

## 2JCP1841501c

868 MHz ISM Ceramic Thru-Hole Mount

### Key Features

- 868 MHz ISM
- 863-870 MHz
- Thru-Hole Mount
- High Grade Ceramic
- High Gain
- Small Size
- Ground Plane Dependent
- Dimensions 18 x 18 x 4 mm



## 1. Antenna and electrical specifications

| Parameters               | 868 MHz ISM Antenna       |
|--------------------------|---------------------------|
| <b>Standards</b>         | ZigBee, ISM, SigFox, LoRa |
| <b>Band (MHz)</b>        | 868                       |
| <b>Frequency (MHz)</b>   | 863-870                   |
| <b>Return Loss (dB)</b>  | ~-8.8                     |
| <b>VSWR</b>              | ~1.9:1                    |
| <b>Peak Gain (dBi)</b>   | ~-6.4                     |
| <b>Impedance (Ohm)</b>   | 50                        |
| <b>Polarisation</b>      | Linear                    |
| <b>Radiation Pattern</b> | Hemispherical             |
| <b>Axial Ratio (dB)</b>  | 3 max                     |
| <b>Polarization</b>      | RHCP                      |

### Antenna Measurement Conditions:

Free Space

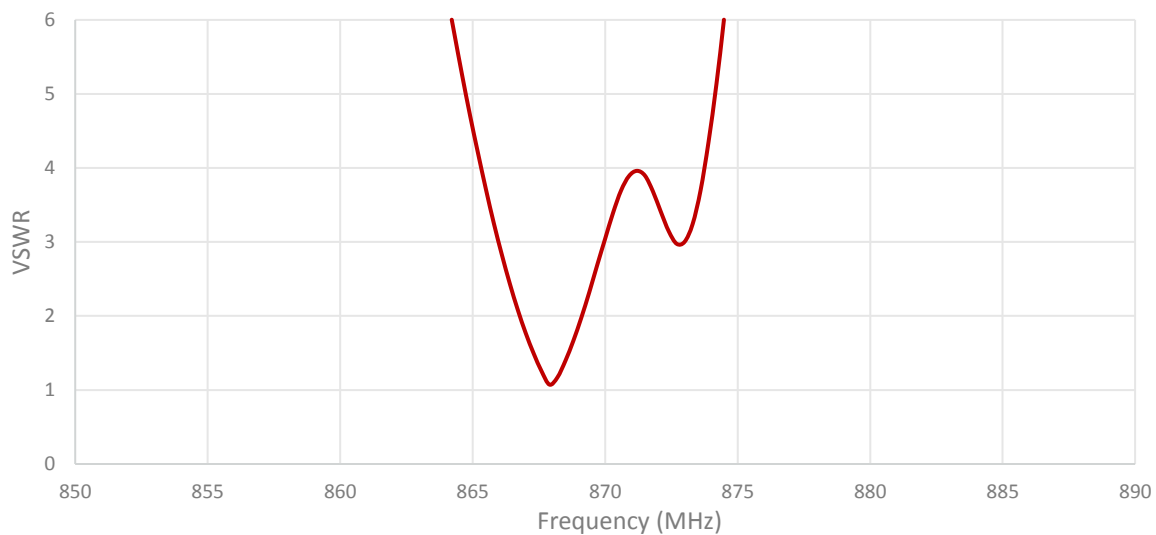
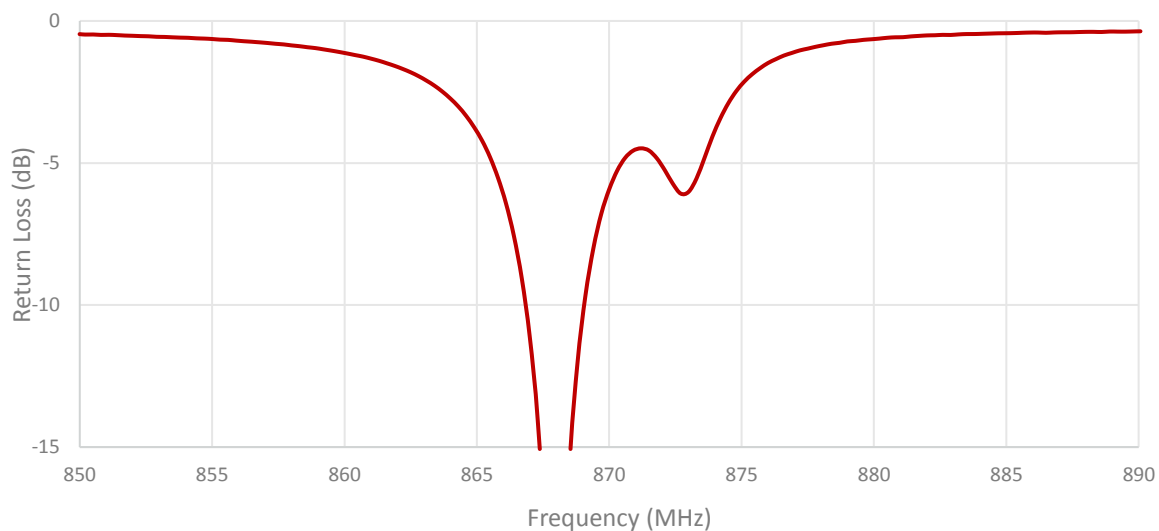
Mounted on Ground Plane of 70 x 70 mm

