

# DATA SHEET

## WIRELESS COMPONENTS

FR4 Chip Antenna  
ANT1204F002R0433A

433MHZ  
I204 Series



FEATURES

- Compact size
- Omni-directional Radiation
- Tape & reel automatic mounting
- Reflow process compatible
- RoHS compliant

APPLICATIONS

- Smart meter
- Industrial remote control
- ISM band equipment

ORDERING INFORMATION

All part numbers are identified by the series, packing type, material, size, antenna type, working frequency and packing quantity.

**PART NUMBER**

**ANT I204 F 002 R 0433A**  
(1) (2) (3) (4) (5) (6)

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**(1) PRODUCT**

ANT = Antenna

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**(2) SIZE**

I204=12×4

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**(3) ANTENNA TYPE**

L, F, A=Chip antenna

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**(4) SERIAL NO.**

002

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**(5) PACKING STYLE**

R = Tape and Reel

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**(6) WORKING FREQUENCY**

0433=433 MHz

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**PHYCOMP CTC**

CAN431 I059020431K

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**I2NC**

431 I05902043

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**SPECIFICATION**

Table 1

| DESCRIPTION                   | VALUE                                       |
|-------------------------------|---------------------------------------------|
| Centre Frequency              | 433 M Hz                                    |
| Bandwidth                     | 28M Hz ( Typ. )                             |
| Return Loss                   | 6.5 dB min                                  |
| Polarization                  | Linear                                      |
| Azimuth Beamwidth             | Omni-directional                            |
| Peak Gain                     | 0.79 dBi ( Typ. )                           |
| Impedance                     | 50 $\Omega$                                 |
| Operating Temperature         | - 40~105 °C                                 |
| Maximum Power                 | 1 W                                         |
| Termination                   | Ni / Sn (Environmentally-Friendly Leadless) |
| Resistance to Soldering Heats | 260°C , 10sec.                              |

**NOTE**

I. The specification is defined on Yageo evaluation board

**DIMENSIONS**

Table 2 Machinal Dimension

|        | DIMENSION        |
|--------|------------------|
| L (mm) | 12.30 $\pm$ 0.20 |
| W (mm) | 4.00 $\pm$ 0.20  |
| T (mm) | 1.60 $\pm$ 0.20  |
| A (mm) | 0.50 $\pm$ 0.20  |

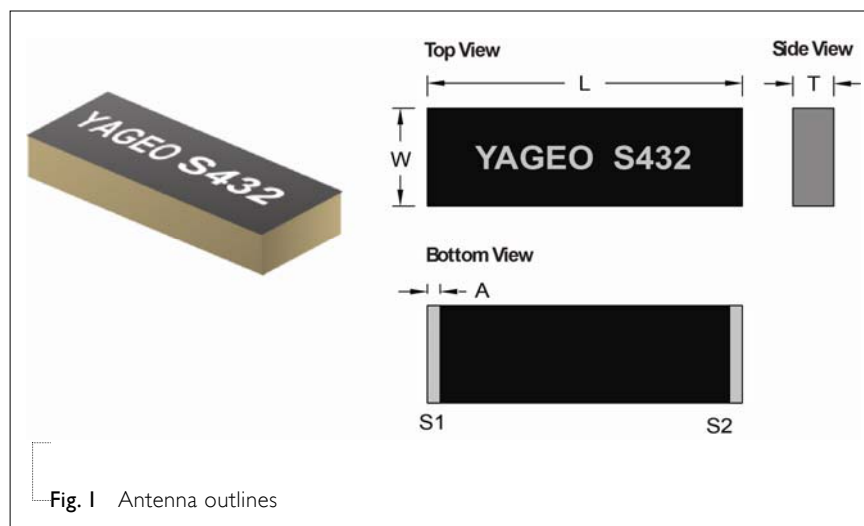
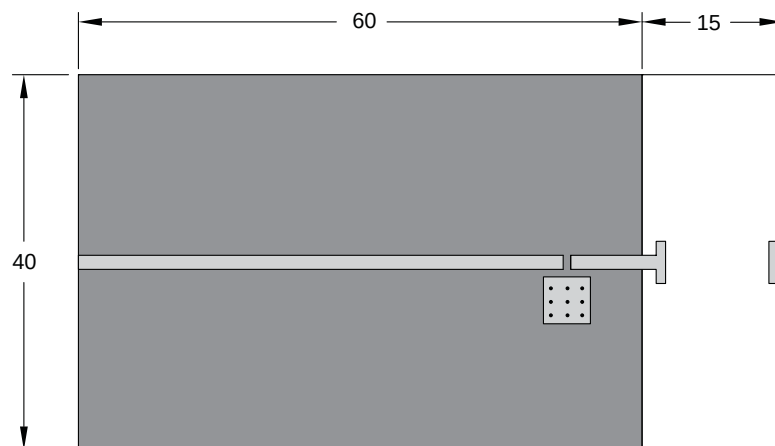
**OUTLINES**

