承 认 书

SPECIFICATION FOR APPROVAL

Customer: Kandao

Brand: Jiutian

Description: WIFI Antenna

Specification /part no: 3.0dBi@2.4GHz,3.0dBi@5.8GHz Internal Antenna,RG0.81 Black Cable L=120mm, IPEX Four Generation Terminal, Black FPC Antenna

Date: 2024.03.25

Remark: Pleasereturnonespecificationoronecopyofitwithyourchopandsignatureofapprovalandretain the others for your record. In the event of an order being placed for this part number before the chop and signed with specification (or copy) is returned and without special explanation, it will be assumed that full approval have been given.

Customer signature and seal:

CHECKED/DATE	AUDITOR/DATE	APPROVED/DATE

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TEL: 0769- 82953575 FAX: 0769-82953543

Specifications

Customer P/N：10000949

Antenna Model：QY162-11C0012A

Specification： Antenna,3.0dBi@2.4GHz ,3.0dBi@5.8GHz Internal Antenna, RG0.81 Black Cable L=120mm, IPEX Four Generation Termina Black FPC Antenna

Description： WIFI Antenna

Supplier： Jiutian

Producer： Jiutian

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CHECKED/DATE	AUDITOR/DATE	APPROVED/DATE
Zhang Bingxiang 2024.03.25	Wu Qianjin 2024.03.25	Luo Daxun 2024.03.25

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Resume					
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V1.0					

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Picture：

Electrical parameters：

Frequency 频率范围	2.4~2.5GHz&5.15~5.85GHz
Impedance 特性阻抗	50Ω
S.W.R. 电压驻波比	≤2.0
Antenna Gain 增益	3.0dBi±0.5@2.4GHz，3.0dBi±0.5@5.85GHz
Polarization 极化形式	vertical polarization
Return Loss 回波损耗	-9.2dB MAX

Mechanical parameters

Antenna Colour 天线颜色	Black
RF Cable Model 射频线型号	RG 0.81，Black
Connect Type 接口方式	I-PEX Ⅳ

Operating/ Storage Temperature：

Operating Temperature 工作温度	-40~85℃
Storage Temperature 储存温度	-40~85℃

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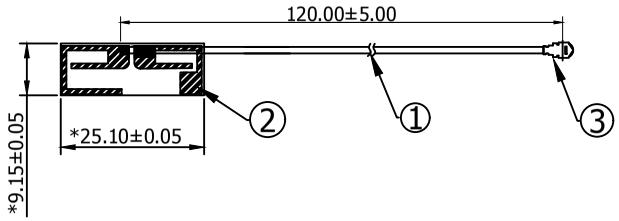
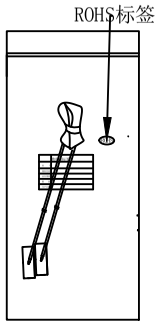
成品图

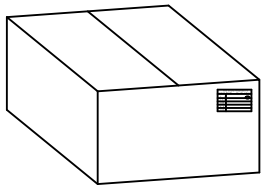
REV	DATE	DESCRIPTION
A	2023.05.27	NEW ISSUE



Specification:
Frequency Range :2.4~2.5GHz&5.15~5.85GHz
Return loss: -9.2dB or less
VSWR: 2.0:1max
Gain(Peak): 3.0dBi



Pack full：200pcs/PE Bag



1. 纸箱需贴上1pcs/ROHS环保标签至成品标签上；
2. 纸箱须贴上1pcs外箱标签至纸箱右上角。

NO	DESCRIPTION		QTY	REMARK
3	Connector	IPEX IV	1	
2	FPC	25.10*9.15*0.2mm ,Black	1	
1	Cable	RG-0.81 RF Cable 50Ω,Black	1	

XXX.	±5.0	APPROVED	
XX.	±3.0		
X.	±1.0	CHECKED	
.X	±0.5		
.XX	±0.1	DRAWING	

COSTOMER:
PART NO :
PARTNAME : WIFI天线
R.F P/NO :

REV	UNIT	SCALE	SIZE	SHEET
A	mm	1:1	A4	1OF1

深圳市玖天电子有限公司
SHENZHEN Jiont Electric Co., Ltd..

