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Pulse | LARSEN Antennas
A YAGEO Company

TECHNICAL DATA SHEET

Description: 7020 2.4-2.5GHz Chip Antenna

PART NUMBER: ANT7020LL05R2400A

Features:

- Size : 7.00x2.00x0.75 mm
- Omni-directional radiation
- Tape & reel automatic mounting
- Reflow process compatible
- RoHS compliant

Applications:

- 2.4 GHz WiFi device
- Bluetooth gadget
- Zigbee devic
- ISM band equipment

ELECTRICAL SPECIFICATIONS

Working Frequency	2.45 GHz
Bandwidth	500 MHz(Typ.)
Return Loss	10 dB Max.
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	2.62 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

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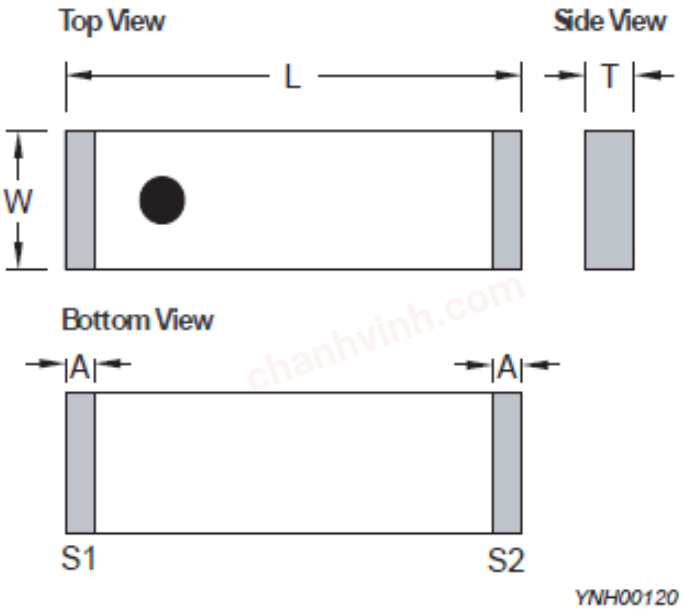
MECHANICAL DRAWING





	Dimension
L (mm)	7.00 ±0.20
W (mm)	2.00 ±0.20
T (mm)	0.75 ±0.20
A (mm)	0.45 ±0.20

Terminal name	Function
S1	Feeding Point
S2	Soldering Point

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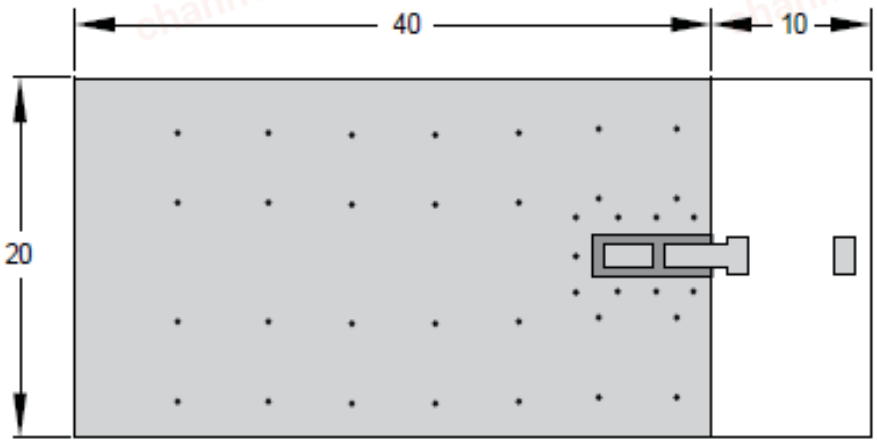
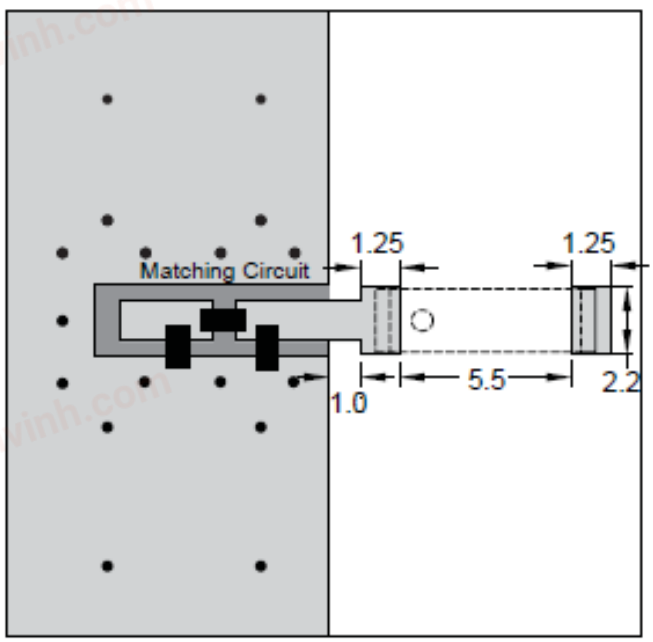
REFERENCE DESIGN OF EVALUATION BOARD



