

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.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

For more information:



Pulse Worldwide Headquarters
15255 Innovation Drive #100
San Diego, CA 92128
USA
Tel: 1-858-674-8100

Pulse/Larsen Antennas
18110 SE 34th St Bldg 2 Suite 250
Vancouver, WA 98683
USA
Tel: 1-360-944-7551

Europe Headquarters
Pulse GmbH & Co, KG
Zeppelinstrasse 15
Herrenberg, Germany
Tel: 49 7032 7806 0

Pulse (Suzhou) Wireless Products Co, Inc.
99 Huo Ju Road(#29 Bldg, 4th Phase
Suzhou New District
Jiangsu Province, Suzhou 215009 PR China
Tel: 86 512 6807 9998

Description: 1204 433MHz FR4 Chip Antenna

PART NUMBER: ANT1204F002R0433A

ELECTRICAL SPECIFICATIONS

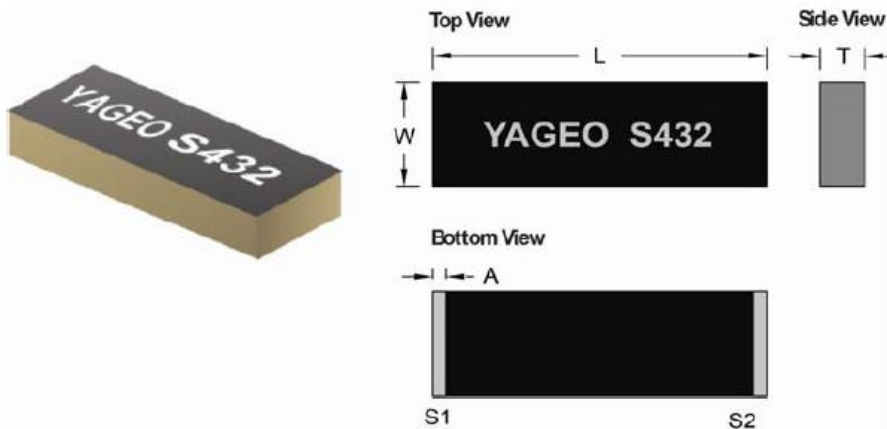
Working Frequency	433 MHz
Bandwidth	28 MHz(Typ.)
Return Loss	6.5 dB Min.
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	0.79 dBi(Typ.)
Impedance	50 Ω
Operating Temperature	- 40~105 $^{\circ}\text{C}$
Maximum Power	2 W
Termination	Ni / Sn (Environmentally-Friendly Leadless)
Resistance to Soldering Heats	260 $^{\circ}\text{C}$, 10sec.

NOTE

1. The specification is defined on Pulse evaluation board

MECHANICAL DRAWING

	Dimension
L (mm)	12.3 \pm 0.20
W (mm)	4.00 \pm 0.20
T (mm)	1.60 \pm 0.20
A (mm)	0.50 \pm 0.20



Terminal name	Function
S1	Feeding Point
S2	Soldering Point

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

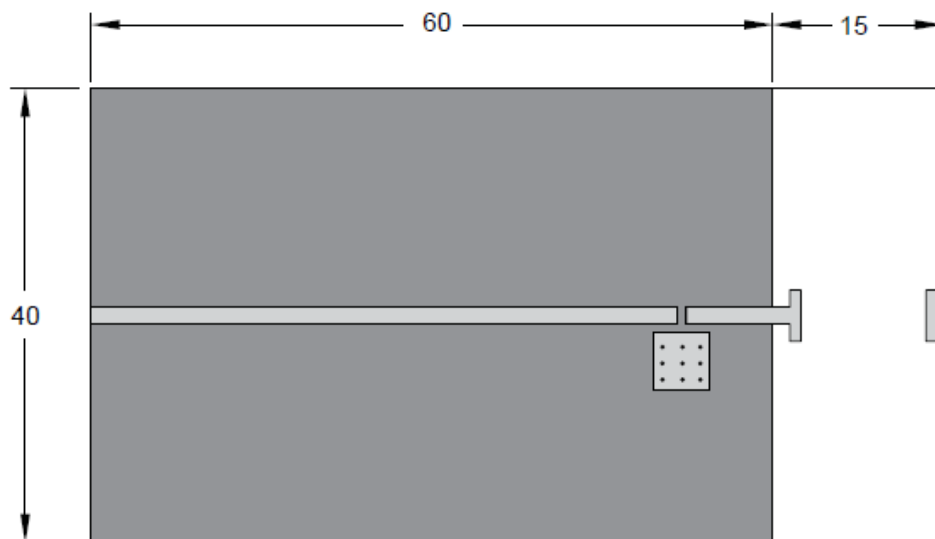
CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

