

Specification Recognition Letter

Specification For Approval

Customer Name: 360

Customer

IPEX-2.4G black rubber antenna -113 black-L35MM

Part name

Feiyu letter number: 3.13.0101003107

Part No

Customer material number:

Customer Part No

Customer Confirm Customer confirmation		
Confirm Confirmation	Verify Check	Approval Approver

Manufacturers acknowledge Manufacturer recognition			
Sales Representative Sales	fiction Drafters	Verify Check	Approval Approver
Luo Yi	Li Yongjie	Zhou Xihua	Li He

Thank you for the opportunity to give our company a sample of recognition. If Huimon admits, please sign this form back to our company.

Thank you for giving us the chance to approve samples. If you agree to pass it, please kindly send it back to us.

Shenzhen Feiyuxin Electronics Co., Ltd.

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Directory Catalog


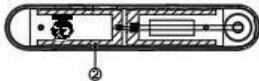

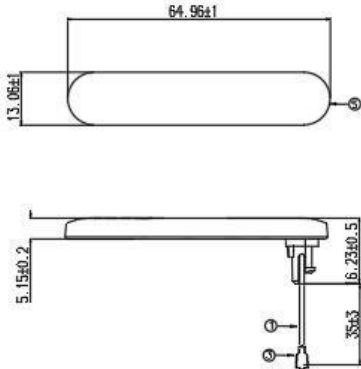


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Modify records

Modification by Engineer

A0 2024.09.15 Li Yongjie New

1. Product dimension drawing

A		B		C		D		E		F		END PRODUCT DRAWING 成品图		
RoHS Compliant										REV	DATE	DESCRIPTION	ECN NO.	NAME
										A0	2024.09.15	新订图面		黎永杰
<div> <div> <div>PCB Size:4*45.6mm</div>    </div> <div>  </div> </div>														
工作频段 (Frequency Range)		2400-2500MHz												
增益 (Gain)		2dBi												
电压驻波比 (VSWR)		对比波形-空侧												
极化方式 (Polarization)		Linear												
特性阻抗 (Impedance)		50 ohm												
⑧														
⑦														
⑥														
⑤	L64.96*13.06*5.15-黑色	1	上盖											
④	L62.98*13.88*11.08-黑色	1	下盖											
③	2027B-112R-13-插头	1	IPEX											
②	2.4G-绿色-单面板-丝印	1	PCB											
①	1.13黑-64-双锡-FEP	1	线材											
No.	Name		Qty	Remark										
					角法 ANGLE PROJECTION 		产品名称 (PRODUCT NAME) IPEX-2.4G 黑色棒状天线-113黑-L35MM							
					公差 GENERAL TOLERANCE 100-200 : ± 3.00 50-100 : ± 2.00 25-50 : ± 0.20 10-25 : ± 0.10 1-10 : ± 0.05		产品料号 (PRODUCT NO) 3.13.0101003107		单位 (UNIT) 页数 (PAGE) 1 OF 1		M M 幅面 (FORMAT) A4		比例 (SIZE) 1:1	
					设计 (D S) 审核 (CHK) 核准 (APPD)		黎永杰 周锡华 李智		 深圳飞宇信电子有限公司 SHENZHEN FLYFOX ELECTRONICS CO.,LTD					

表单编号: FYX/E-QR-14A 版本: 第三版

2. Product Appearance

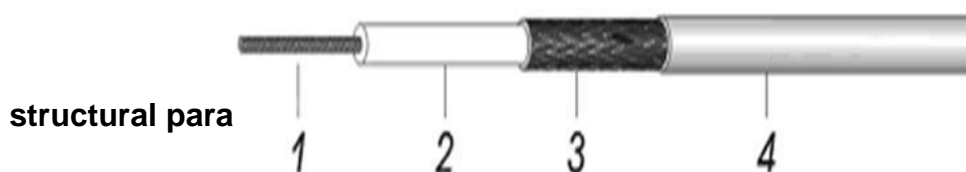
Exterior dimension	L64.96 * 5.15	Fixed way	snap-on
Weight	/	Connector type	IPEX
Shell color	Black	Cable	1.13 line

3. antenna performance parameters

Project	Characteristics	Unit
Frequency range	2400~2500	MHz
output impedance	50	Ω
standing wave ratio	≤ 2.0	--
Gain	≥ 2	dBi
polarization mode	vertical polarization	
radiation direction	Omni-directional	
Maximum input power	5	W
Working temperature	-40 to +70	°C
Storage temperature	-45 ~ +75	°C

