

2J0B15-433-C884G

433 MHz ISM Connector Mount

Key Features

433 MHz ISM
- 433-435 MHz
Connector Mount
Low Profile
Ground Plane Dependent
Dimensions 44 × 19.1 × 9 mm



1. Antenna Description

2J0B15-433-C884G

The High-Efficiency Antenna Optimized for ISM

This 2J0B15-433 series connector mount low profile ground plane dependent antenna has been optimized specifically for the ISM frequency bands of 433MHz to 435MHz.

When selecting the correct antenna for the application, it is important to understand the restriction of the 433MHz ISM band. This antenna was developed for system installations such as remote monitoring, smart metering, home automation, medical devices and the M2M automation in general. This makes it a popular solution for IoT manufacturers and hobbyists. It is ideal for applications where data refreshing is needed periodically.

Application Parameters

Based on the application needs, this antenna provides an average range of 100-300 feet outdoors and 30-100 feet indoors.

The 433MHz band provides a lower path loss than 868MHz and 915MHz bands utilizing the same power for the same range, but with a limited scheduled periodic data transmission as regulated by FCC 15.231.a.3 in the US markets.

Typical applications

- IoT applications
- Remote Monitoring
- Smart Metering
- Home Automation
- Medical Devices
- M2M automation
- And others

Key Features

- ISM specifically optimized
- 12 variations with straight, right-angle and reversed polarity connectors
- Sustained High Efficiency and Performance
- High Gain
- Compact and Elegant
- Ground Plane Dependent
- Easy Integration
- Different colors available upon request

Installation

For specialized applications, this cable free antenna solution can be retrofitted with a straight or right-angle SMA-Male-R/A standard connector.

2. Antenna and electrical specifications

Parameters	433 MHz ISM Antenna
Standards	ISM, LoRa
Band (MHz)	433 MHz
Frequency (MHz)	433-435
Return Loss (dB)	~-15.4
VSWR	~1.4:1
Efficiency (%)	~41.7
Peak Gain (dBi)	~-1.2
Average Gain (dB)	~-3.8
Impedance (Ohm)	50
Polarisation	Linear
Radiation Pattern	Omni-Directional
Max. Input Power (W)	25
Connector Type	SMA-Male-R/A Standard

Antenna Measurement Conditions:

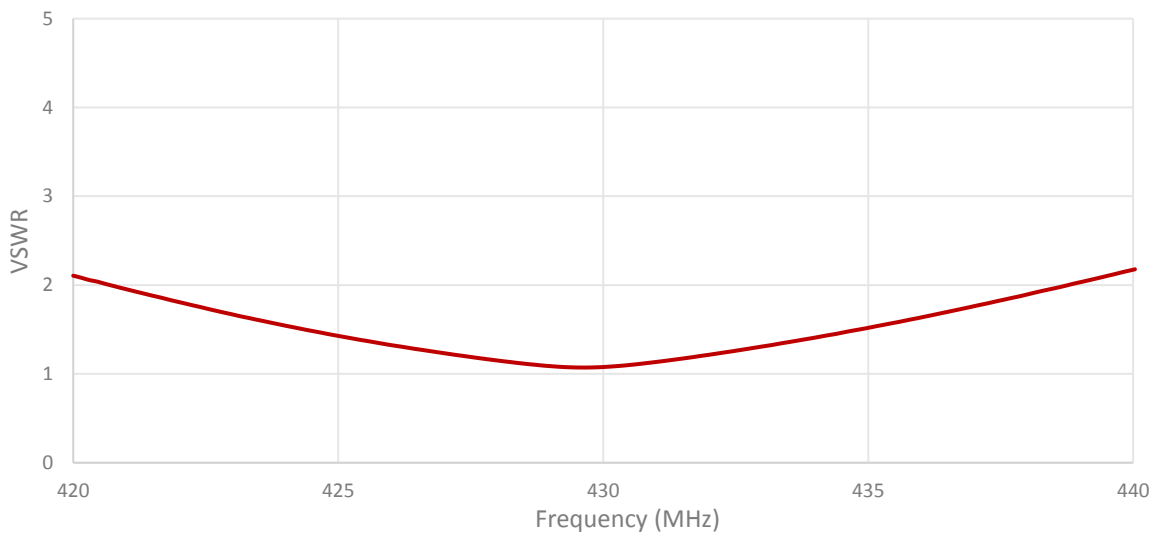
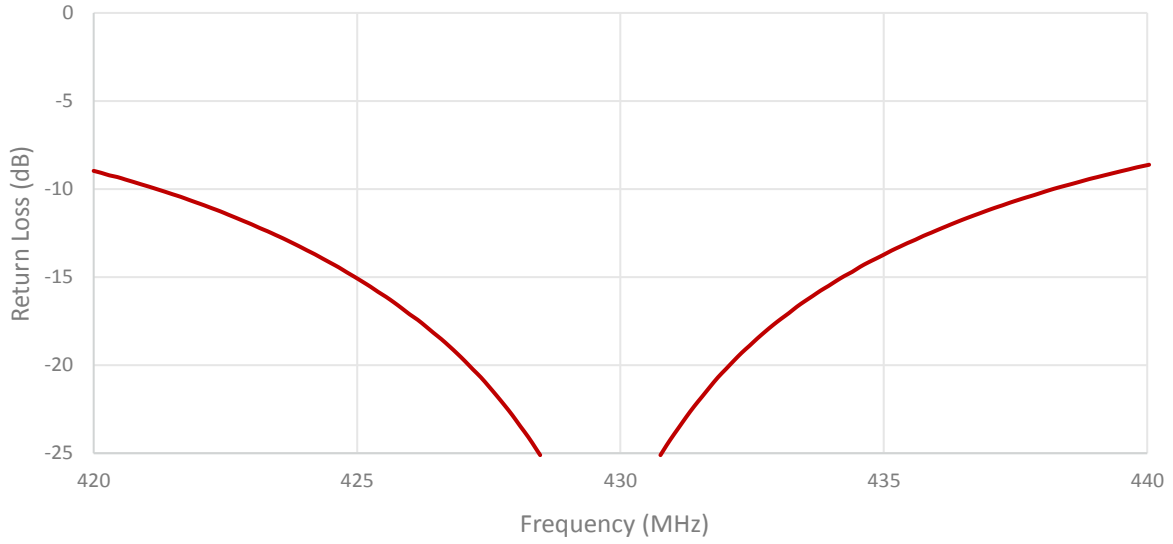
Mounted on Ground Plane of 150x50 mm