Table 3 Termination configuration

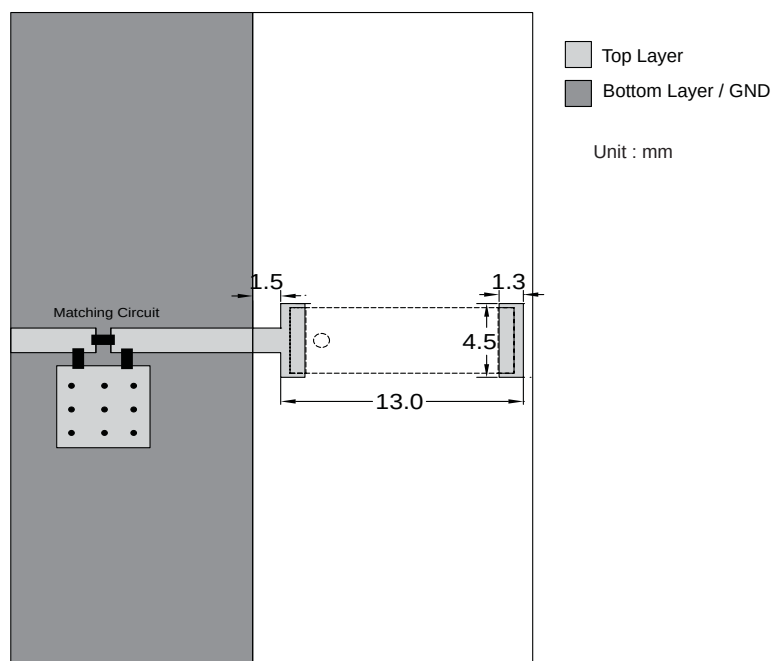
| TERMINAL NAME | FUNCTION        |
|---------------|-----------------|
| S1            | Feeding Point   |
| S2            | Soldering Point |

