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|--------------|------------------|-------------|------------|--------------|
| SPEC NO.     | SP03AC24508-0141 | ISSUED DATE | 2020.02.05 | PUBLISHED BY |
| PRODUCT NAME | FSAJ0I22         | VERSION     | 01         |              |
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# SPECIFICATION

**SPEC NO.** : SP03AC24508-0141

**PART NO. : 03C15C030E0D10T**

**PRODUCT NAME : FSAJ0I22**

FR4 Single-Band Antenna

**DESCRIPTION :**

## REVISION STATUS

| Prepared By | Checked By | Approved By |
|-------------|------------|-------------|
| 翁秀惠         | 呂秉群        | 張敦信 吳佳宗     |

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# CIROCOMM TECHNOLOGY CORP.

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**PART NUMBER : 03C15C030E0D10T**

## 1 SCOPE

CIROCOMM's customized **FR4 Single-Band Antenna** covers for WIFI Band.

## 2 Name of the product

This product is named "**FR4 Single-Band Antenna**".

## 3 Electrical characteristics

### 3-1 Electrical characteristics of antenna

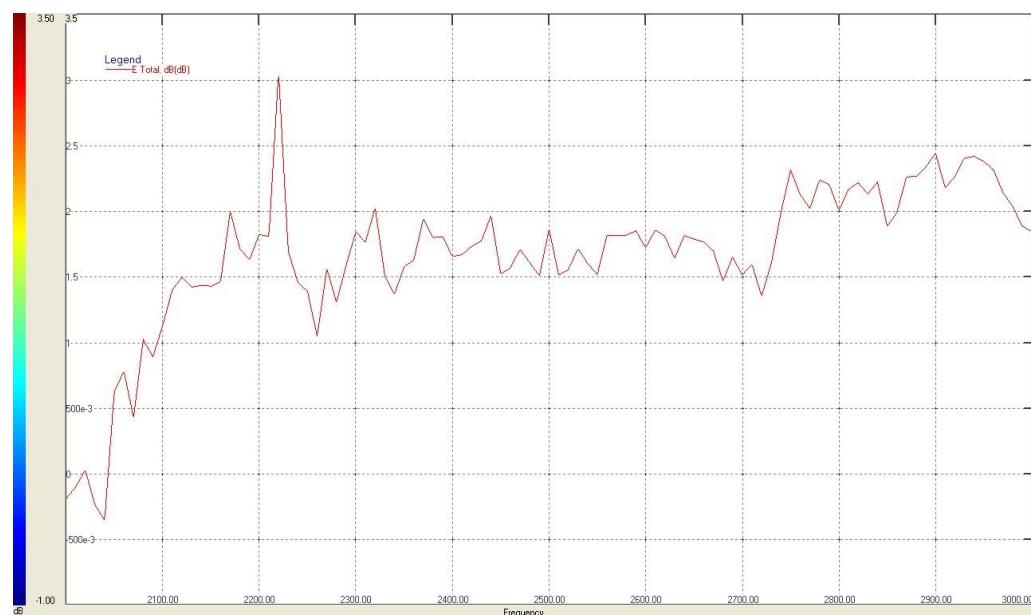
The antenna has the electrical characteristics given in Table 1 under the CIROCOMM standard installation conditions shown in the figure of Evaluation Board.

**Table 1**

| No | Parameter             | Specification   |
|----|-----------------------|-----------------|
| 1  | Working Frequency     | 2400-2500 MHz   |
| 2  | Dimension             | 47.8*12.45*1 mm |
| 3  | Polarization          | Linear          |
| 4  | Operating Temperature | - 40°C to +85°C |