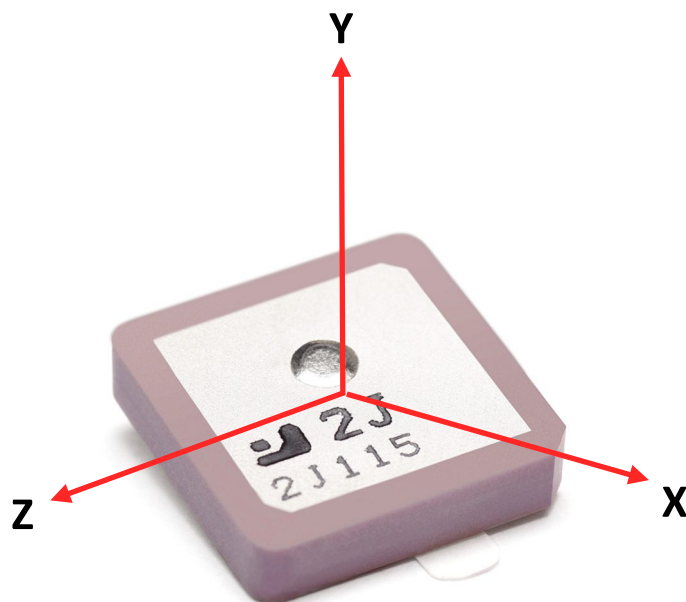
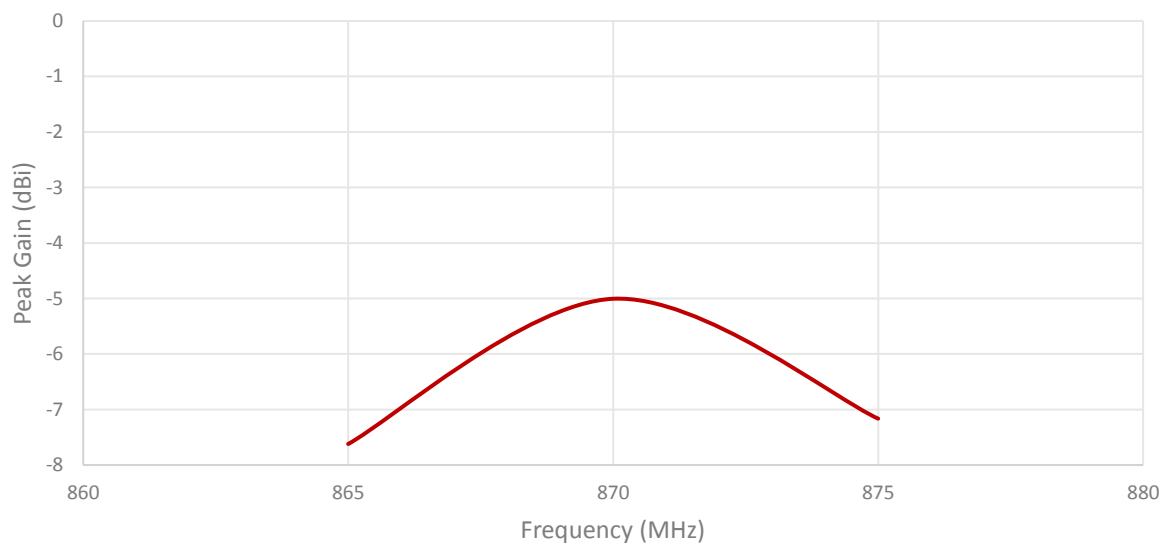
Measured in Certified CTIA 3D Anechoic Chamber

## 2. Mechanical and environmental specifications

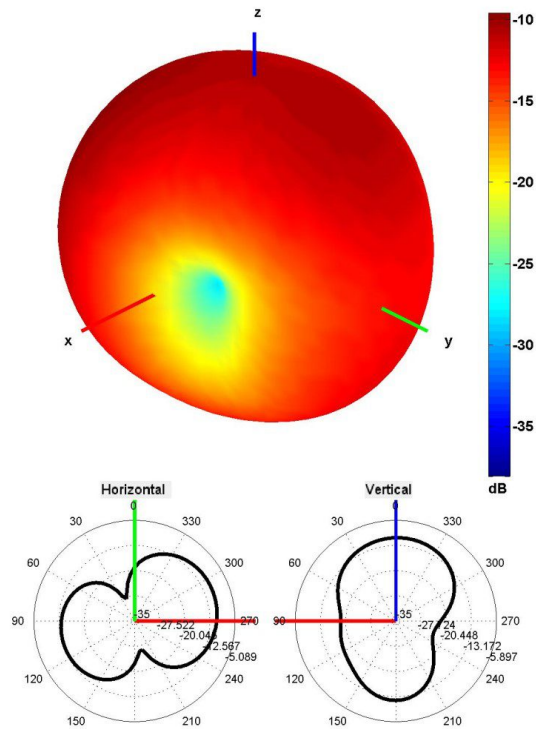
| Specifications                   | 2JCP1841501c    |
|----------------------------------|-----------------|
| <b>Mounting Type</b>             | Thru-Hole Mount |
| <b>Adhesive</b>                  | Nitto 5000NS    |
| <b>Dimensions (mm)</b>           | 18 x 18 x 4     |
| <b>Operating Temperature (C)</b> | -40 to +85      |
| <b>Storage Temperature (C)</b>   | -40 to +85      |
| <b>Substance Compliance</b>      | RoHS            |