4. Wire specifications

1.13 Line Structure Diagram



	Materials	Diameter (mm)
1. Inner conductor	Tinned copper wire	7/0.08±0.02
2. Insulator	Solid Polyethylene (PE)	0.66±0.02
3. Outer conductor	Tinned copper wire	0.88±0.05
4. Sheath	FEP	1.13±0.05

electrical performance parameters

Capacitance (pF/m) 96±3

Impedance (ohm) 50

rate (%) 66

bending radius (mm) ≤ 7

Maximum operating voltage (VMS) 1000

Maximum operating frequency (MHz) 6000

Operating

-40 to +80

Attenuation (typical)

Frequency (MHz)	Attenuation (≧ dB/m)
100	0.42
400	0.58
1000	2.20
2000	3.40
3000	4.20
4000	4.50
5000	5.20
6000	5.60

Environmental Test Report

5.1 high and low temperature constant humidity test

Test Items	High temperature, low temperature and constant humidity test			
Testing equipment	Constant temperature and humidity test chamber			
Inspection standard	1. The metal surface coating is free of peeling, cracks, wrinkles and other defects; non-metallic parts can not have discoloration, cracks, deformation, degumming and other phenomena.			
Test Name	Test Items	Requirements	Test Method	Result judgment
High temperature test	Temperature (°C)	70±3	Test steps:	Qualified
	Test sample temperature time (h)	1	a) Put the tested part into the test chamber, and then put the high temperature chamber temperature	
	Test duration (h)	2	Adjust the degree to 70 °C 3 °C, and monitor the time.	
	Recovery time (h)	1	B) After the test, place it at room temperature for 1 hour and conduct regular inspection. test.	
Low temperature test	Temperature (°C)	-40±3	Test steps:	Qualified
	Test sample temperature time (h)	1	a) Put the tested part into the test chamber, and then put the low temperature chamber	
	Test duration (h)	2	The degree is adjusted to -40 °C +3 °C,	

	Recovery time (h)	1	and the monitoring time is maintained. B) After the test, place it at room temperature for 1 hour and carry out regular inspection. test.	d
constant damp heat	Temperature (°C)	+40±3	a) Put the tested part into the test chamber, and then warm the test chamber.	Qualified
Test	Relative humidity (%)	90-95	The degree is adjusted to +40 °C 3 °C, the humidity is 90-95%, monitoring Time.	
	Test duration (h)	21		
	Recovery time (h)	1	B) After the test, place it at room temperature for 1 hour and carry out regular inspection. test.	
Confirmed by: Guo Guangfen			Approved by: Xie Zhoujun	

5. 2 Free drop test

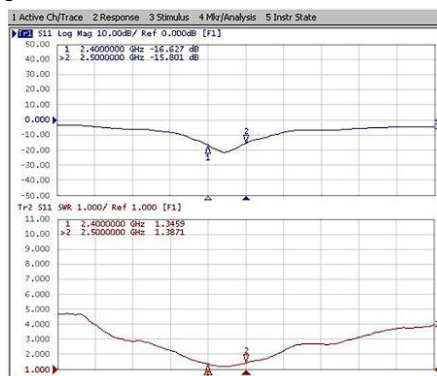
Test Items	Free drop test			
Testing equipment	1 m high table top			
Inspection standard	1. Falling at a height of 1 meter, the product has no defects such as falling off, cracks, etc., and the appearance has no deformation.			
Test Name	Test Items	Requirements	Test Method	Result judgment

Test of free drop	Drop height 1000mm	Front and back fall 2 times	Test steps: a) Drop the tested part at a height of 1000mm, and carry out regular inspection after the test.	Qualified
Confirmed by: Guo Guangfen Approved by: Xie Zhoujun				

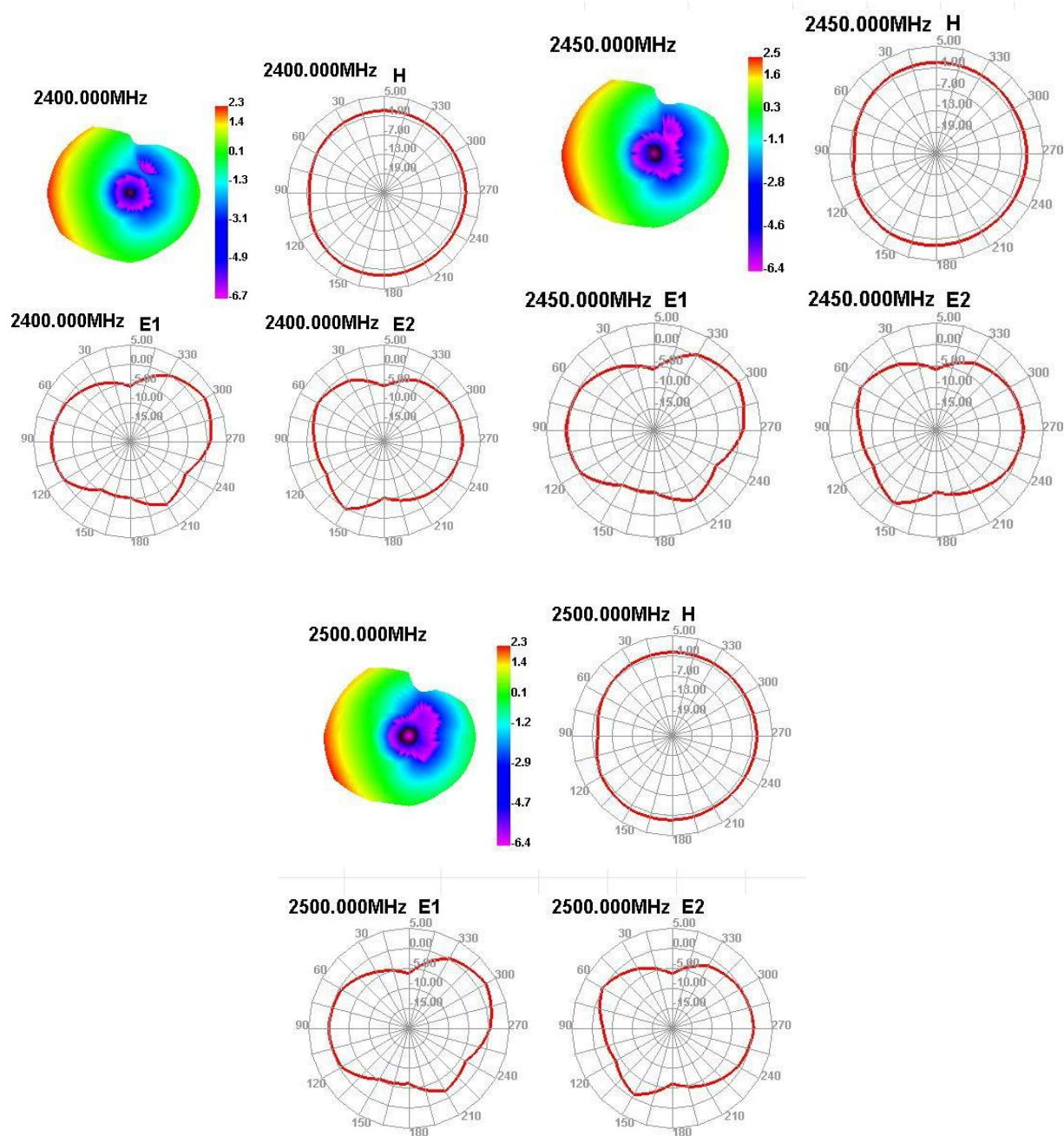
5.3 Salt spray test

Test Items	Salt spray test			
Testing equipment	Salt spray test machine			
Inspection standard	1. There is no peeling of the coating on the metal surface; the appearance is free of rust, corrosion, oxidation and other undesirable phenomena.			
Test Name	Test Items	Requirements	Test Method	Result judgment
Salt spray test	1. NaCl concentration: 2. Air pressure: 3. PH: 4. Spray volume: 5. Salt water test temperature setting a. Laboratory temperature: B. Pressure barrel temperature: 6. Test time:	40-60g/1kg $1.0 \pm 0.01 \text{ kgf/m}^2$ 6.5-7.2 1.0-2.0ml/80c/h. $35 \pm 1^\circ\text{C}$ $47 \pm 1^\circ\text{C}$ 24h	Test steps: a) The salt spray tester shall be adjusted to the relevant test conditions. b) Put the tested piece into the salt spray tester and place it for 24 hours. After the test, rinse with clean water, visually inspect the appearance of the tested parts and conduct regular inspection.	Qualified
Confirmed by: Guo Guangfen Approved by: Xie Zhoujun				

6. Antenna performance test



Passive Test For 2400-2500		
Freq(MHz)	Effi(%)	Gain(dBi)
2400	78.93	1.82
2410	75.1	1.98
2420	74.26	1.74
2430	77.31	1.92
2440	81.28	1.96
2450	84.88	2
2460	82.24	1.96
2470	79.05	1.87
2480	82.97	1.92
2490	83.18	1.93
2500	77.61	1.83



7. Product real shot

