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Pulse | LARSEN Antennas
A YAGEO Company

TECHNICAL DATA SHEET

Description: 1204 433MHz FR4 Chip Antenna

PART NUMBER: ANT1204F002R0433A

Features:

- Size : 12.3x4.0x1.6 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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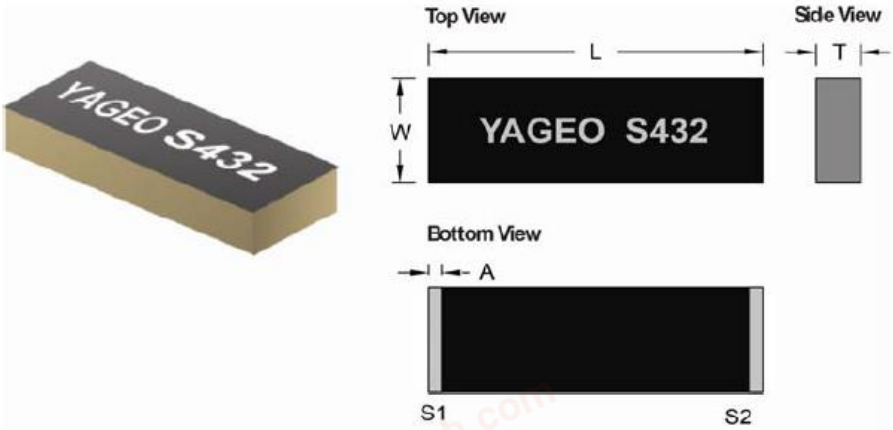
ELECTRICAL SPECIFICATIONS

Working Frequency	433 MHz
Bandwidth	28 MHz(Typ.)
Return Loss	6.5 dB Min.
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	0.79 dBi(Typ.)
Impedance	50 Ω
Operating Temperature	- 40~105 ℃
Maximum Power	2 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)	12.3 ±0.20
W (mm)	4.00 ±0.20
T (mm)	1.60 ±0.20
A (mm)	0.50 ±0.20



Terminal name	Function
S1	Feeding Point
S2	Soldering Point

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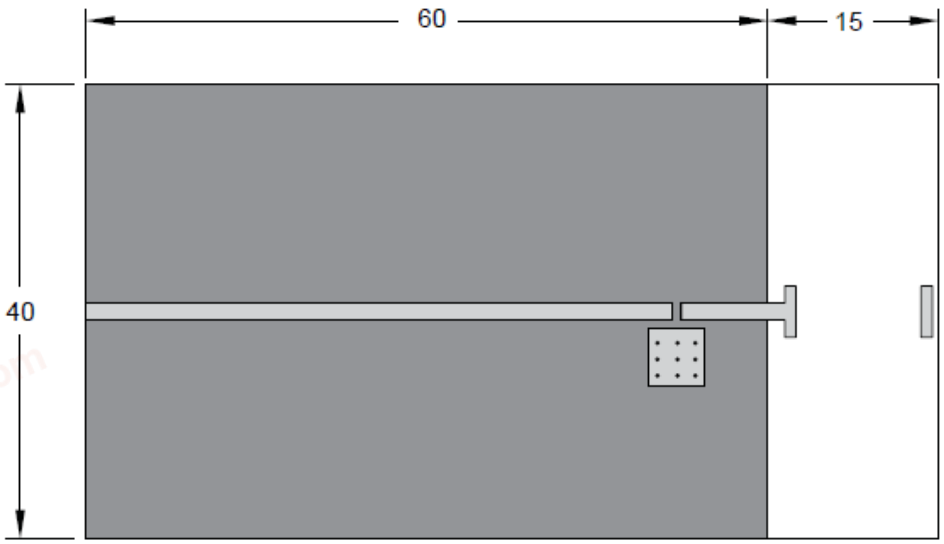
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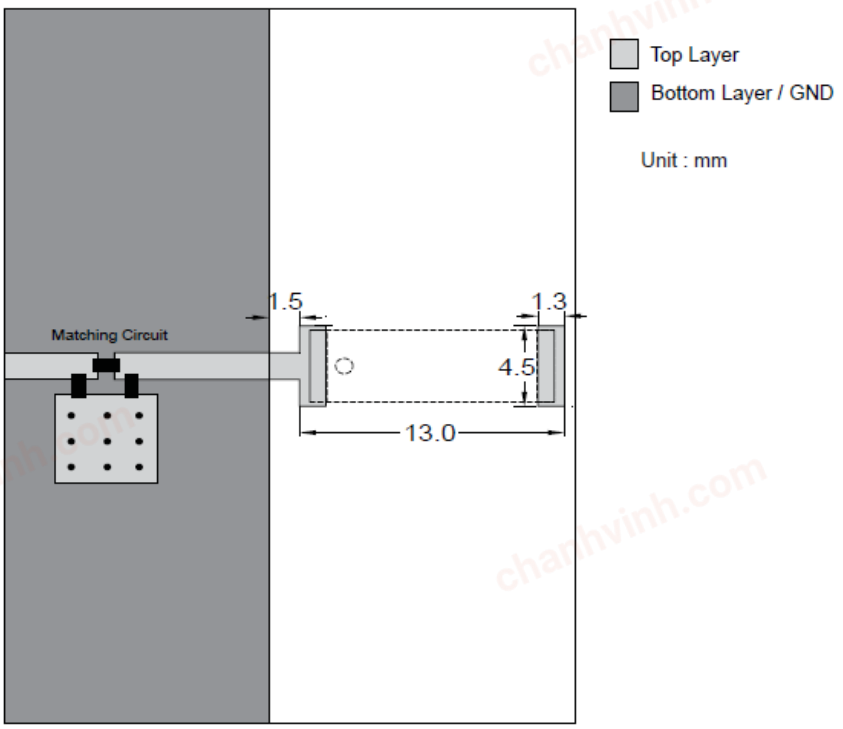
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REFERENCE DESIGN OF EVALUATION BOARD



