

2J0C15-868-C885G

868 MHz ISM Connector Mount

Key Features

868 MHz ISM
- 863-870 MHz
Connector Mount
Low Profile
Ground Plane Dependent
Dimensions 38 × Ø 9 mm



1. Antenna Description

2J0C15-868-C885G

The High-Efficiency Antenna Optimized for ISM

This 2J0C15-868 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 2J0C15-868 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
Standards	ZigBee, ISM, SIGFOX, LoRa
Band (MHz)	868 MHz
Frequency (MHz)	863-870
Return Loss (dB)	~-8.5
VSWR	~2.2:1
Efficiency (%)	~64
Peak Gain (dBi)	~2.5
Average Gain (dB)	~-2.0
Impedance (Ohm)	50
Polarisation	Linear
Radiation Pattern	Omni-Directional
Max. Input Power (W)	25
Connector Type	SMA-Male Standard

Antenna Measurement Conditions:

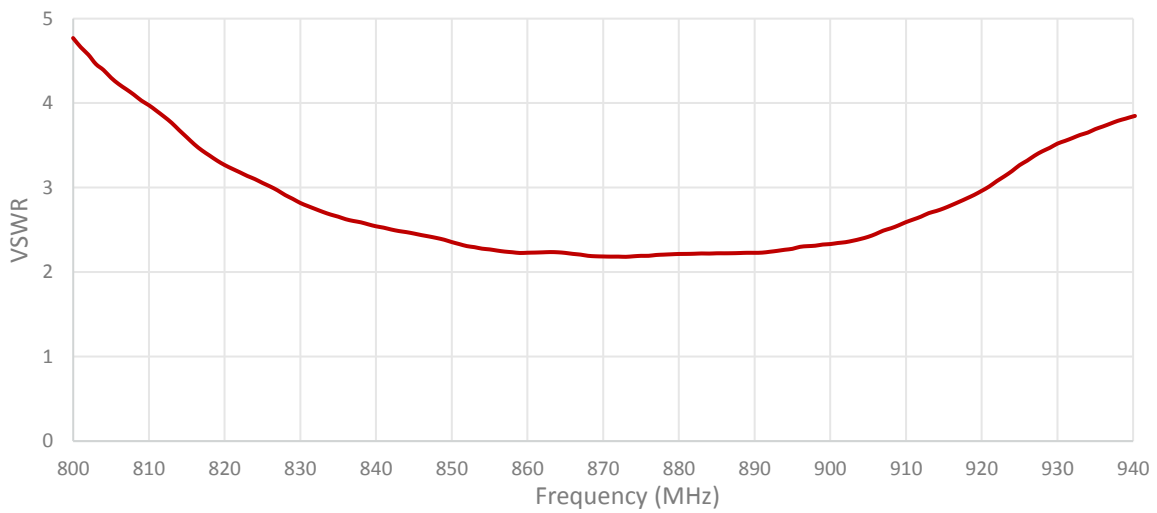
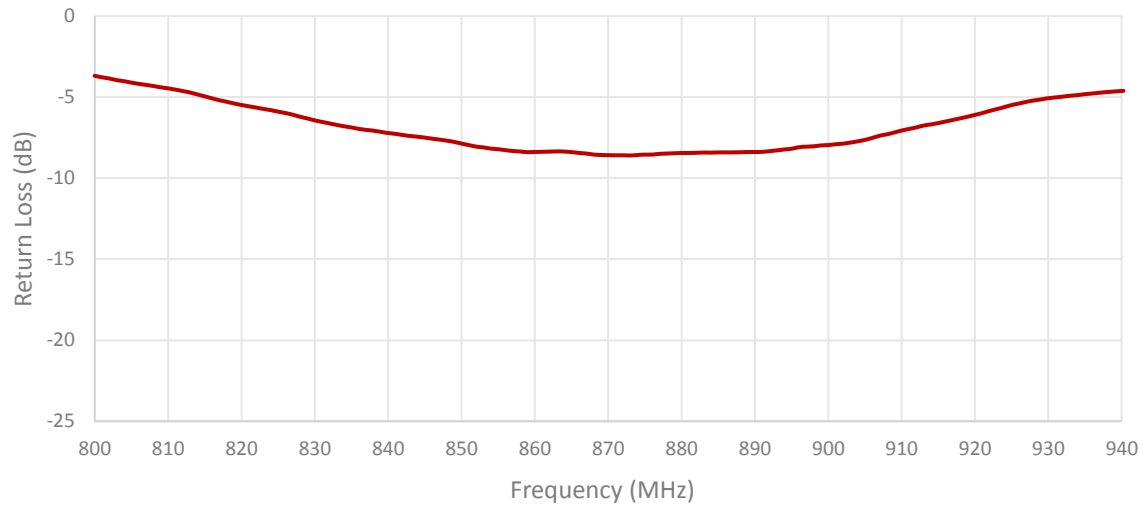
Mounted on Ground Plane of 95x40 mm

