

# 2J0B15-868-C884G

868 MHz ISM Connector Mount

## Key Features

868 MHz ISM  
- 863-870 MHz  
Connector Mount  
Low Profile  
Ground Plane Dependent  
Dimensions 44 x 19.1 × 9 mm



## 1. Antenna Description

### 2J0B15-868-C884G

#### The High-Efficiency Antenna Optimized for ISM

This 2J0B15-868 series connector mount low profile ground plane dependent antenna has been optimized specifically for the ISM frequency bands of 863MHz to 870MHz in the European market.

When selecting the correct antenna for the application, it is important to understand the restriction of the 868MHz ISM band. This antenna was developed for system installations such as industrial, scientific and medical applications. IoT applications can also take advantage of this system as it provides high throughput and is not limited to any transmission time. IoT implementations can range from home automation, security, industrial control, remote sensing, automatic meter reading, toys, weather stations among many other consumer applications.

#### Application Parameters

Based on the application needs, this antenna provides an average range of 800 meters. The 2J0B15-868 868MHz band antenna provides a stable connection through walls and transmission is not disturbed by obstacles such as human bodies (this is the case for WIFI and Bluetooth technologies at 2,4 GHz).

#### 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	868 MHz ISM Antenna
<b>Standards</b>	ZigBee, ISM, SIGFOX, LoRa
<b>Band (MHz)</b>	868 MHz
<b>Frequency (MHz)</b>	863-870
<b>Return Loss (dB)</b>	~-10.9
<b>VSWR</b>	~1.8:1
<b>Efficiency (%)</b>	~75
<b>Peak Gain (dBi)</b>	~2.5
<b>Average Gain (dB)</b>	~-1.3
<b>Impedance (Ohm)</b>	50
<b>Polarisation</b>	Linear
<b>Radiation Pattern</b>	Omni-Directional
<b>Max. Input Power (W)</b>	25
<b>Connector Type</b>	SMA-Male-R/A Standard

### Antenna Measurement Conditions:

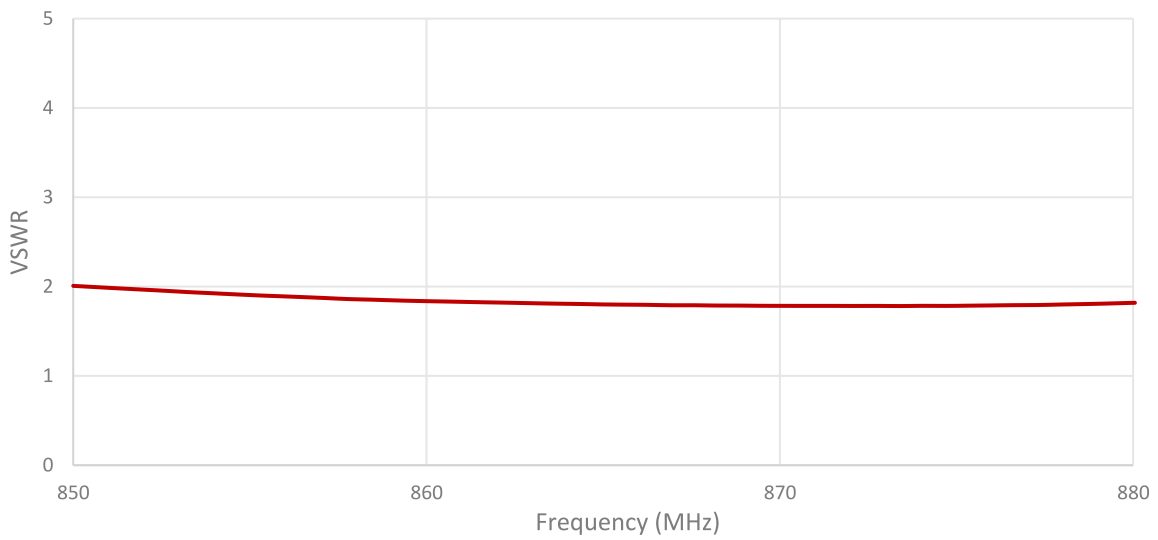
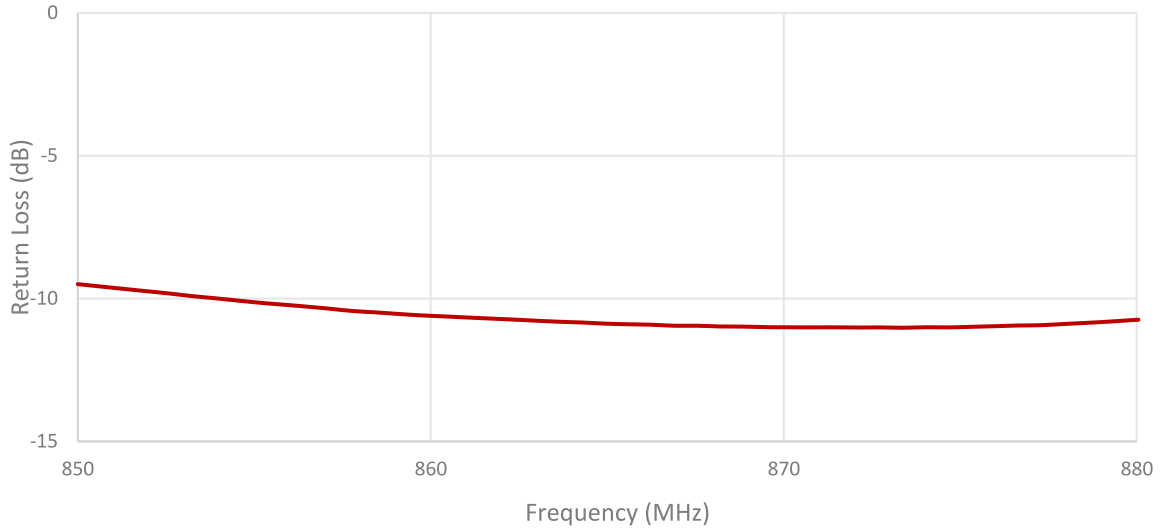
Mounted on Ground Plane of 95x40 mm

