SPECIFICATION

SPEC NO. : **SP03AG2450E-0130**

PART NO. : **03P15G030o0010T**

PRODUCT NAME : **ESAJ0I27**

DESCRIPTION : **Embedded Single-Band Antenna**
RoHS 2.0 & Halogen Free

REVISION STATUS

VERSION	DATE	PAGE	REVISION DESCRIPTION	PREPARED	CHECKED	APPROVED
d01	2023.04.19	Whole	New Issued.	翁秀惠	馬得淞	張敦信、吳佳宗

Prepared By	Checked By	Approved By
翁秀惠	馬得淞	張敦信 吳佳宗

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CIROCOMM TECHNOLOGY .

PART NUMBER : 03P15G030o0010T

1 SCOPE

CIROCOMM's customized **Embedded Single-Band Antenna** covers the 2400~2500MHz.

2 Name of the product

This product is named "**Embedded 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.

Table 1

No.	Parameter	Specification
1	Working Frequency	2400~2500MHz
2	Dimension(FPC)	29.39x16.7x0.15 mm
3	Polarization	Linear
4	Operating Temperature	- 30°C to +80°C

* Actual value will depend on customer device.

Environment

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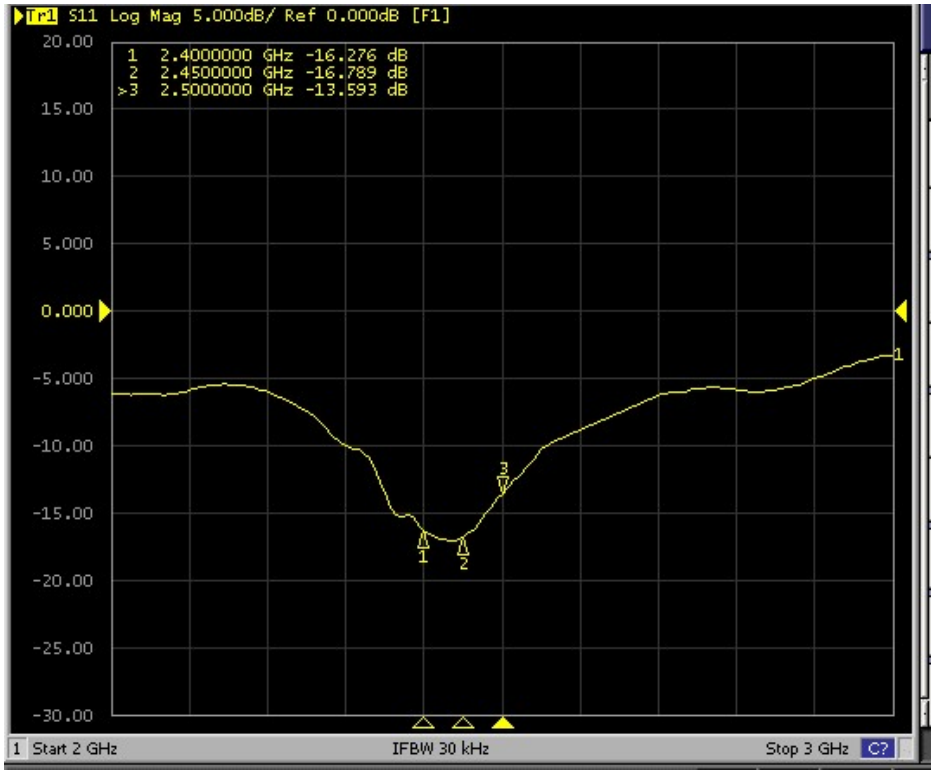
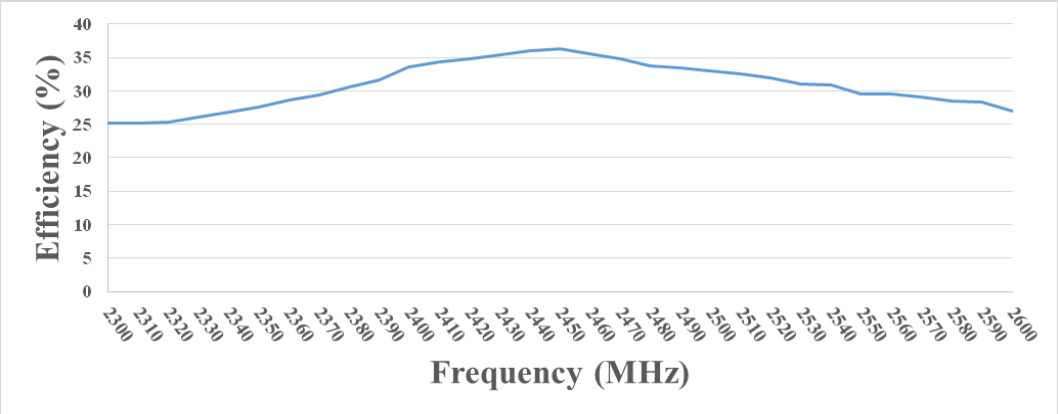
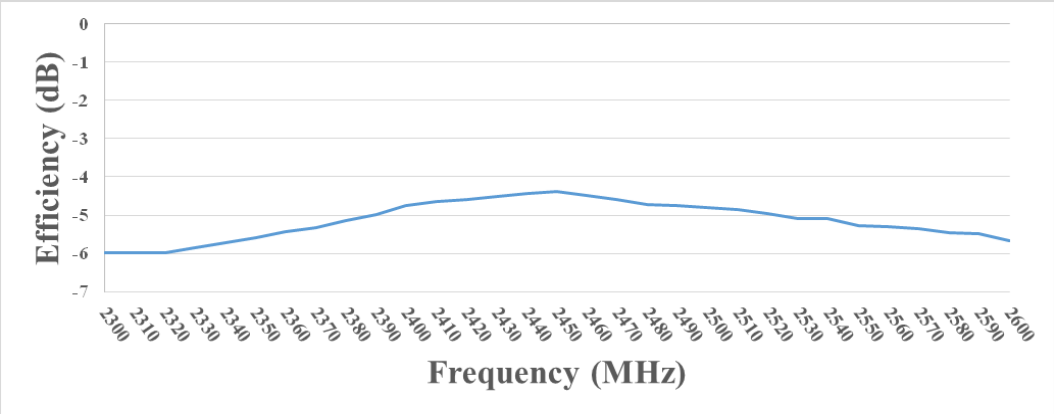
3-2 S11 Response curve