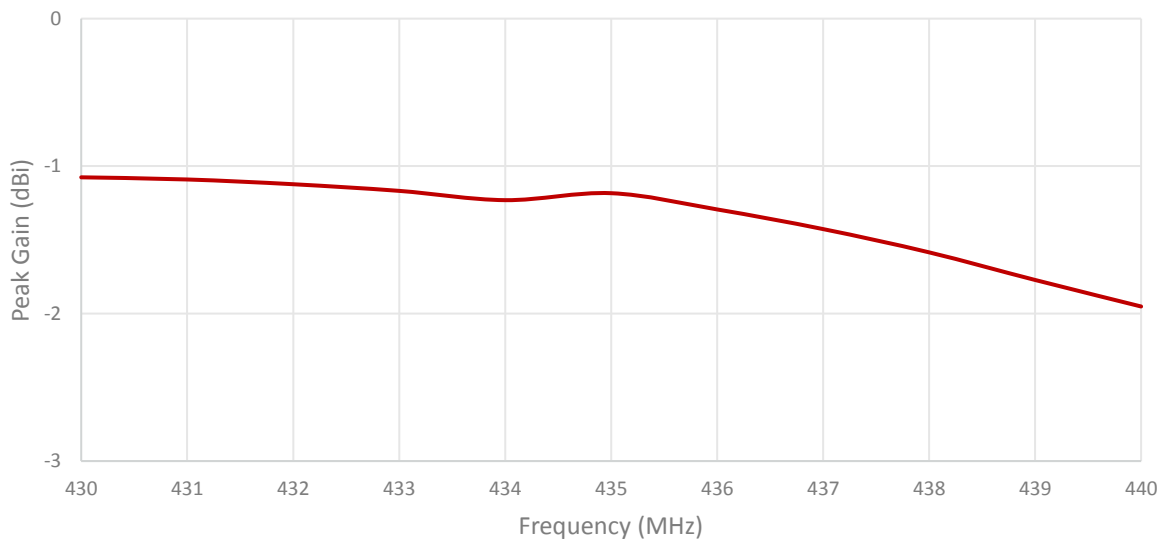
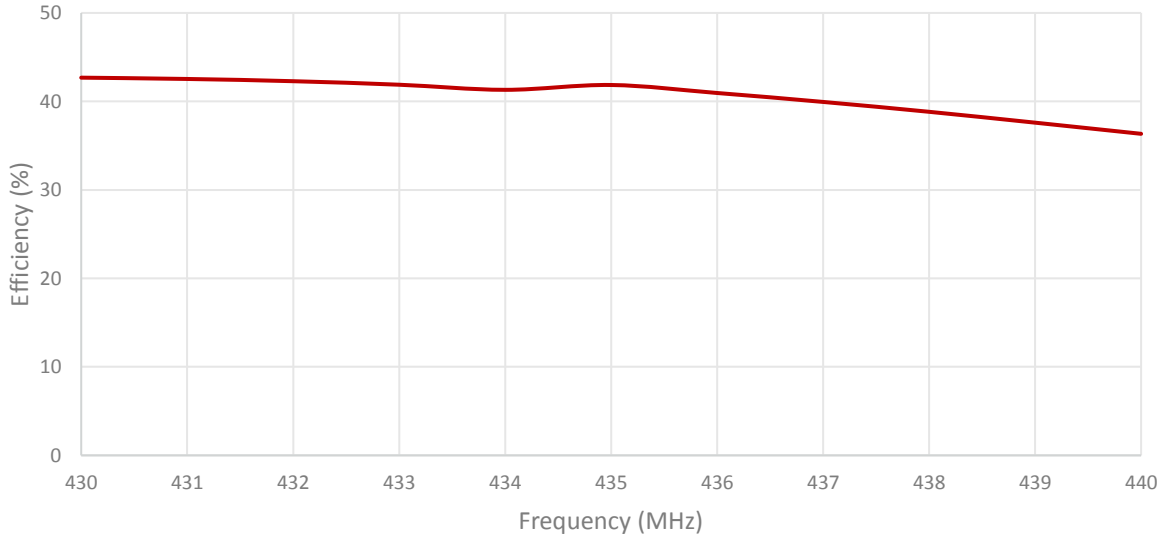
Measured in Certified CTIA 3D Anechoic Chamber

