

ANT-003-2G4 Spec

1、 Introduction:

ANT-003-2G4 is a PCB antenna designed for 2.4GHz portable devices such as Bluetooth and WiFi;

Manufacturer :Chengdu Ebyte Electronic Technology Co.,Ltd.

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2、 External dimensions

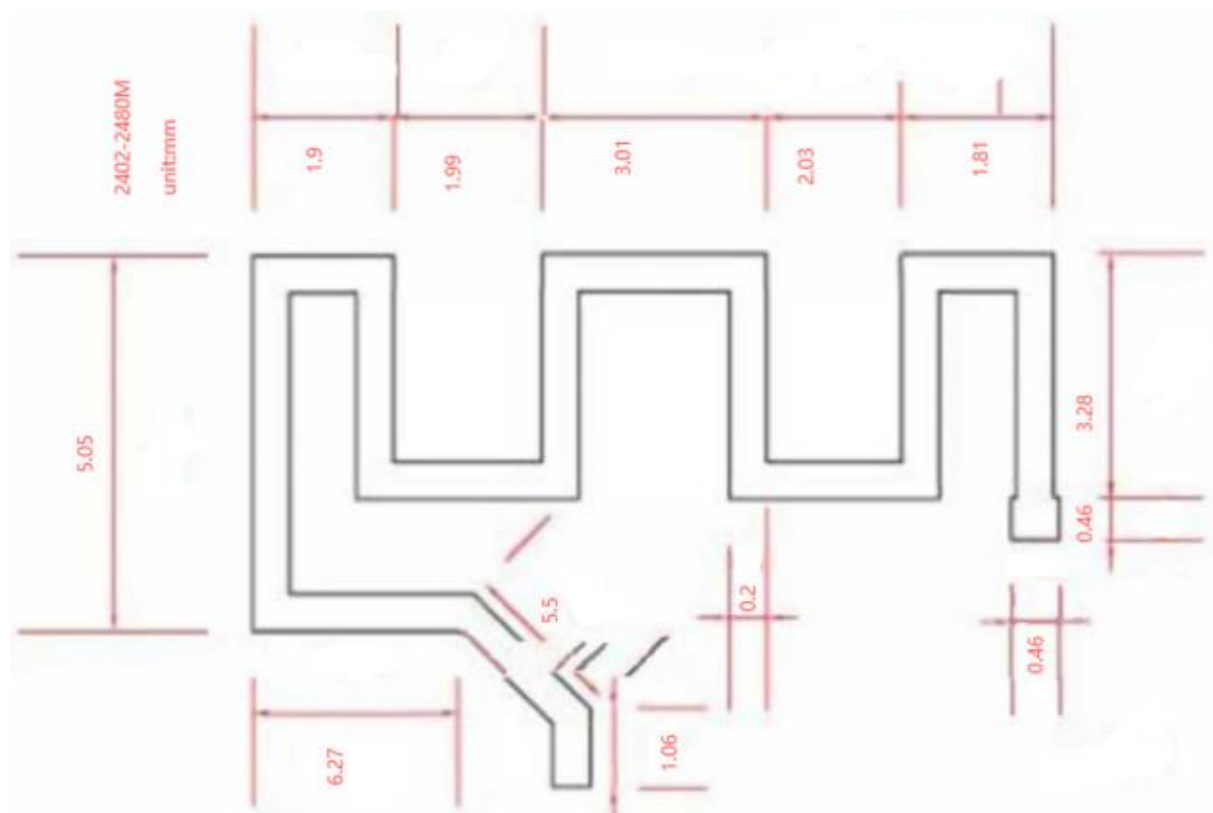


Figure 1 Dimensional drawing

3、 Operating Frequency

2400-2480MHz

4、 performance parameter

Frequency	2400~2500MHz
Antenna Gain	0dBi
S. W. R.	≤2.5
Polarization	Linear
Radiationtype	Omnidirectional
Nominal Impedance	50 Ω
Power Capacity	10W
Overall Length	6.5mm
Cable Length	13mm
Weight	/g
Material	FR4
Operation Temperature	-30℃~+75℃