Unit : mm

Outlook and dimension of evaluation board



Top Layer

Bottom Layer / GND

Unit : mm

Details of soldering Pad

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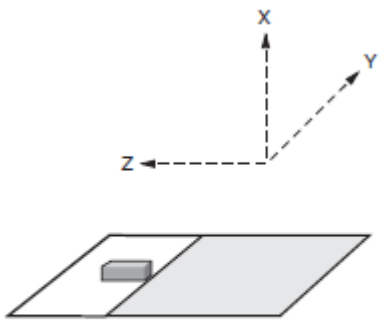
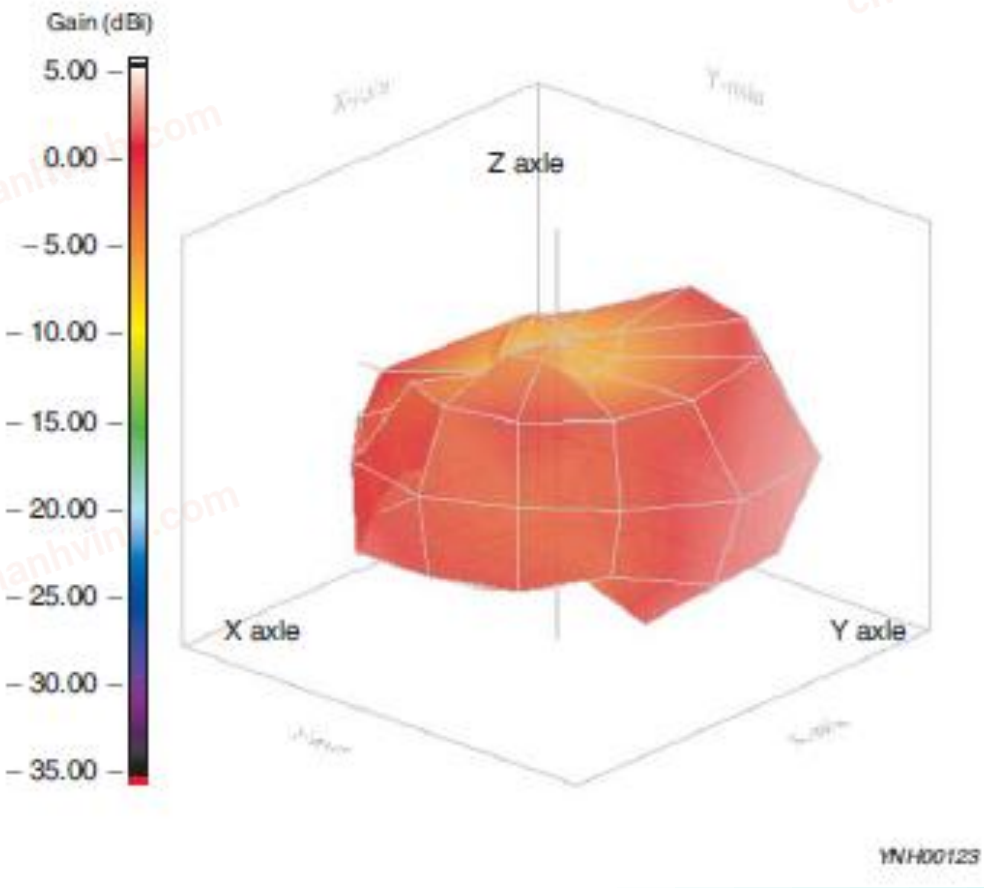