Efficiency



Average Gain



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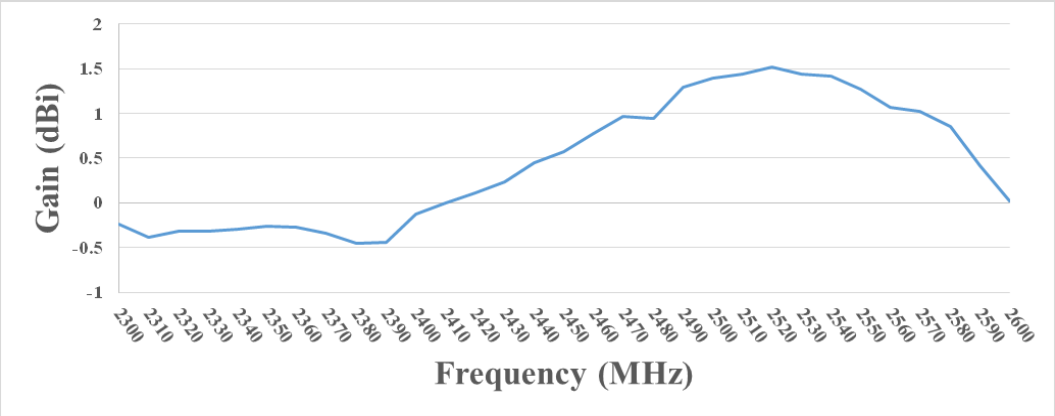
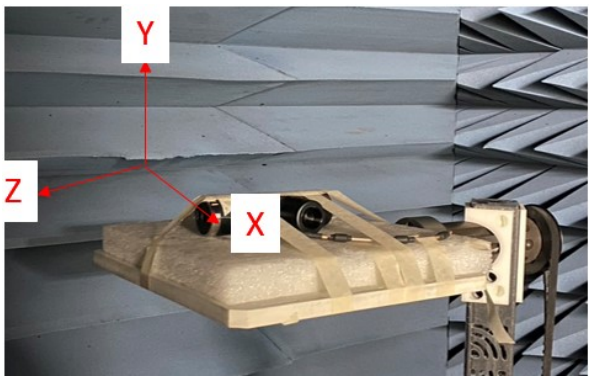
Peak Gain

