

SMD Antenna Specification

Manufacturer:Guangzhou Little Orange Cat Technology Co., Ltd.

Address:Room 410, No. 193, Shui Xi Road (Self-organized D2 Building), Huangpu District, Guangzhou, China

Model: CA-C03

2.4 GHz ISM

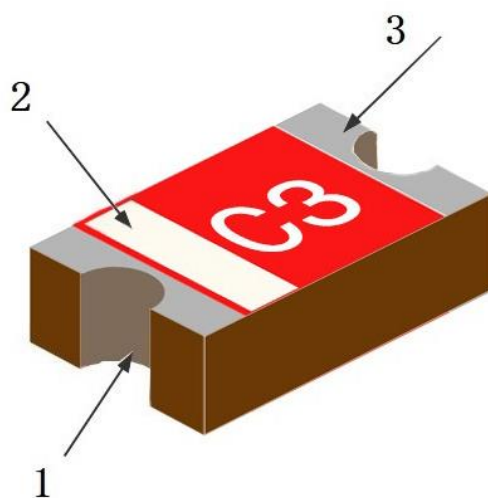
Feature

1. Small size SMD patch antenna measuring only 5.5 X 2.0 X 1.0 mm.
2. Low energy loss and high antenna efficiency.
3. High stability in the case of temperature and humidity changes.

Application

1. 2.4GHz ISM frequency band antenna application
2. Bluetooth, ZigBee, wireless application, smart home application, etc.
3. WIFI (only 2.4G)

Structure



1, antenna feed terminal 2,
feed identification mark 3,
antenna welding fixed end