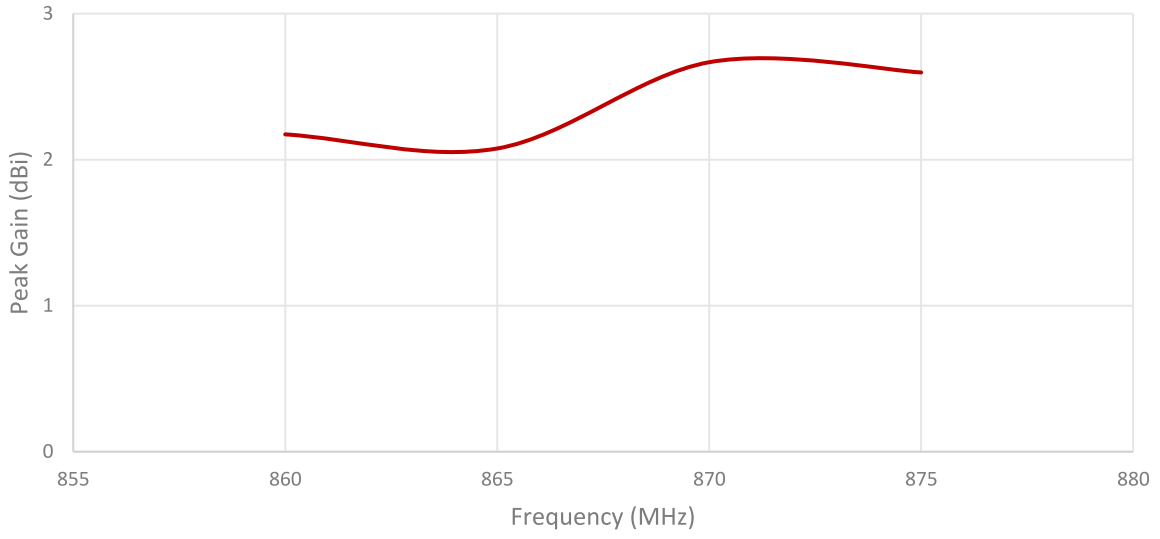
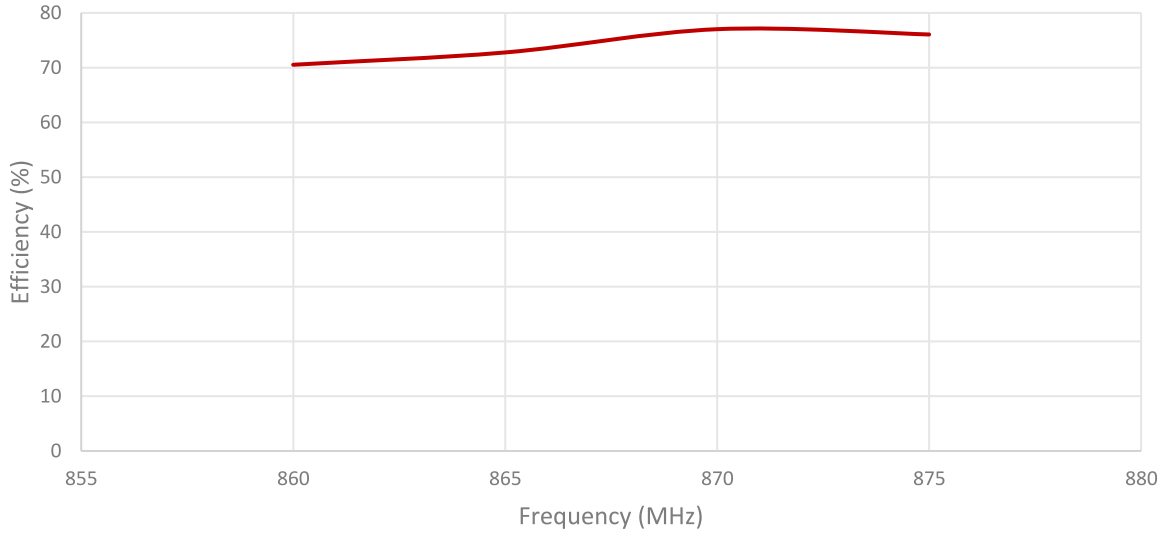
Measured in Certified CTIA 3D Anechoic Chamber