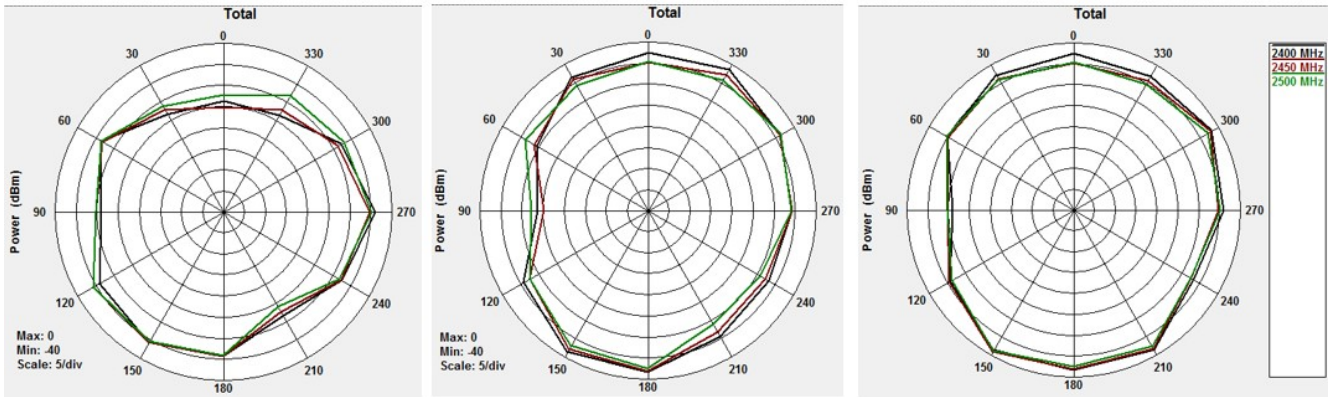


Frequency (MHz)	2400	2450	2500
Efficiency (%)	33.60	36.68	33.01
Average Gain (dB)	-4.74	-4.39	-4.81
Peak Gain (dBi)	-0.13	0.57	1.40

3-3 2D and 3D Radiation Pattern:



2D pattern



XY-Plane XZ-Plane YZ-Plane

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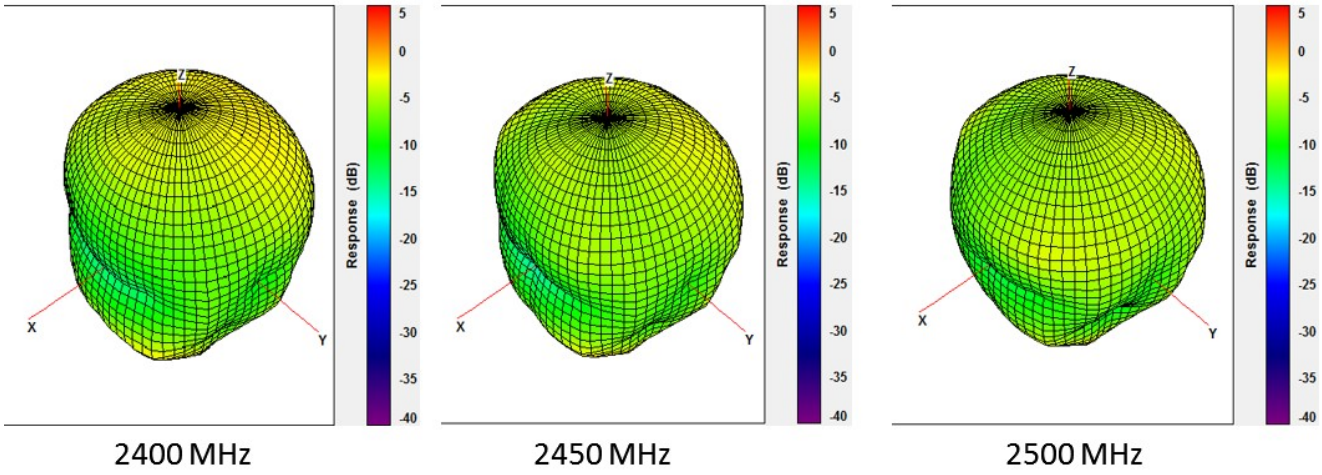
3D pattern