Evaluation board and XYZ direction



Radiation pattern

Frequency= 2.45 GHz
Max gain = 2.62 dBi, at (90,120)
MEG (mean effective gain)= -2.28 dBi
Directivity (dB) = 3.67
Efficiency = -1.05 dB, 78.49%

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RoHS COMPLIANT

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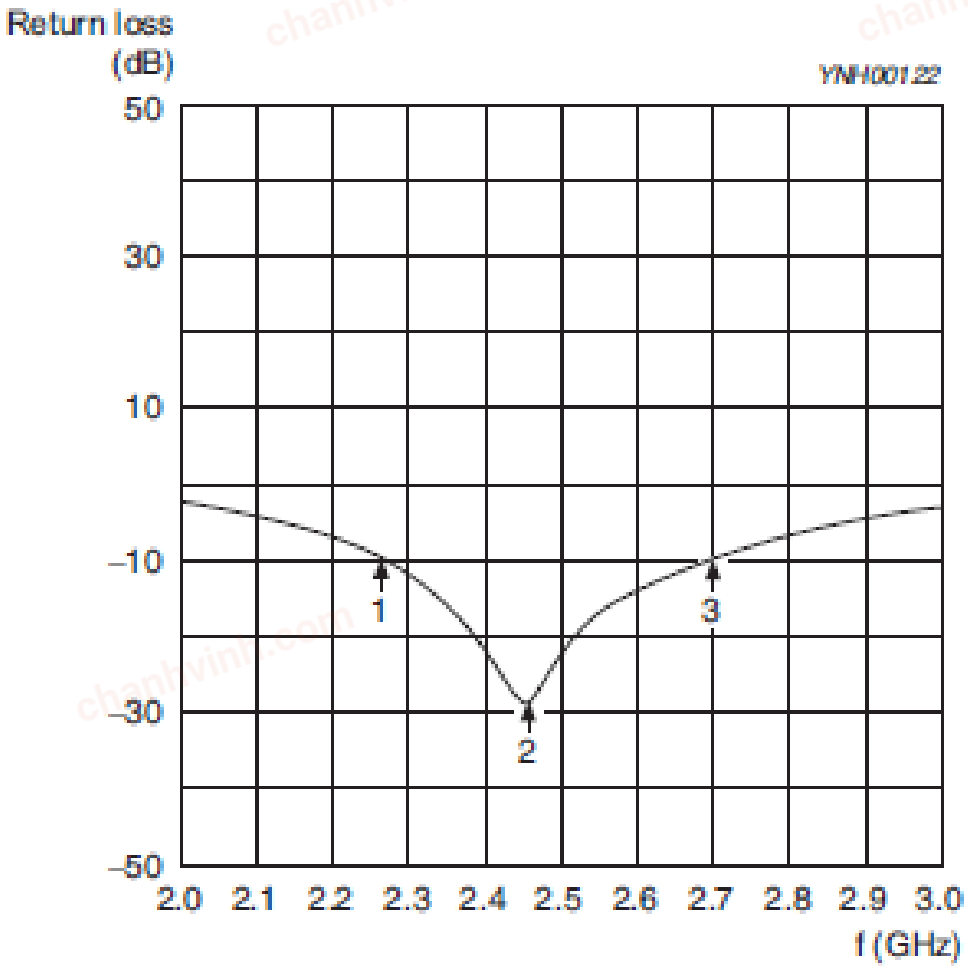
ELECTRICAL PERFORMANCES



Maker data
2.27GHz, -10dB
2.45GHz, -28.3dB
2.69GHz, -10dB

Return loss

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REVISION HISTORY

Revision	Date	Description
Version 1	Nov. 20, 2020	- New issue

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