Description: 1204 433MHz FR4 Chip Antenna

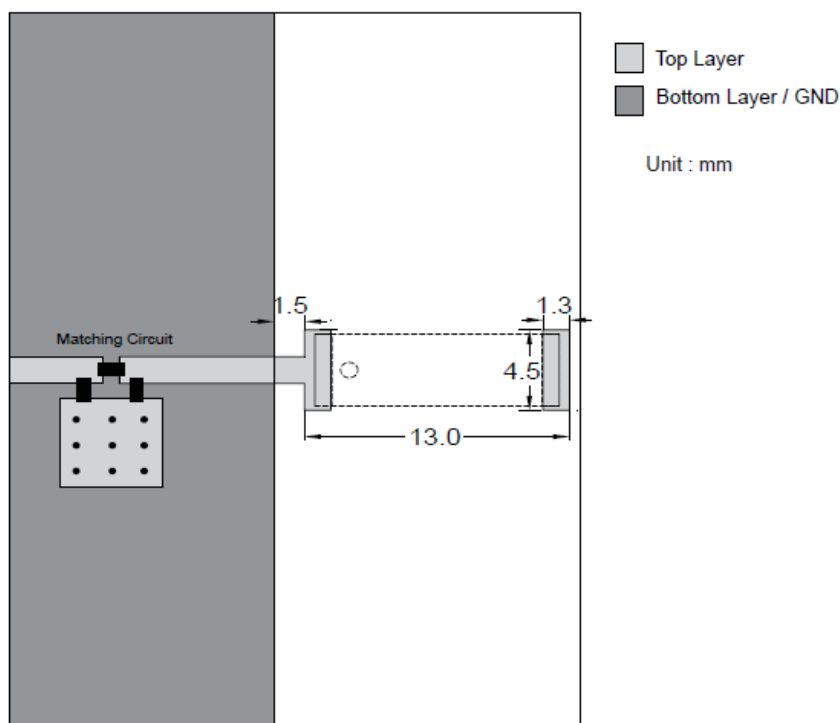
PART NUMBER: ANT1204F002R0433A

REFERENCE DESIGN OF EVALUATION BOARD



Outlook and dimension of evaluation board

Unit : mm



Details of soldering Pad

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

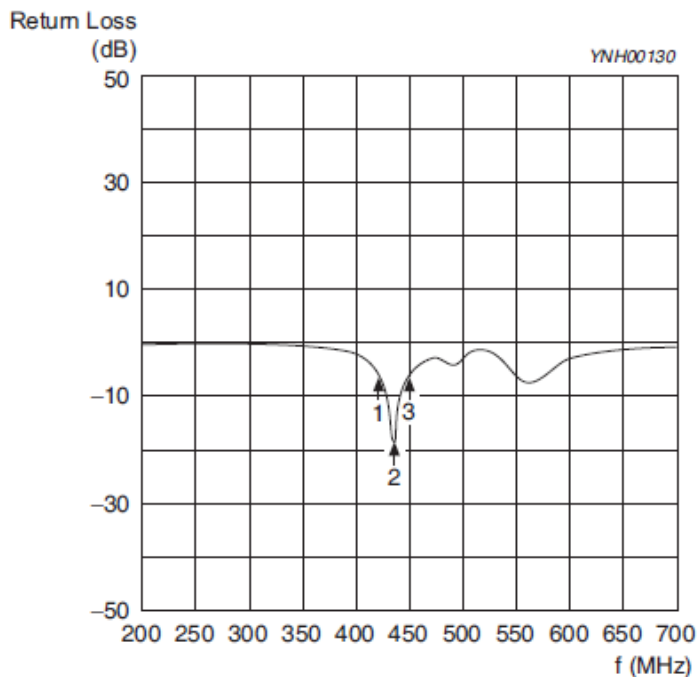
CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

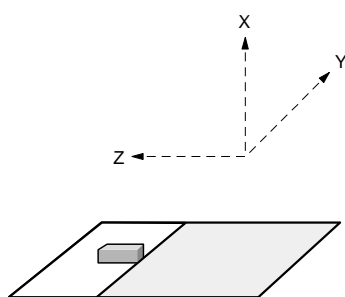
Description: 1204 433MHz FR4 Chip Antenna

PART NUMBER: ANT1204F002R0433A

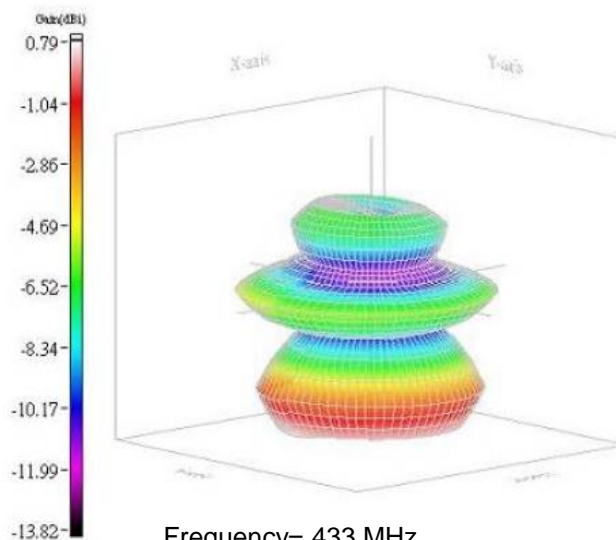
ELECTRICAL PERFORMANCES



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

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

Description: 1204 433MHz FR4 Chip Antenna

PART NUMBER: ANT1204F002R0433A

REVISION HISTORY

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

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

 RoHS

5