2400 MHz　　2450 MHz　　2500 MHz

4 Environmental conditions

4-1 Operating conditions

The antenna has the electrical characteristics given in Tables 1 in the temperature range of -30˚C to +80˚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 -30°C to +80°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 -30°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 +80°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 S11 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.

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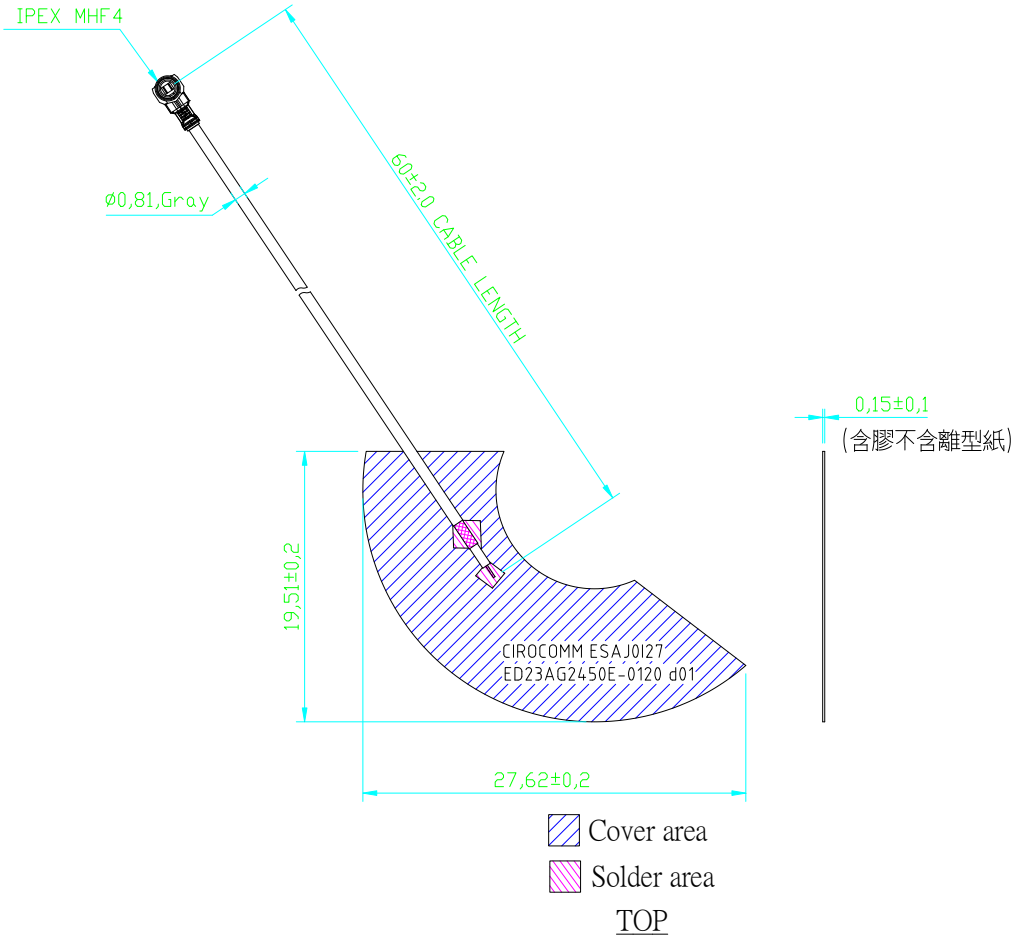
9 Drawings

ANTENNA



Unit: mm

Manufacturer:Leadtek Japan

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