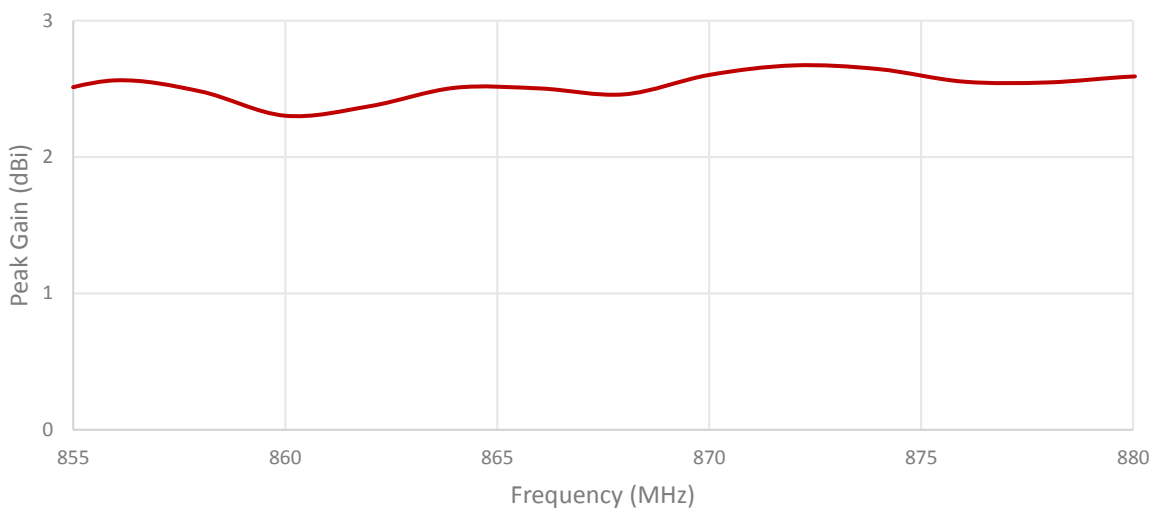
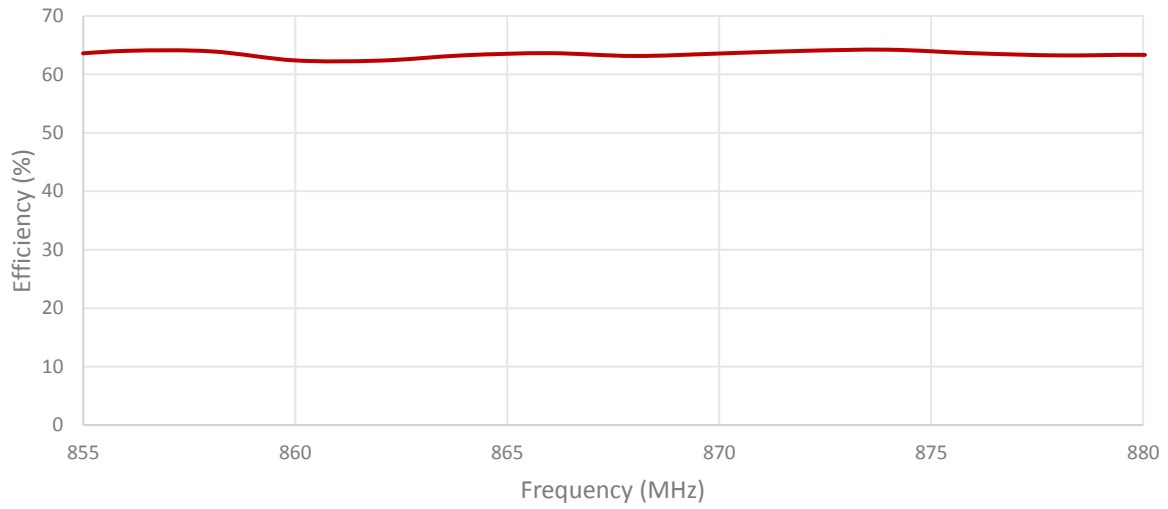
Measured in Certified CTIA 3D Anechoic Chamber