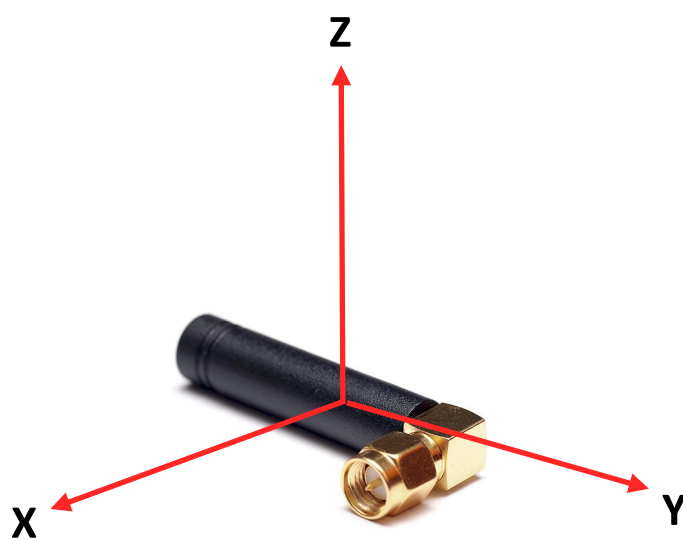
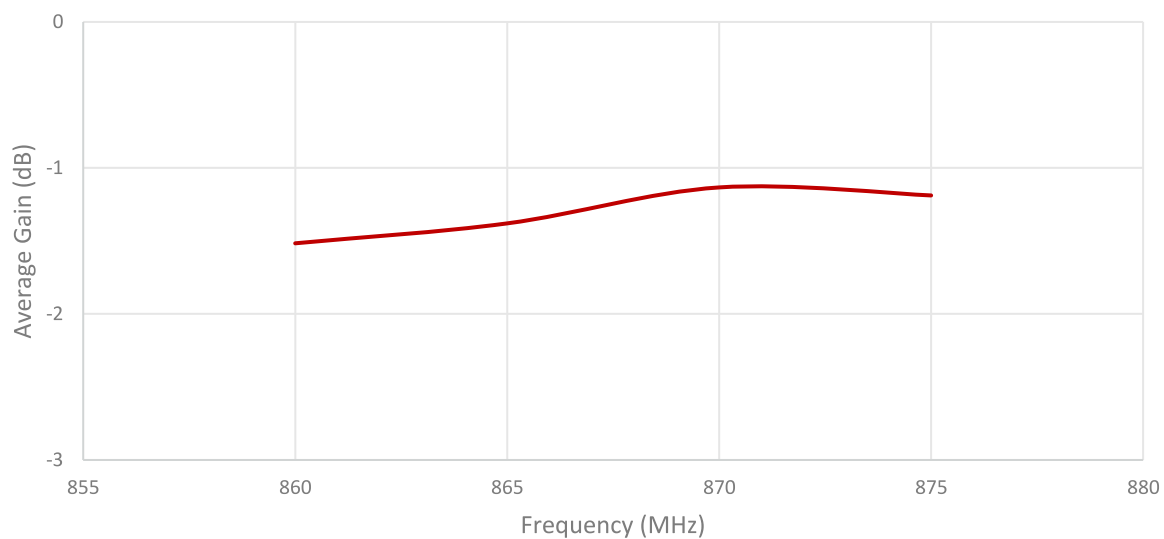
## 3. Mechanical and environmental specifications