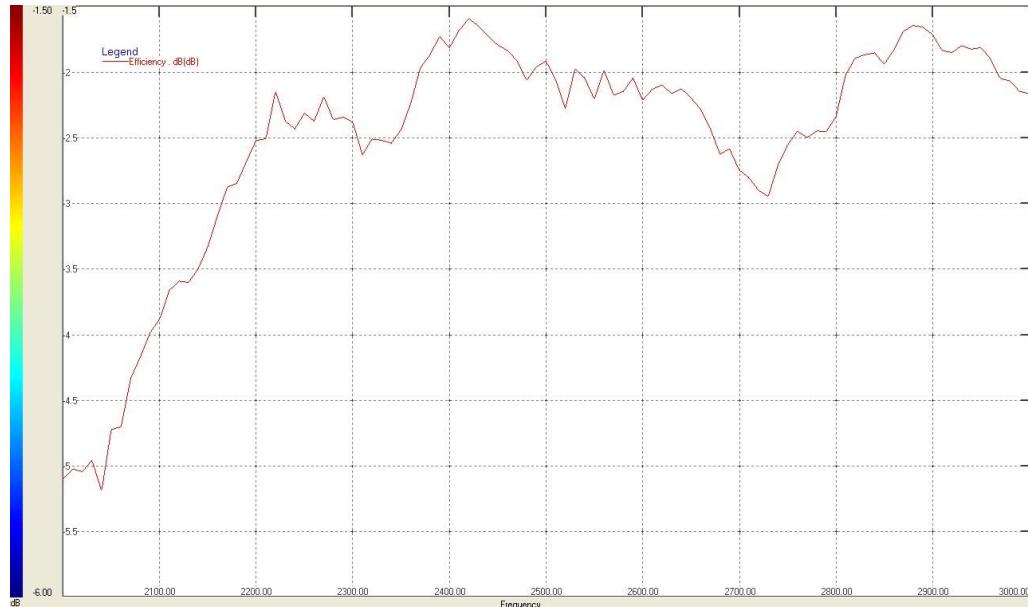
\* Actual value will depend on customer ground plane size.

## WIFI Antenna Peak Gain



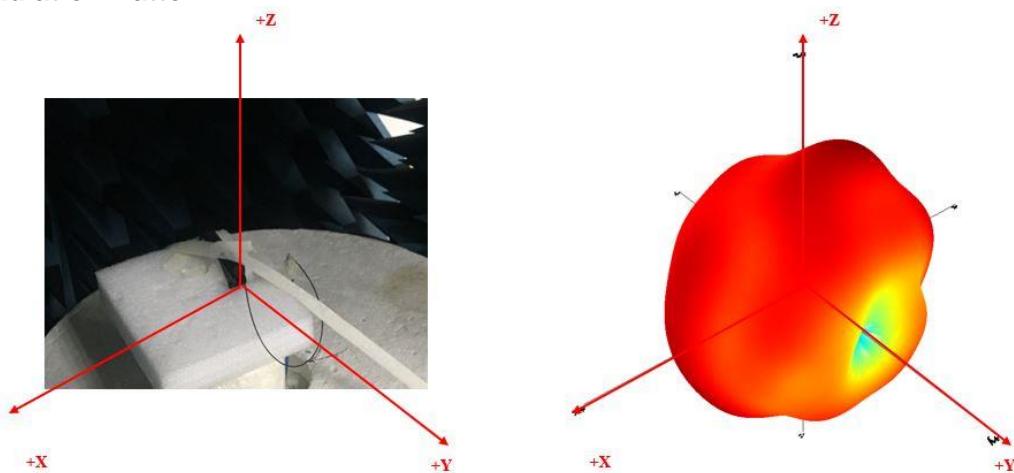
|                     |                         |                    |                   |                     |
|---------------------|-------------------------|--------------------|-------------------|---------------------|
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### WIFI Antenna Average Gain



|                           |             |             |             |
|---------------------------|-------------|-------------|-------------|
| <b>Frequency (MHz)</b>    | <b>2400</b> | <b>2450</b> | <b>2500</b> |
| <b>Peak Gain (dBi)</b>    | 1.65        | 1.52        | 1.86        |
| <b>Average Gain (dBi)</b> | -1.81       | -1.79       | -1.91       |

### 3D Radiation Pattern



|                     |                         |                    |                   |                     |
|---------------------|-------------------------|--------------------|-------------------|---------------------|
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#### **4 Environmental conditions**

##### **4-1 Operating conditions**

The antenna has the electrical characteristics given in Tables 1 in the temperature range of -40°C to +85°C and under the environmental conditions of +40°C and 0-95% r.h..

##### **4-2 Storage temperature range**

The storage temperature range of product is -40°C to +85°C

#### **5 Reliability tests**

The decision standard of the confirmation of the movement is doing the characteristic electric standard of the antenna module. And, the decision standard of the appearance isn't thought function problem become defect be.

##### **5-1 Low-temperature test**

Expose the specimen to -40°C for 16 hours and then to normal temperature/ humidity for 24 hours or more. After that examine the appearance and functions.

##### **5-2 High-temperature test**

Expose the specimen to +85°C for 16 hours and then to normal temperature/ humidity for 24 hours or more. After that examine the appearance and functions.

#### **6 Inspection**

As for the examination in the mass production, the receiving character of the ratio wave sent in a shield box from the standard antenna and VSWR are confirmed in the picking out examination.

#### **7 Warranty**

If any defect occurs form the product during proper use within a year after delivery, it will be repaired or replaced free of charge.

#### **8 Other**

Any question arising from this specification manual shall be solved by arrangement made by both parties.

#### **9 Drawings**

ANTENNA