5、Antenna characteristics

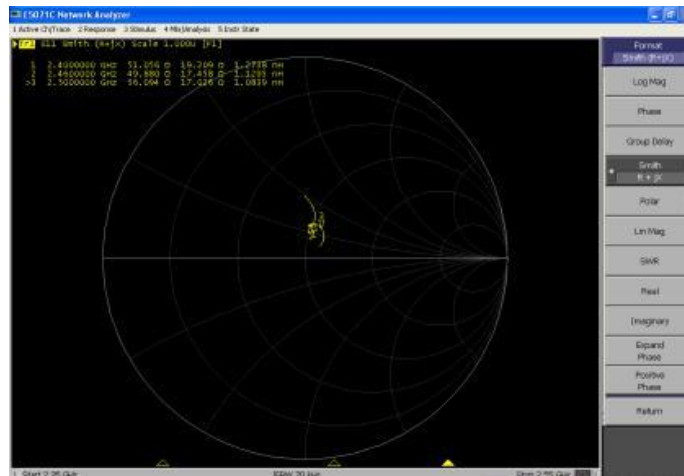


Figure 2 Smith chart

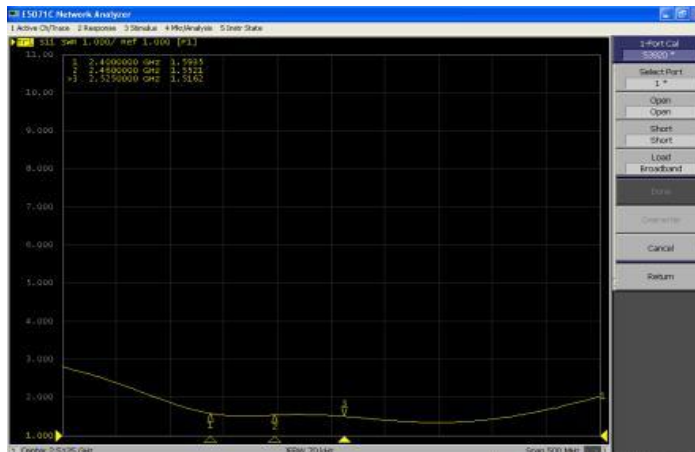
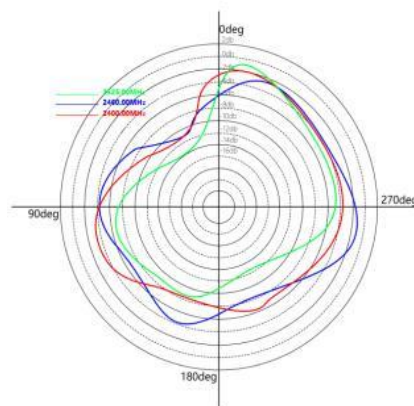


Figure 3 Standing Wave Ratio Test Diagram



Frequency	Gain(max)
2400MHz	-2dBi
2450MHz	-1dBi
2500MHz	-1dBi

Figure 4: Gain diagram of XOY planar antenna

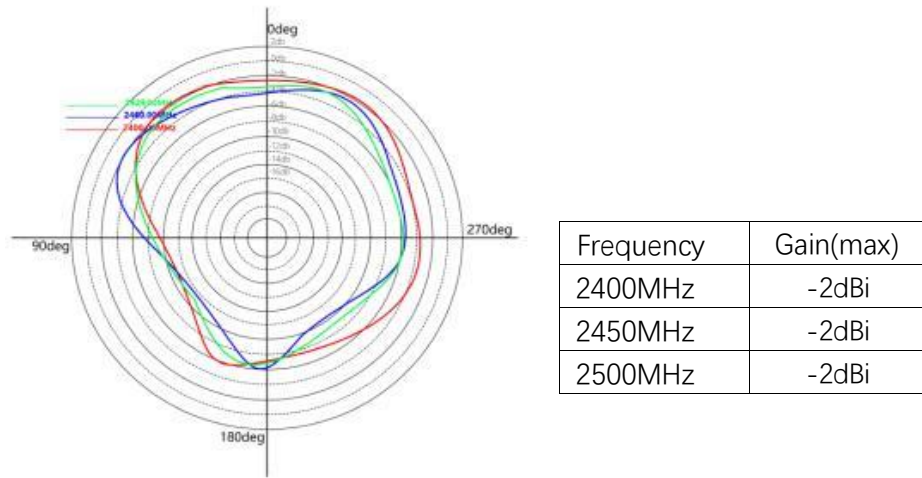


Figure 5: Gain diagram of XOZ planar antenna

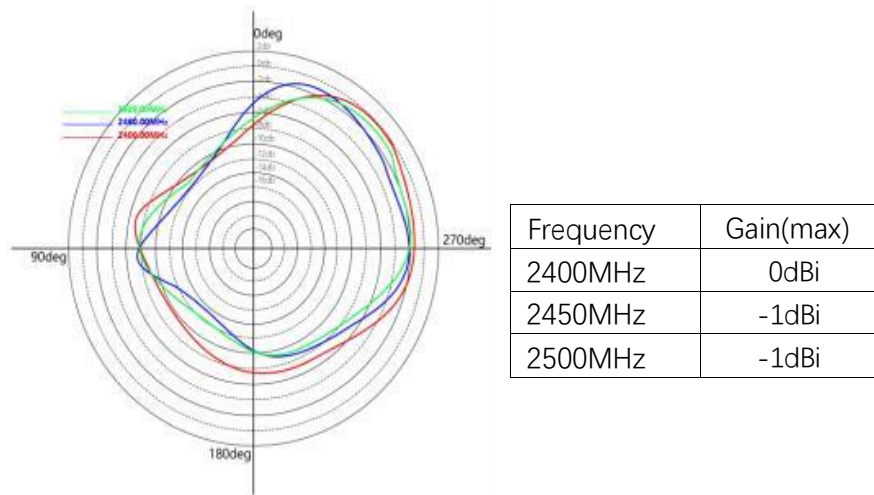


Figure 6 YOZ planar antenna gain diagram

5、remarks

Antennas are highly sensitive to the size of the PCB RF ground layer and the plastic casing of the product. The antenna can be simulated as an LC resonator, and as L (inductance) or C (capacitance) increases, the resonant frequency of the LC resonator will decrease. A larger RF ground layer and plastic casing will increase the effective capacitance, thereby reducing the resonant frequency. Please adjust the matching parameters according to the actual installation situation when using.