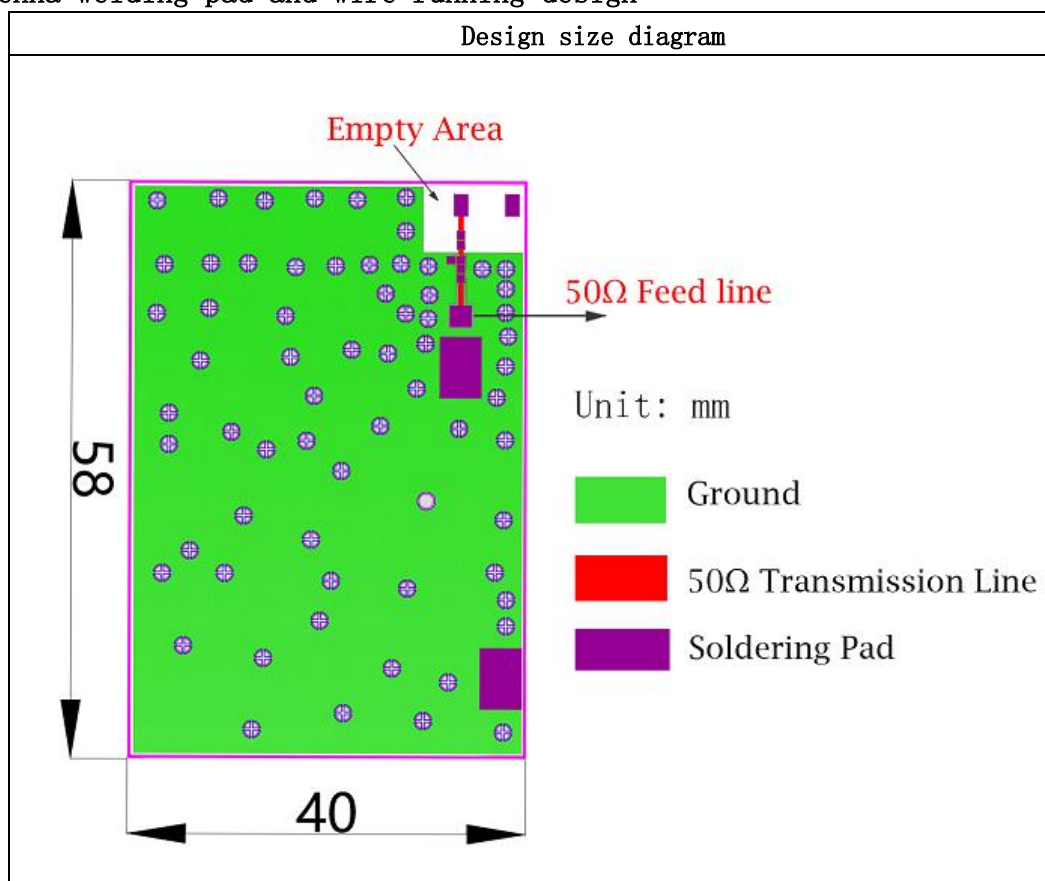
Size

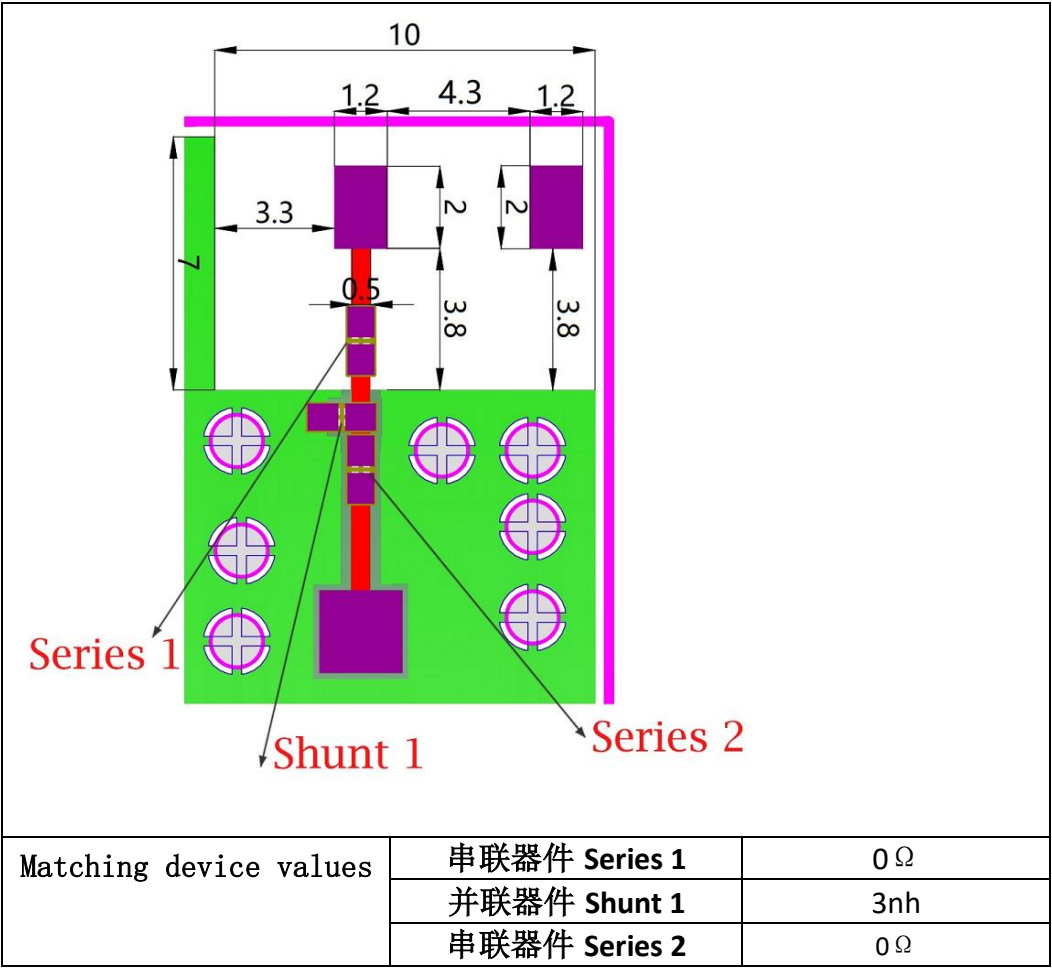
Three views	Symbol	Size(mm)
	L	5.5 ± 0.2
	w	2.0 ± 0.1
	T	1.0 ± 0.1
	a	0.5 ± 0.1

electrical character

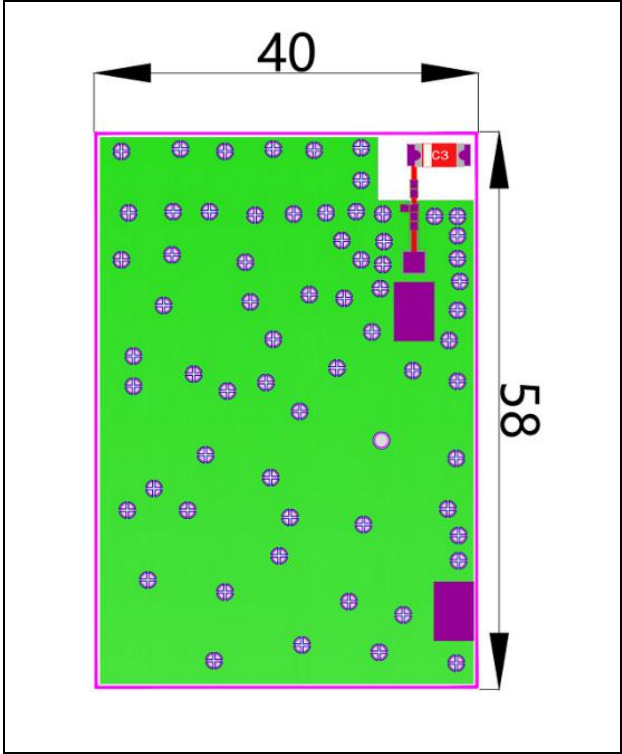
CA-C03	Specification
工作频率范围 Working Frequency	2450±50MHz
初始频段(GHz)	2.7GHz
带宽 Band Width	>100MHz
阻抗 Impedance	50 Ω
增益 Gain(dBi)	4.3 (peak)
驻波比 VSWR	<2
工作温度 Operation Temperature	-40℃~+95℃
可承受功率 Power Capacity	3W