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Environmental and reliability testing:

Environmental test

High and low temperature humidity test report

experimental project	High temperature, low temperature and constant humidity test		
Test sample Name plate	FPC Antenna	Test date	2023.03.15
quimente	Constant temperature and humidity test chamber network analyzer	quantity	5PCS
inspection standd	1. 1. The metal surface coating has no peeling, cracking, wrinkling and other defects;The non-metal part should not be discolored, broken, deformed, degummed and other defects. 2 .Electrical test meets the design requirements; The voltage standing wave ratio test is qualified.		

nameThe	experimental project	require	experimental method	Actual test data	result	
					sample	decide
high temperatue test	Temperature (℃) Temperature stabilization time of test sample (h) Duration of test (h) Recovery time (h)	+85±3 1 1 1	In accordance withGB2423.1-89 9 chapter To be carried out in the prescribed manner	+85 1.2 2.3 1	1	qualified
					2	qualified
					3	qualified
					4	qualified
					5	qualified
low temperatue test	Temperature (℃) Temperature stabilization time of test sample (h) Duration of test (h) Recovery time (h)	-40±3 1 2 1	n accordance withGB2423.1-89 Section 8 chapter Regulation of the methods	-40 1.2 2.4 1.1	1	qualified
					2	qualified
					3	qualified
					4	qualified
					5	qualified
steady-state damp heat test	Temperature (℃) Relative Humidity (%) Duration of test (h) Recovery time (h)	+40±2 90-95 21 1	According to GB2423.3-93 section 5 chapter Stipulated by the parties the parties	+42 92 22 1.1	1	qualified
					2	qualified
					3	qualified
					4	qualified
					5	qualified

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Salt spray test; salt fog test

Salt spray test report			
experimental project	salt spray test; salt fog test		
Test sample Name plate	FPC Antenna	Test date	2023.03.15
quimente	salt spray corrosion test chamber	quantity	5PCS
inspection sta ndd	Put the test sample into the prepared salt solution test chamber and salt spray corrosion chamber for continuous spray test		
Salt solution concentration	52g/L	The pH of the salt solution：6.5-7.2	test cycle： 24h
Actual test data	55g/L	The pH of the salt solution：6.8	test cycle：26h
test standard; test criteria	According to GB/T10125 "artificial atmosphere corrosion test, salt spray test" test;Results according to the GB/T6461-2002 "Metal and other inorganic coating on metal substrate after corrosion test is the grade of samples and test pieces" rating.		

test results

NO.	Corrosion rating	Actual test data	Evaluation of the results	备注
1	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	qualified	
2	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	qualified	
3	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	qualified	
4	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	qualified	
5	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	qualified	

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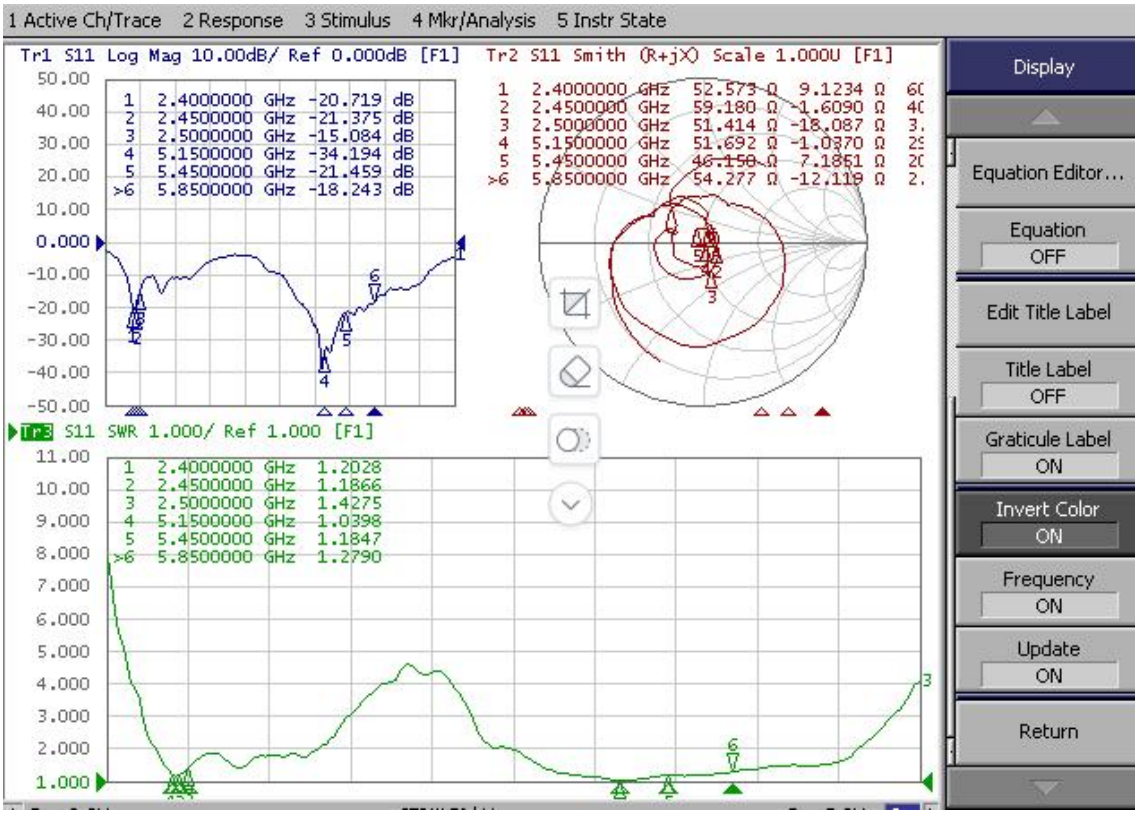
Measuring parameter

