

**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**

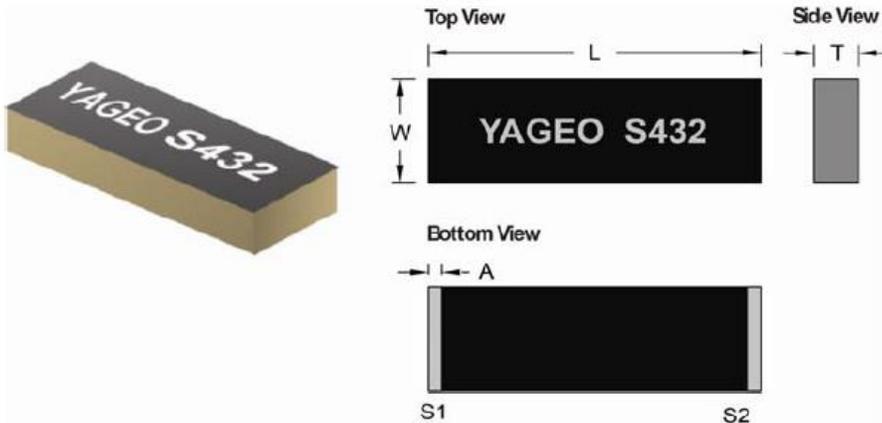
<b>Working Frequency</b>	433 MHz
<b>Bandwidth</b>	28 MHz(Typ.)
<b>Return Loss</b>	6.5 dB Min.
<b>Polarization</b>	Linear
<b>Azimuth Beamwidth</b>	Omni-directional
<b>Peak Gain</b>	0.79 dBi(Typ.)
<b>Impedance</b>	50 Ω
<b>Operating Temperature</b>	- 40~105 °C
<b>Maximum Power</b>	2 W
<b>Termination</b>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



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

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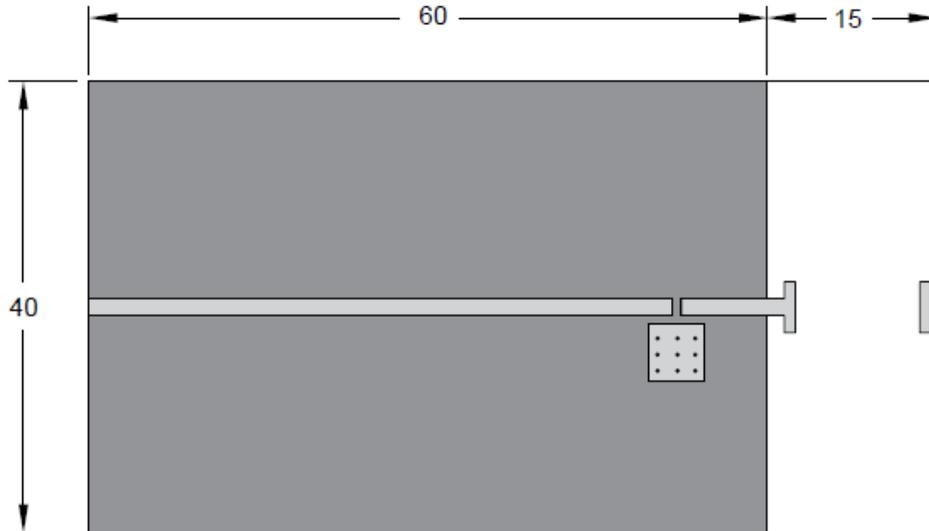
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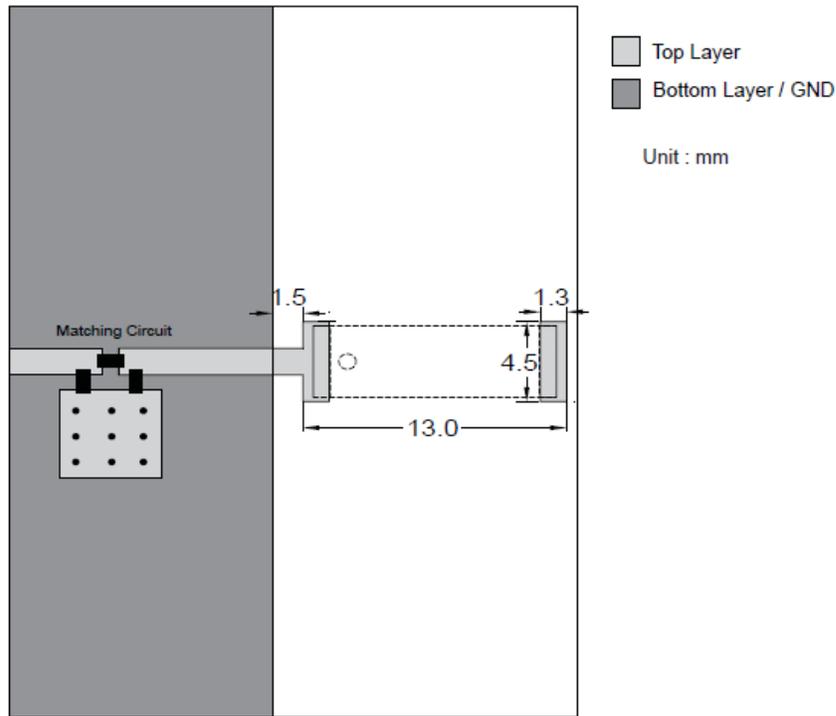
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**REFERENCE DESIGN OF EVALUATION BOARD**



Outlook and dimension of evaluation board

Unit : mm



Details of soldering Pad

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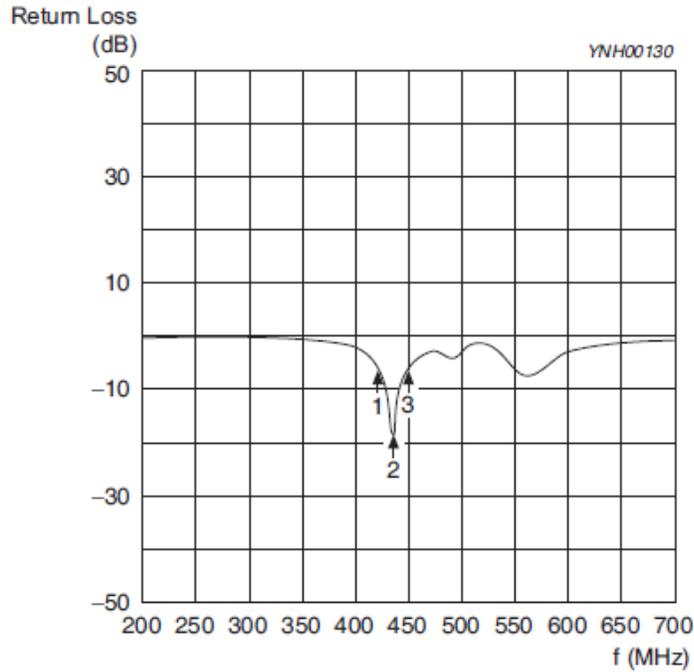
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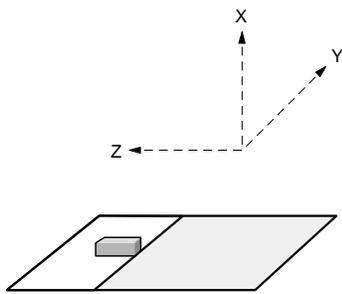
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**ELECTRICAL PERFORMANCES**

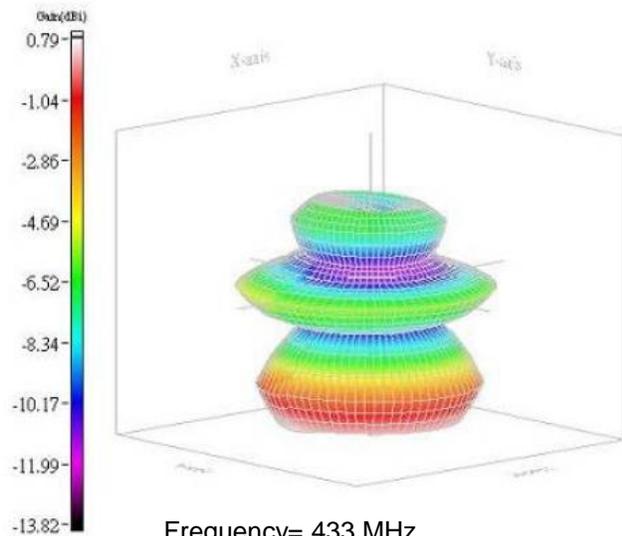


Marker data  
 1. 419MHz, -6.5dB  
 2. 433MHz, -16 dB  
 3. 447MHz, -6.5dB

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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