# REFERENCE DESIGN OF EVALUATION BOARD



Unit : mm

**Fig. 3** Outlook and dimension of evaluation board

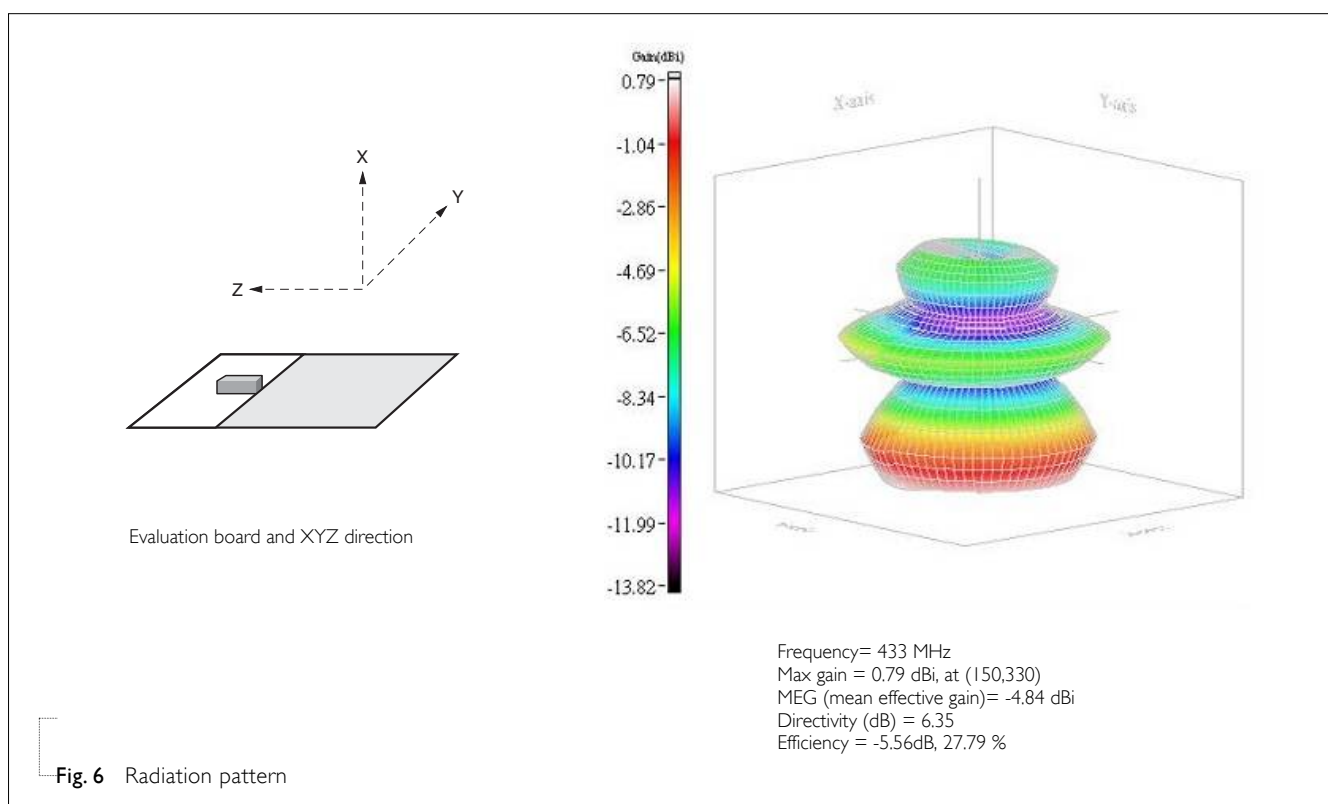
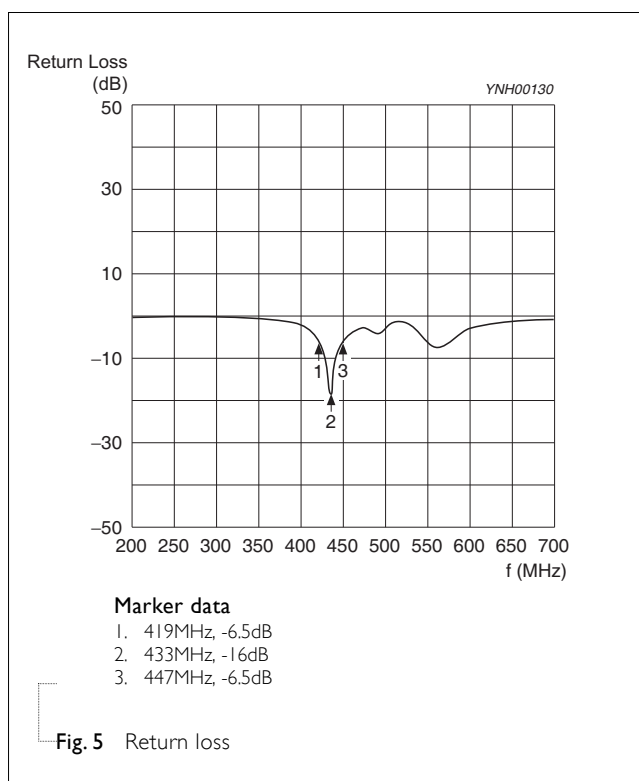


Unit : mm

**Fig. 4** Details of soldering Pad

YNH00129

# ELECTRICAL PERFORMANCES



# REVISION HISTORY

| REVISION  | DATE          | CHANGE NOTIFICATION | DESCRIPTION                                                            |
|-----------|---------------|---------------------|------------------------------------------------------------------------|
| Version 0 | Aug. 20, 2013 | -                   | - New data sheet for SMD type antenna, 433MHz application, 1204 series |