Antenna welding pad and wire running design

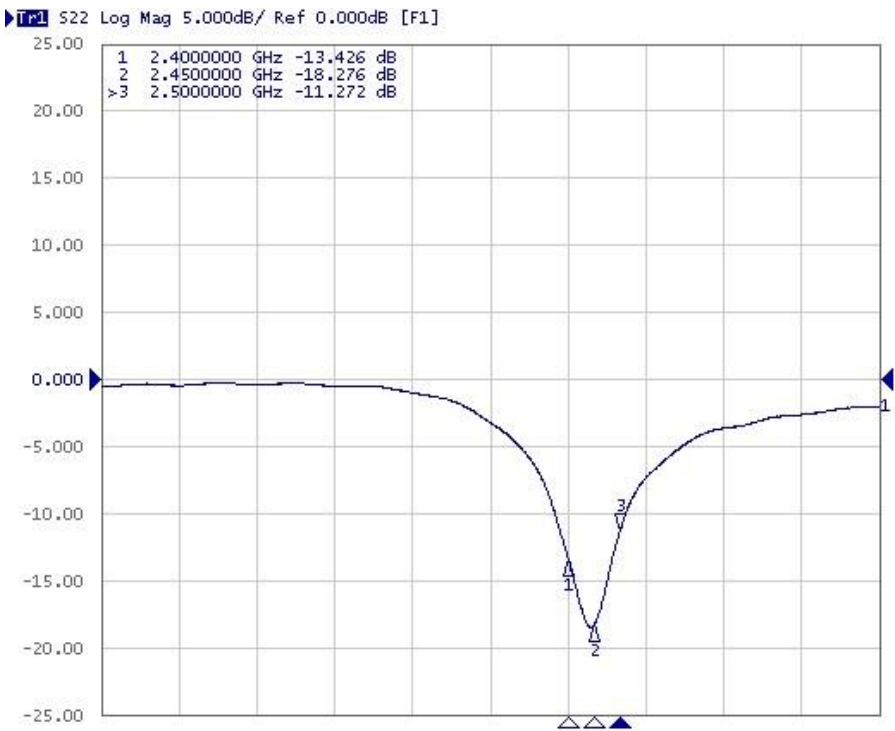




Antenna test on test plate (plate thickness 1.0mm)



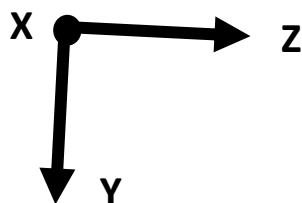
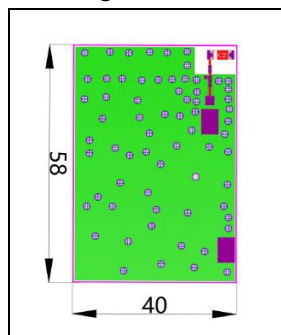
Antenna S11 characteristics