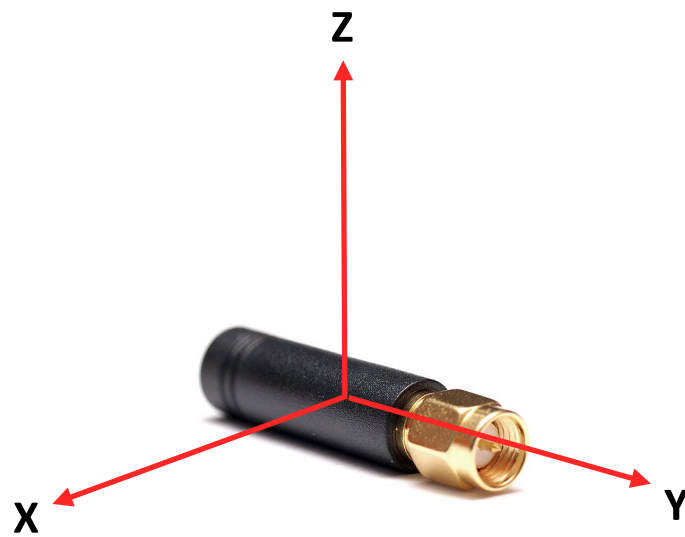
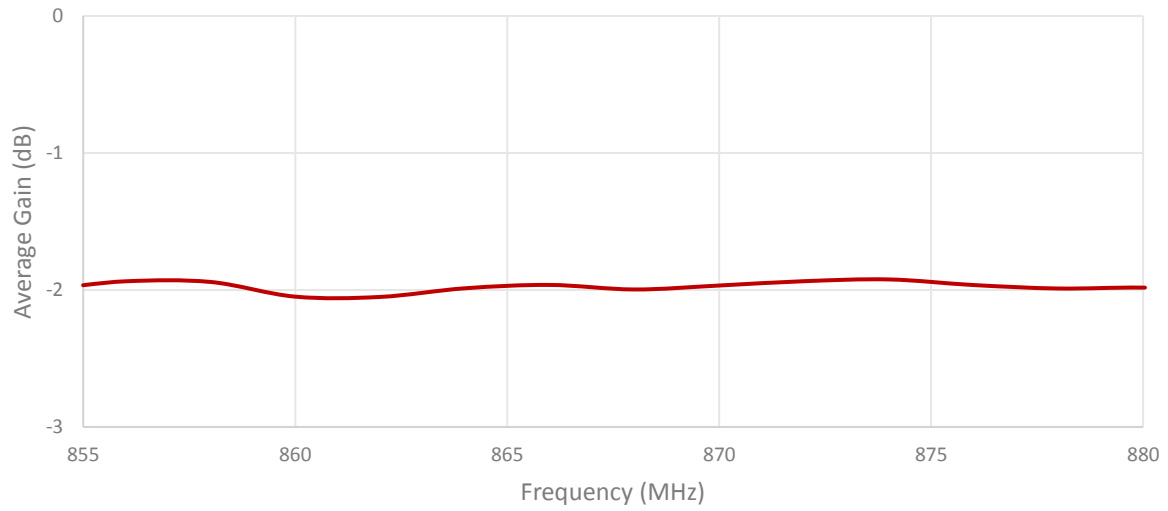
3. Mechanical and environmental specifications