### 3. Antenna parameters



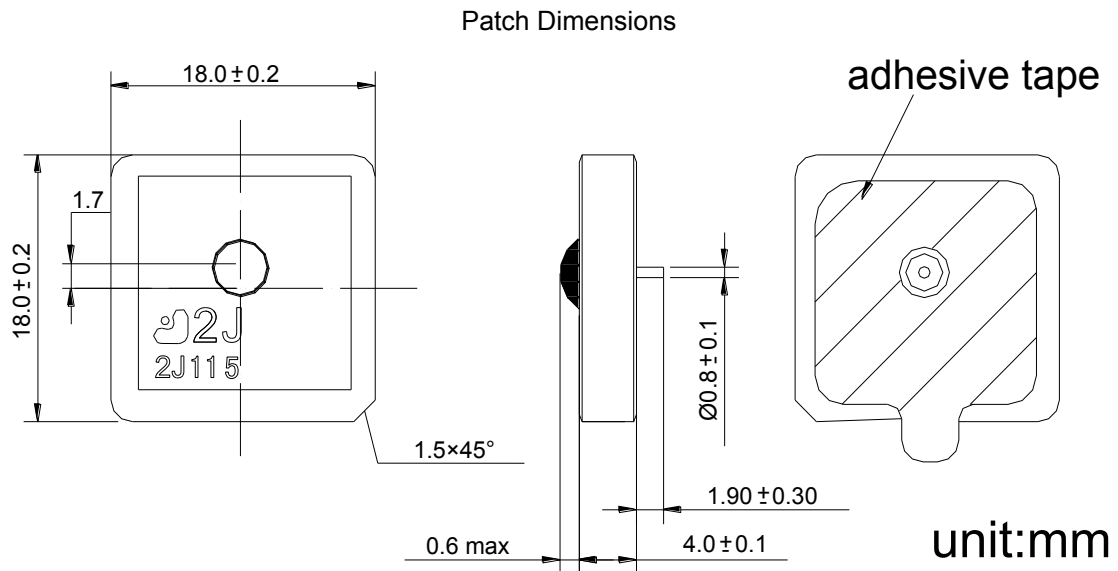


Radiation pattern reference

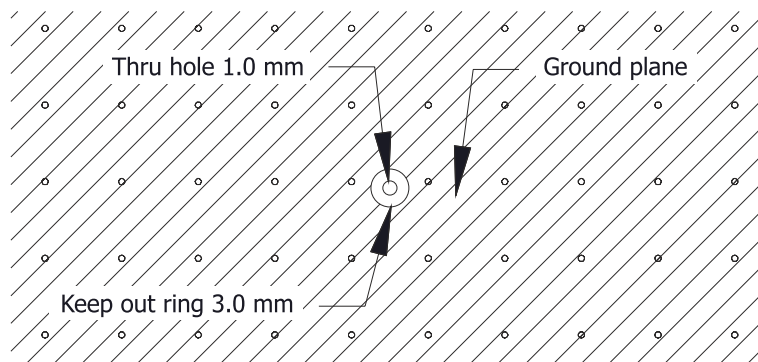


868 MHz Radiation pattern

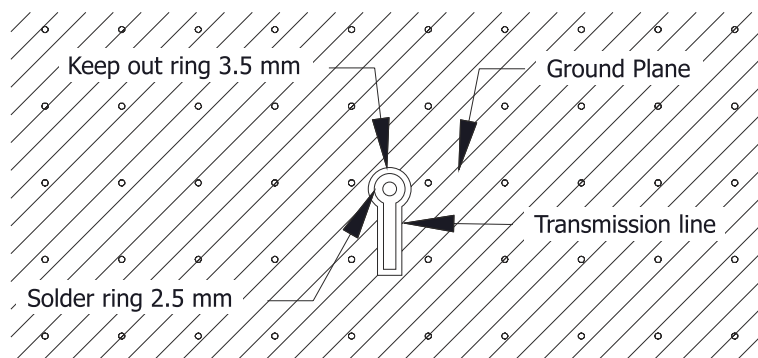
## 4. Antenna drawings



Layout for top layer



Layout for bottom layer



## 5. Antenna Images

