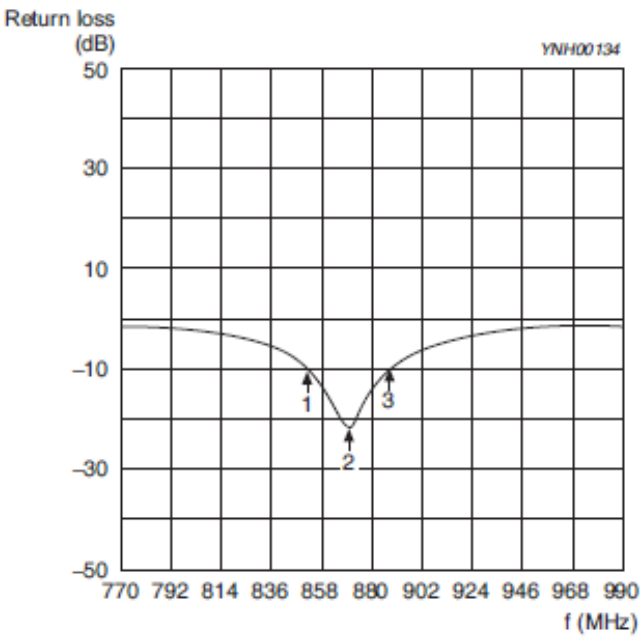
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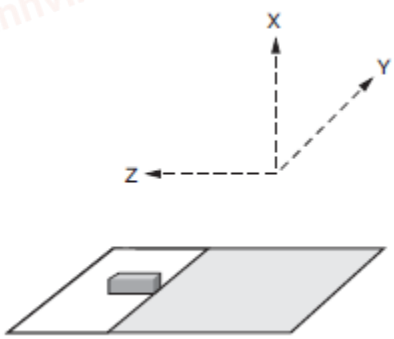
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ELECTRICAL PERFORMANCES

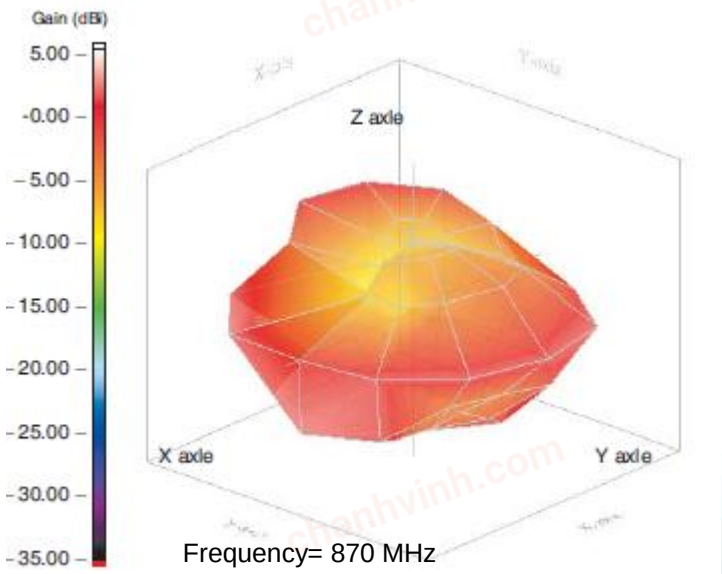


Maker data
1. 852MHz, -10dB
2. 870MHz, -22dB
3. 889MHz, -10dB

Return loss



Evaluation board and XYZ direction



Frequency= 870 MHz
Max gain = 1.83 dBi, at (90,330)
MEG (mean effective gain)= -2.51dBi
Directivity (dB) = 3.75
Efficiency = -1.92dB, 64.20%

Radiation pattern

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REVISION HISTORY

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

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