

Sample acceptance

Name of the supplier Shenzhen Feiyuxin Electronics Co., LTD

Grid type number OPEN-2.4G FPC Ant.-1.13 Gray-L150MM

SAP Material coding _____

ERP Material coding _____

Acceptance stamp

Supplier acceptance (Supplier field)			Customer acceptance		
Engineering	Quality	approval	R&d recognition	R&d approval	Quality confirmation
Li Yongjie	Chen Yan	Li HE			
Seal and sign			Seal and sign		
Date		2024-08-14	Date		
Instructions: ☐ acceptance ☐ Conditional acceptance					

Document correction record

Version	Modify location	modify content	modifier	approver	Time in Force
A0	/	New drawing			

Specification For Approval

Customer: _____ 10295 _____

Part name: _____ OPEN-2.4G FPC Ant.-1.13 Gray-L150MM _____

Part No: _____

Customer Part No: _____

Customer confirmation		
Confirmation	check	Approver

Manufacturer recognition			
Sales	Drafters	check	Approver
Luo Yi	Li Yongjie	Zhou Xihua	Li He
Thank you for giving us the chance to approve samples. If you agree to pass it, please kindly send it back to us.			

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Modification record

Versions	Date	Engineer	Content modification
A0	2024.08.15	Li Yongjie	New Drawing

1. Product size drawing

RoHS Compliant		A		B		C		D		E		F	
END PRODUCT DRAWING 零件图		REV 4.0		DATE 2023.12.18		DESCRIPTION 零件图		EVEN NO.		NAME 陈良宏			

要求:

1. 材料无损伤;
2. 成品须100%耐压测试OK;
3. 成品须100%全检OK;
4. 采用环保制程;
5. 标注部分为重直管径尺寸。

④	工作频率 (Frequency Range)	24.00~25.00Mhz
⑤	增益 (Gain)	2dB
⑥	电压驻波比 (VSWR)	对比测试
⑦	氧化为氧 (Oxidation)	Linear (Vertical)
⑧	特性阻抗 (Impedance)	50 ohm

⑨	⑨	材料: 铜厚片	规格: 铜厚片
⑩	⑩	⑩	⑩
⑪	⑪	⑪	⑪
⑫	⑫	⑫	⑫
⑬	⑬	⑬	⑬
⑭	⑭	⑭	⑭
⑮	⑮	⑮	⑮
⑯	⑯	⑯	⑯
⑰	⑰	⑰	⑰
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2. Product appearance

Size	L33*20mm	Fixed mode	Paste type
Weight	0.9g	Connector	NA
colour	FPC black	Cable	1.13

3. Antenna performance parameters

Items	Specifications	unit
Center Frequency	2400~2500	MHz
Output impedance	50	Ω
V.S.W.R	Compare the waveform	-
Average Gain	1.87	dBi
Maximum Peak Gain	2.00@2470MHz	dBi
Maximum Efficiency	67.33%@2490MHz	
Polarization mode	Linear polarization	
Radiation direction	omnidirectional	
Maximum input power	5	W
working temperature	-40~+70	°C
Storage temperature	-45~+75	°C

4. Cable specification

1.13 Structure chart		
		
Structure parameter		
	Material Science	Diameter(mm)
1.Inner conductor	Tinned copper wire	7/0.08±0.02
2.Insulator	(PE)	0.66±0.02
3.Outer conductor	Tinned copper wire	0.88±0.05
4.Sheath	FEP	1.13±0.05
Electric performance parameters		

Capacitance (pF/m)	96±3
Impedance(ohm)	50
Rate (%)	66
Bending radius (mm)	≤7
Maximum working voltage	1000
Maximum operating frequency (MHz)	6000
Operating temperature range (°C)	-40~ +80
Attenuation	
(MHz)	(≥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

5.Environmental experiment

Environmental test report

5.1High low temperature and constant humidity test

No		Specifications	OPEN-2.4G FPC Ant.-1.13 Gray-L150MM	
Items	High temperature, low temperature and constant humidity test			
Testing equipment	Alternating constant temperature and humidity test chamber	number	3	
Inspection standard	1. The coating on the metal surface shall be free of peeling, cracking, wrinkling and other defects; the non-metal part shall not have discoloration, cracking, deformation, degumming and other phenomena.			
Test name	Test items	requirement	test method	Result judgment
High temperature	Temperature (°C) Test sample temperature	75±3 1	Test procedure: a) Put the test piece into the test	OK

e test	time (H) Test duration (H) Recovery time (H)	2 1	chamber, and then adjust the temperature of the high temperature chamber to 75 °C± 3 °C, and monitor the time. b) After the test, it was placed at room temperature for 1 hour for routine inspection.	
Low temperature test	Temperature (°C) Test sample temperature time (H) Test duration (H) Recovery time (H)	-40±3 1 2 1	Test procedure: a) Put the test piece into the test chamber, and then adjust the temperature of the high temperature chamber to 75 °C± 3 °C, and monitor the time. b) After the test, it was placed at room temperature for 1 hour for routine inspection	OK
Constant damp heat test	Temperature (°C) Test sample temperature time (H) Test duration (H) Recovery time (H)	+40±3 90-95 21 1	a) Put the tested object into the test chamber, then adjust the temperature of the test chamber to + 40 °C± 3 °C, the humidity to 90-95%, and monitor the time. b) After the test, it was placed at room temperature for 1 hour for routine inspection.	OK
inspector: Guo Guangfeng ratify: Xie Zhoujun				

5.2 Free fall test

No		Specifications	OPEN-2.4G FPC Ant.-1.13 Gray-L150MM	
Items	Free fall test			
Testing equipment	1m high desktop	number	3	
Inspection standard	1. The product has no defects such as falling off, cracking, etc. and no deformation in appearance when it falls 1 meter high.			
Test name	Items	requirement	test method	Result

				judgment
Free fall test	1000mm Drop height 1000mm	Drop both sides twice	Test procedure: a) Drop the test piece at a height of 1000mm, and carry out routine inspection after the test.	OK
inspector: Guo Guangfeng				ratify: Xie Zhoujun

5.3 Salt spray test

NO		Specifications	OPEN-2.4G FPC Ant.-1.13 Gray-L150MM	
Items	Salt spray test			
Testing equipment	Salt spray tester	number	3	
Inspection standard	1. The coating on the metal surface shall not fall off; the appearance shall be free of rust, corrosion, oxidation and other adverse phenomena.			
Test name	Items	requirement	test method	Result judgment
Salt spray test	1. NaCl concentration: 2. Air pressure: 3. PH value: 4. spray volume: 5. Salt water test temperature setting a. Laboratory temperature: b. Pressure tank temperature: 6. Test time:	40-60g/1kg 1.0±0.01kgf m² 6.5-7.2 1.0-2.0ml/80c/h。 35±1℃ 47±1℃ 24H	Test procedure: a) Adjust the salt spray tester to relevant test conditions. b) Put the test piece into the salt spray testing machine for 24 hours. After the test, rinse with clean water, visually inspect the appearance of the tested parts, and carry out routine inspection.	OK
inspector: Guo Guangfeng				

6.Product pictures



7.Antenna performance test