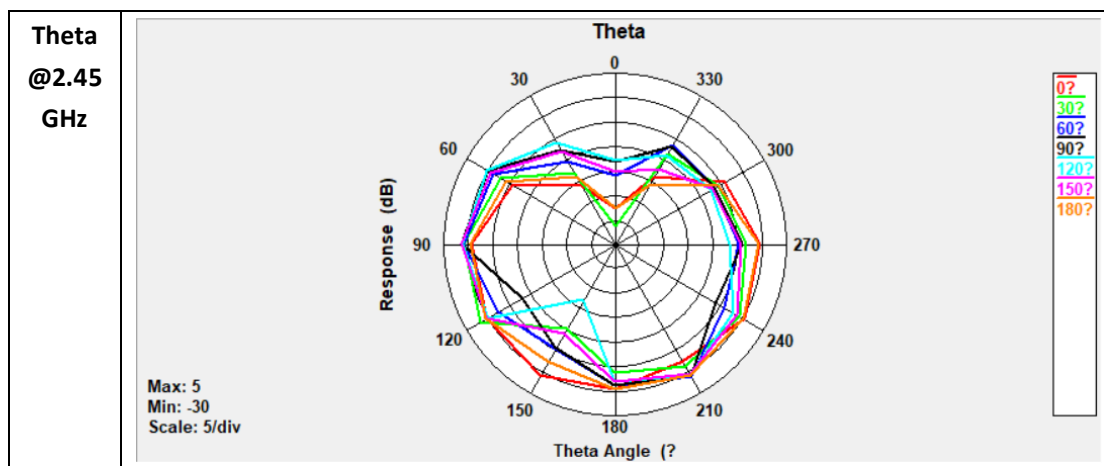
天线 VSWR 特性

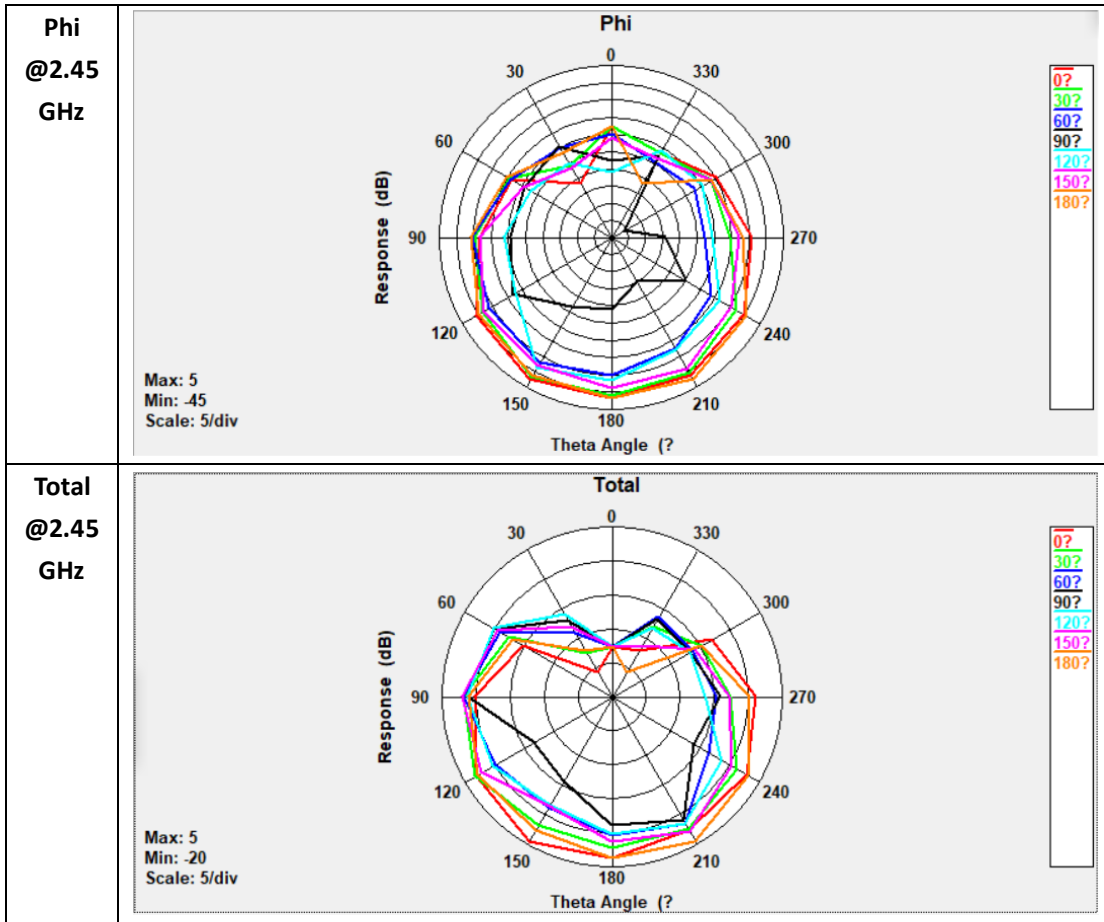


Based on the test PCB plate size and the test direction shown in the following below. The following data were tested in the ETS 3D microwave darkroom.



Gain and Efficiency	bandwidth 2.4G-2.5GHz
峰值增益 Peak Gain	4.3dBi
带内平均增益 Average Gain across the band	4.1dBi
带内增益范围 Gain Range across the band	3.9dBi~4.3dBi
峰值效率 Peak Efficiency	81.7%
带内平均效率 Average Efficiency across the band	80.2%
带内效率范围 Efficiency Range across the band	78.6%~81.7%





welding condition

The reliable and nondestructive typical welding specifications are shown below:

