

# 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=80mm,  
IPEX Four Generation Terminal, Black  
FPC Antenna

Date: 2024.03.25

Remark:

Please return one specification or one copy of it with your chop and signature of approval and retain 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

# Specifications

Customer P/N: 10000951

Antenna Model: QY162-11C0011A

Specification: Antenna,3.0dBi@2.4GHz ,3.0dBi@5.8GHz

Internal Antenna, RG0.81 Black Cable

L=80mm, IPEX Four Generation Termina

Black FPC Antenna

Description: WIFI Antenna

Supplier: Jiutian

Producer: Jiutian

Remark:

Please return one specification or one copy of it with your chop and signature of approval and retain 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.

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



## Specification list

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Picture:



Electrical parameters:

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

Mechanical parameters

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

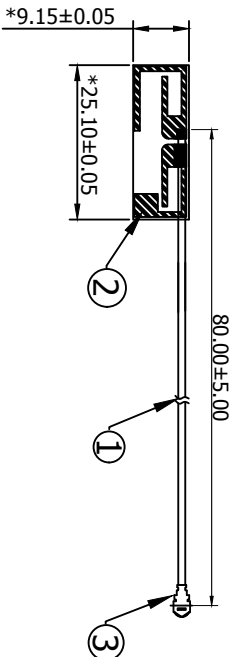
Operating/ Storage Temperature:

<b>Operating Temperature</b> 工作温度	-40~85℃
<b>Storage Temperature</b> 储存温度	-40~85℃

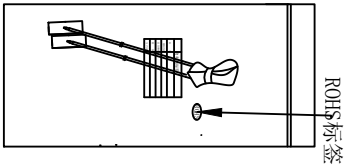
成品图

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REV	DATE	DESCRIPTION
A	2023.05.27	NEW ISSUE

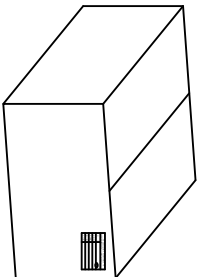


Specification:  
 Frequency Range : 2.4~2.5GHz&5.15~5.85GHz  
 Return loss: -9.2dB or less  
 VSWR: 2.0:1max  
 Gain(Peak): 3.0dbi



ROHS标签

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 JPEX IV	1	
2	FPC 25.10*9.15*0.2mm ,Black	1	
1	Cable RG-0.81 RF Cable 50Ω ,Black	1	

APPROVED

CUSTOMER:

PART NO :

PARTNAME : WIFI天线

R.F P/NO :

REV UNIT SCALE SIZE SHEET

CHECKED

DRAWING

±5.0

A

±3.0

mm

±1.0

1:1

±0.5

A4

±0.1

10F1

深圳市玖天电子有限公司

SHENZHEN Jiout 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			
equipment	Constant temperature and humidity test chamber network analyzer	quantity	5PCS			
inspection standard	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.					
name	The experimental project	require	experimental method	Actual test data	result	
					sample	decide
high temperature test	Temperature (°C)	+85±3	In accordance with GB2423.1-89 9 chapter To be carried out in the prescribed manner	+85	1	qualified
	Temperature stabilization time of test sample (h)	1		1.2	2	qualified
	Duration of test (h)	1		2.3	3	qualified
	Recovery time (h)	1		1	4	qualified
						5
low temperature test	Temperature (°C)	-40±3	In accordance with GB2423.1-89 Section 8 chapter Regulation of the methods	-40	1	qualified
	Temperature stabilization time of test sample (h)	1		1.2	2	qualified
	Duration of test (h)	2		2.4	3	qualified
	Recovery time (h)	1		1.1	4	qualified
						5
steady-state damp heat test	Temperature (°C)	+40±2	According to GB2423.3-93 section 5 chapter Stipulated by the parties the parties	+42	1	qualified
	Relative Humidity (%)	90-95		92	2	qualified
	Duration of test (h)	21		22	3	qualified
	Recovery time (h)	1		1.1	4	qualified
						5

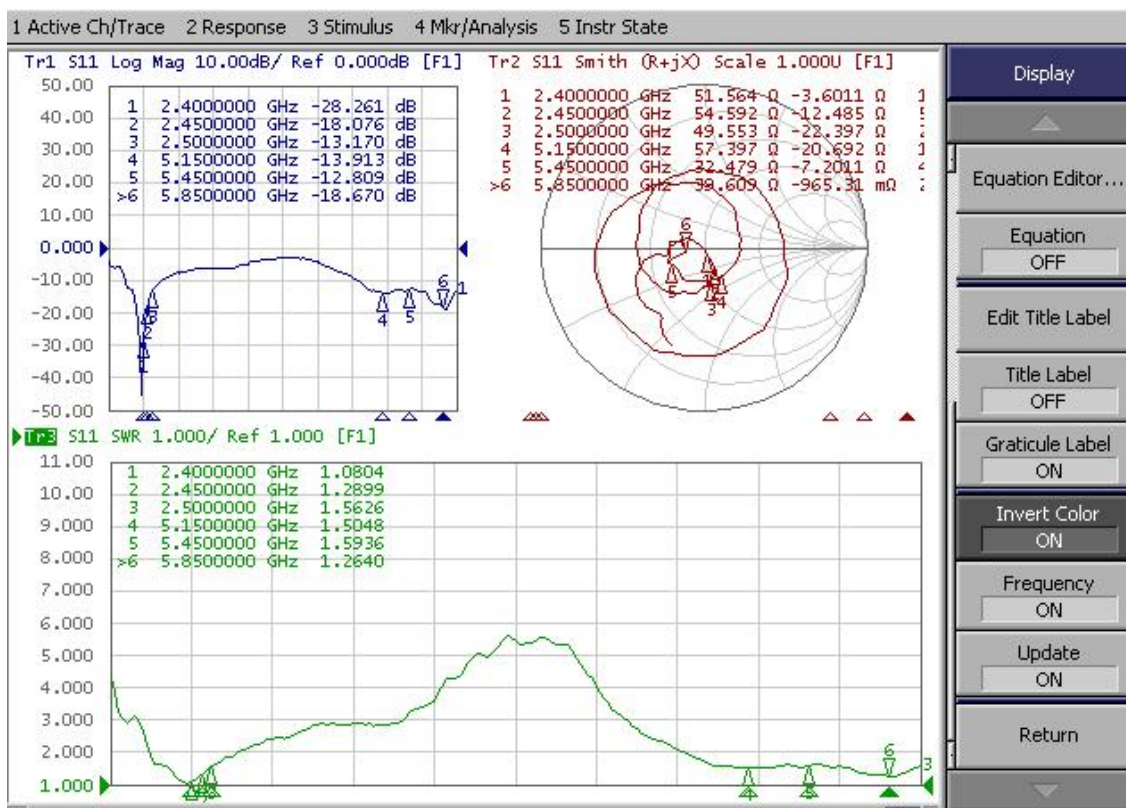
Salt spray test; salt fog test

Salt spray test report				
experimental project	salt spray test; salt fog test			
Test sample Name plate	FPC Antenna	Test date	2023. 03. 15	
equipment	salt spray corrosion test chamber	quantity	5PCS	
inspection standard	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	



## Measuring parameter

### V.S.W.R&Return 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)	2.60	2.70	2.84	2.99	2.77	3.00	2.54	2.75	2.91	2.78	2.83
Efficiency (%)	39.91	40.16	40.96	41.74	42.46	42.62	41.34	40.31	42.72	41.54	41.49

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)	3.24	3.78	3.40	3.40	2.86	3.66	3.53	3.15	3.20	2.70	3.03	2.59	2.71	2.96	3.09
Efficiency (%)	52.10	53.92	49.55	49.53	50.96	52.78	52.05	53.14	52.67	49.53	51.38	49.30	50.72	51.78	52.99

2D、3D Radiation Patte