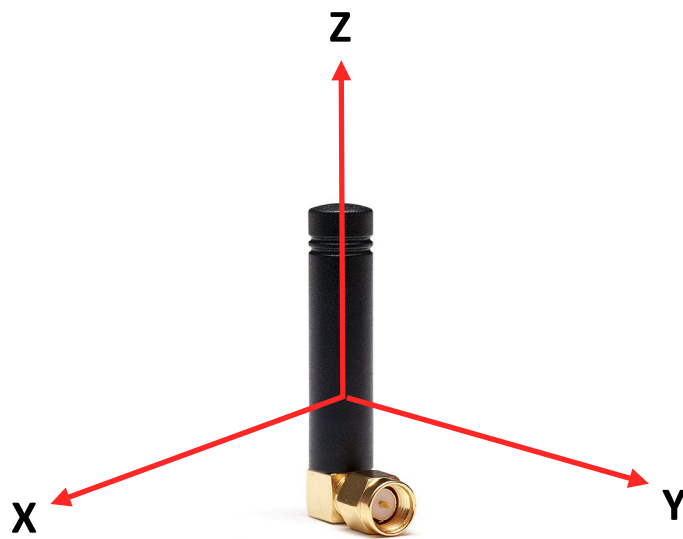
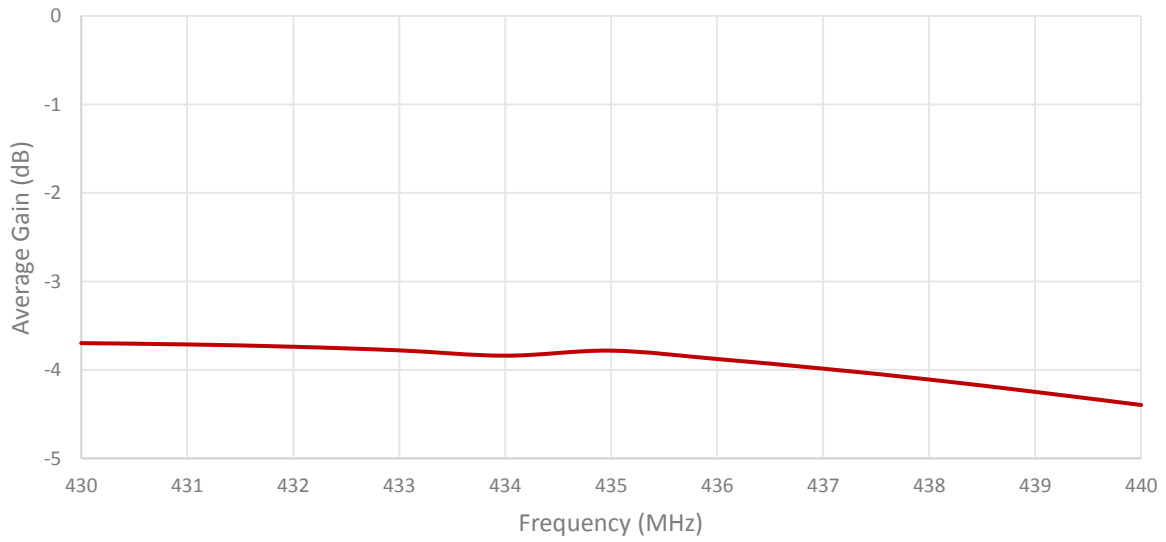
3. Mechanical and environmental specifications