Outlook and dimension of evaluation board

Unit : mm



Details of soldering Pad

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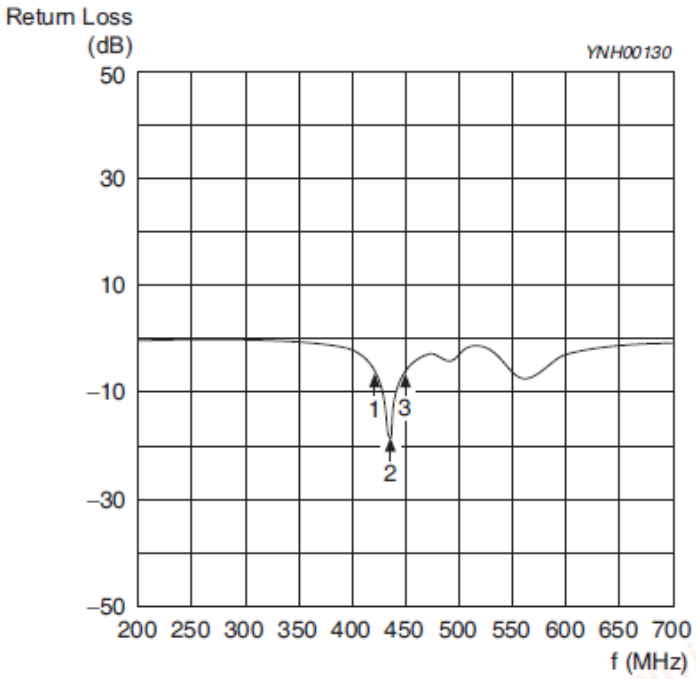
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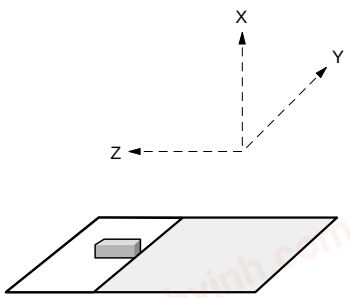
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ELECTRICAL PERFORMANCES

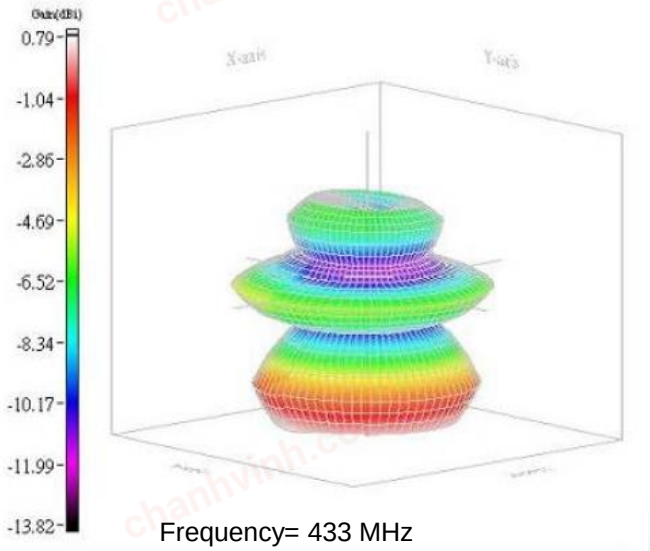


Marker data
1. 419MHz, -6.5dB
2. 433MHz, -16 dB
3. 447MHz, -6.5dB

Return loss



Evaluation board and XYZ direction



Frequency= 433 MHz
Max gain = 0.79 dBi, at (150,330)
MEG (mean effective gain)= -4.84 dBi
Directivity (dB) = 6.35
Efficiency = -5.56dB, 27.79 %

Radiation pattern

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REVISION HISTORY

Revision	Date	Description
Version 1	Apr. 29, 2021	- New issue for Maximum Power 2W.

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RoHS COMPLIANT