Specifications	2J0B15-868-C884G
<b>Mounting Type</b>	Connector Mount
<b>Dimensions (mm)</b>	44 x 19.1 x 9
<b>Radome</b>	ABS UV Stable
<b>Radome color</b>	Black
<b>Operating Temperature (C)</b>	-40 to +85
<b>Storage Temperature (C)</b>	-40 to +85
<b>Substance Compliance</b>	RoHS

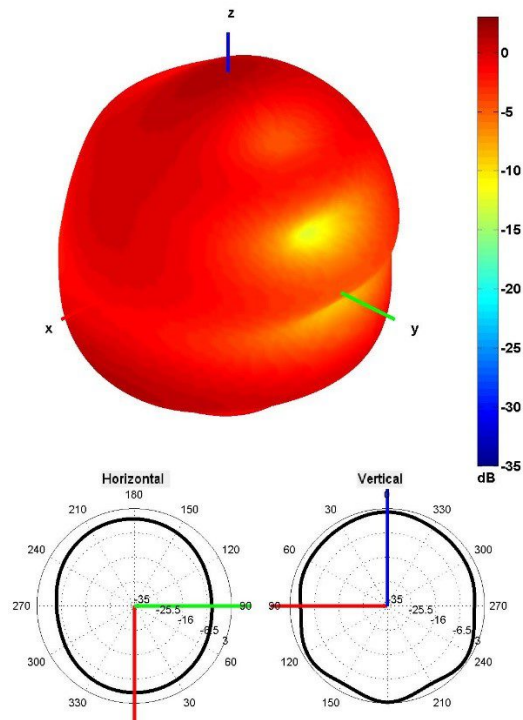
## 4. Antenna parameters





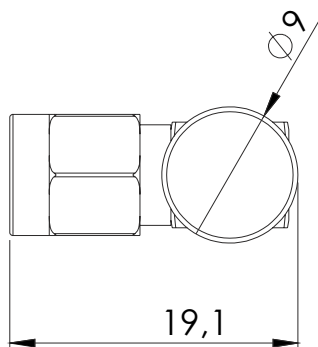
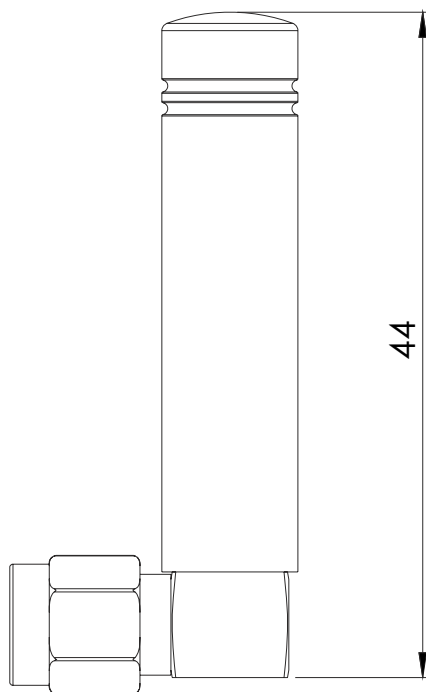


Radiation pattern reference



868 MHz Radiation pattern

## 5. Antenna drawings





## 6. Antenna Images