Specifications	2J0B15-433-C884G
Mounting Type	Connector Mount
Dimensions (mm)	44 × 19.1 × 9
Radome	TPC-ET
Radome color	Black
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS

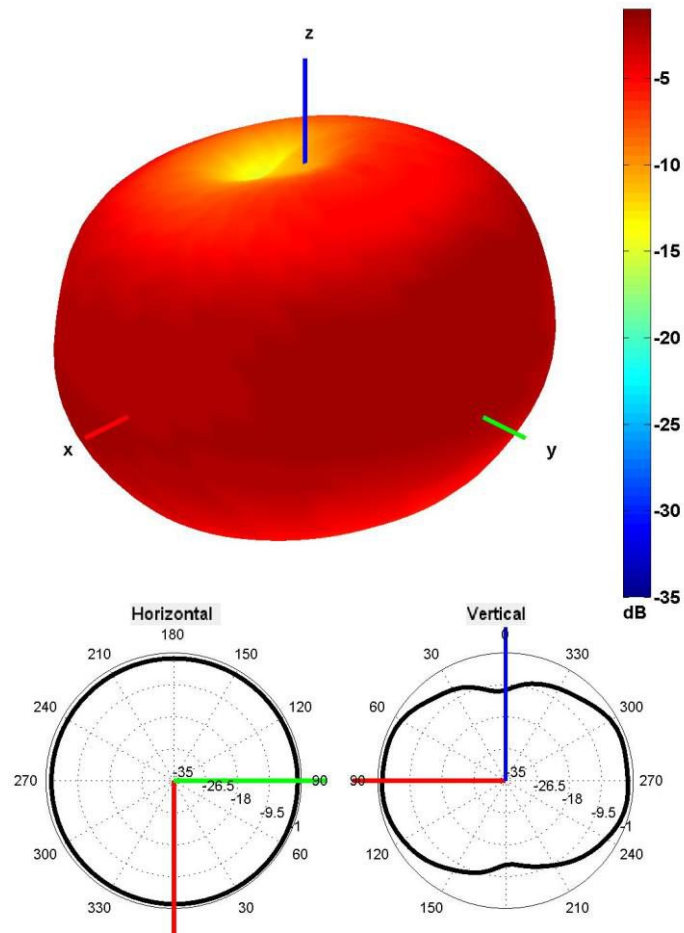
4. Antenna parameters





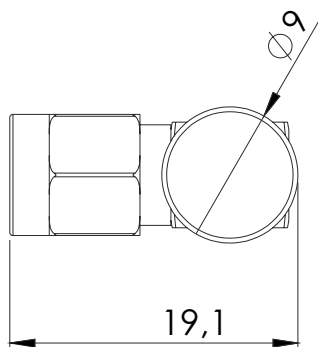
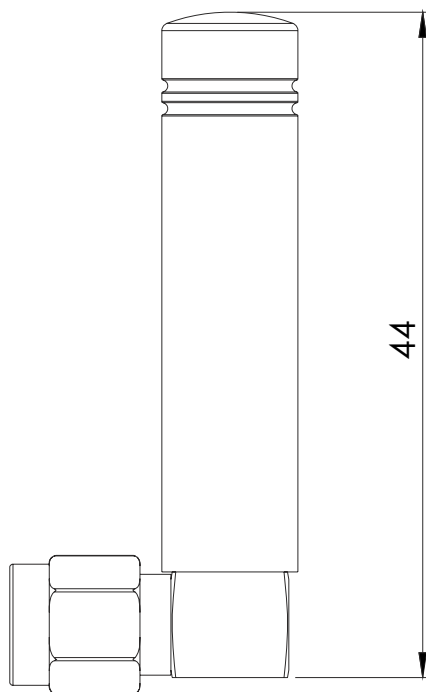


Radiation pattern reference



433 MHz Radiation pattern

5. Antenna drawings



6. Antenna Images