Specifications	2J0C15-868-C885G
Mounting Type	Connector Mount
Dimensions (mm)	38 × Ø 9
Radome	TPC-ET
Radome color	Black
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS

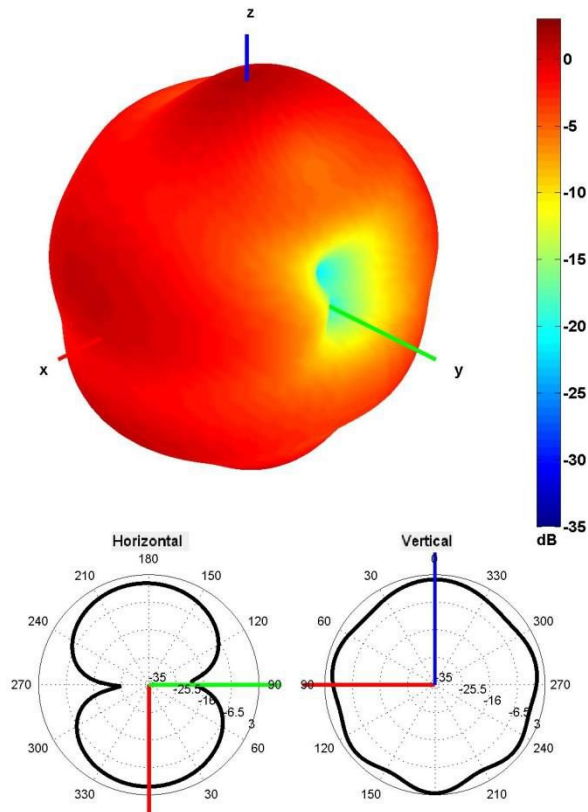
4. Antenna parameters





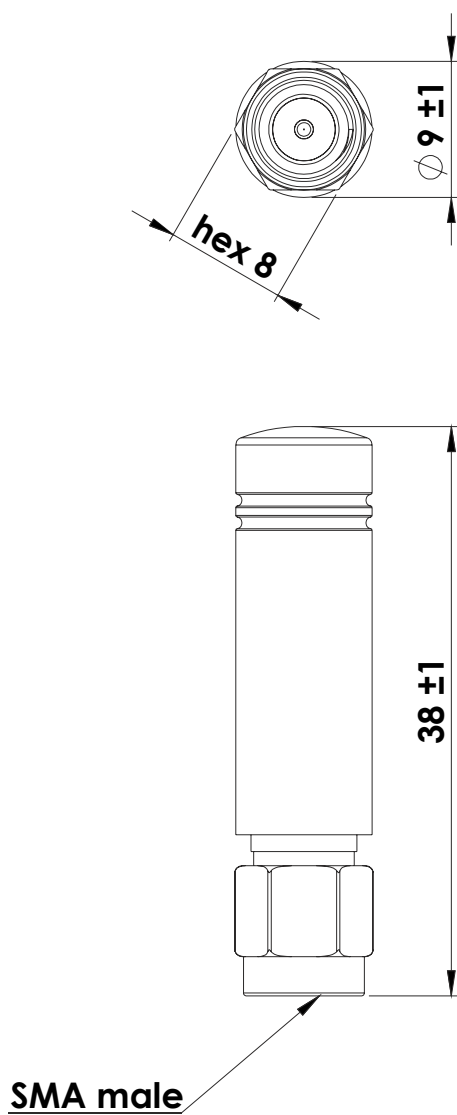


Radiation pattern reference



868 MHz Radiation pattern

5. Antenna drawings



6. Antenna Images