V.S.W.R&Ruturn Loss



Gain&Efficiency

FEITUKEJI											
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	2.40	2.30	2.53	2.36	2.18	2.68	2.19	2.24	2.73	2.51	2.47
Efficiency (%)	38.11	39.65	39.41	38.65	39.30	40.25	40.36	40.28	39.08	39.42	38.41

FEITUKEJI															
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Frequency (MHz)	5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
Gain (dBi)	2.86	3.21	3.08	2.92	2.53	3.15	2.96	2.57	2.74	2.26	2.54	2.09	2.65	2.43	2.74
Efficiency (%)	49.30	50.92	48.31	50.25	49.36	51.35	53.67	52.17	52.63	51.42	52.38	51.47	52.63	50.18	49.37

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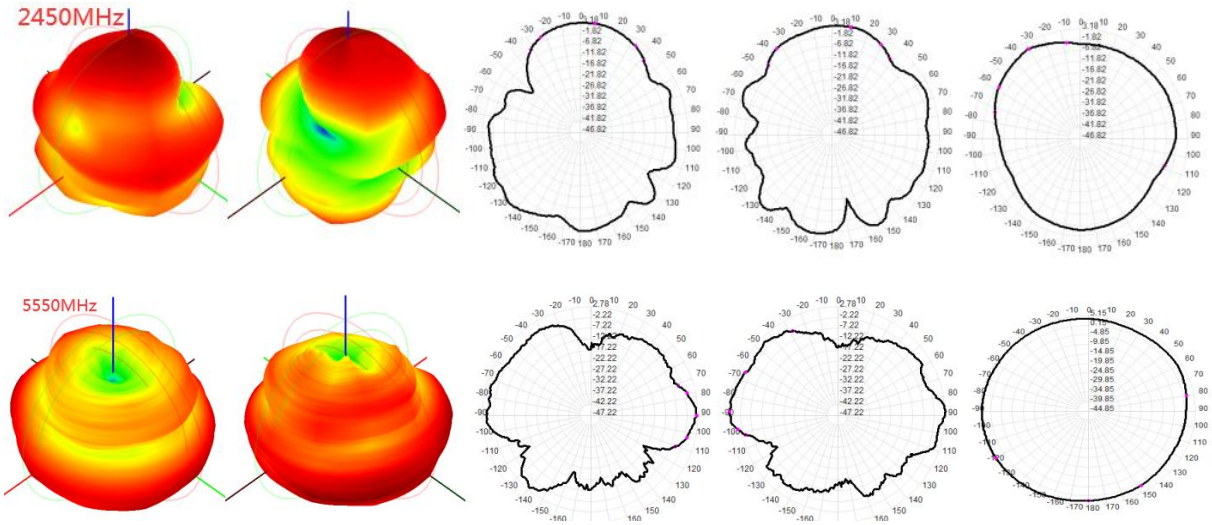
2D、3D Radiation Patte



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