



深圳市顺达成科技有限公司

SHUN DA CHENG TECHNOLOGY CO., LTD

承 认 书

SPECIFICATION FOR APPROVAL

客户名称 Customer Name	ShenzhenKejinmg Electronic Co., Ltd		
客户项目名 Customer Project Name	MX50	顺达成项目名 SDC Project Name	MX50
客户编码 Customer P/N		顺达成料号 SDC P/N	WF2769B-0814R-310 (主) 黑 WF2769B-0814R-485 (副) 灰
频段 Band	WIFI2. 4G/5. 8G/BT		
版本号 Version	A0		
设计人信息/Designer Information			
射频工程师 RF Engineer	陈均鑫	研发主管 R&D Director	符学荣
结构工程师 ME Engineer	李瑶娜		

审批/ Approval			客户批准/Customer Approval		
	制作 Prepared By	审核 Checked By	批准 Approval By	审核 Checked By	批准 Approval By
签章 Signature	李瑶娜	杨永辉	符学荣		
日期 Date	2023. 12. 07	2023. 12. 07	2023. 12. 07		

修订履历/Change Log				
版本 Version	修订内容 Change Description	责任人 Person in Charge	核准 Approval By	日期 Date



目录/Catalogue

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SHUN DA CHENG TECHNOLOGY CO., LTD

样品尺寸测量报告

Sample Dimensions Test Report

测试日期 Test Date	2023. 12. 07	样品数量 Sample Qty.	3	测试人 Inspector	许燕芳
尺寸编号 Dimension No.	标准 Standard	样品 1 Sample 1	样品 2 Sample 2	样品 3 Sample 3	Pass/NG
① Length	30±0.2mm	30.1	30	30	Pass
② Width	19.35±0.2mm	19.35	19.35	19.45	Pass
③ Thickness	0.1±0.03mm	0.1	0.1	0.1	Pass
④ line length	310±3mm	310	311	310	Pass
最终结论 Conclusion					PASS
测试人&日期 Inspector & Date	许燕芳 2023. 12. 07		批准&日期 Approval & Date		

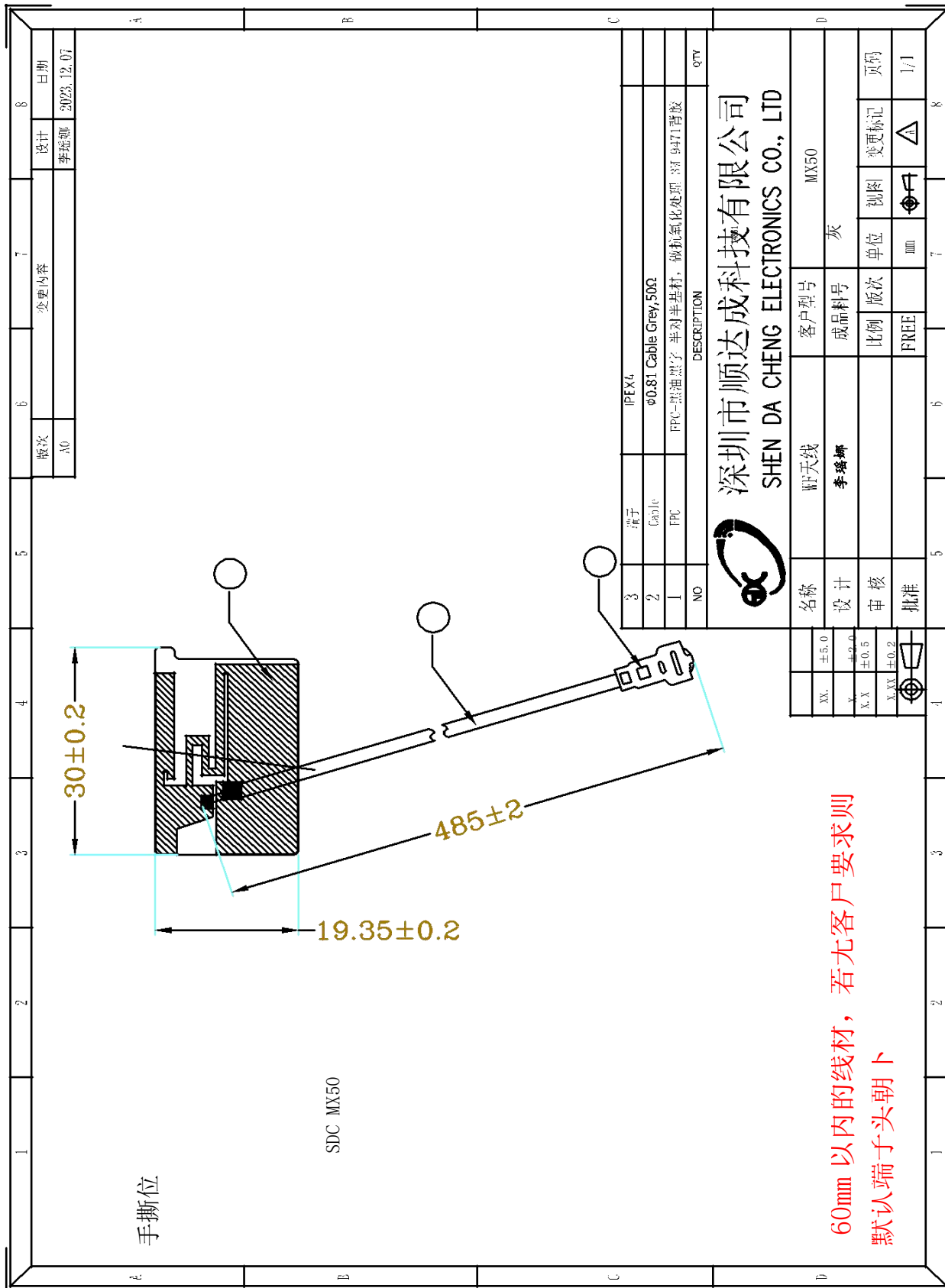


深圳市顺达成科技有限公司

SHUN DA CHENG TECHNOLOGY CO., LTD

产品图纸或实物图片

Drawing or Product Image



60mm 以内的线材, 若尤客户要求则默认端子头朝下



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样品尺寸测量报告

Sample Dimensions Test Report

测试日期 Test Date	2023. 12. 07	样品数量 Sample Qty.	3	测试人 Inspector	许燕芳
尺寸编号 Dimension No.	标准 Standard	样品 1 Sample 1	样品 2 Sample 2	样品 3 Sample 3	Pass/NG
① Length	30±0.2mm	30.1	30	30.1	Pass
② Width	19.35±0.2mm	19.35	19.25	19.45	Pass
Thickness	0.1±0.03mm	0.1	0.1	0.1	Pass
④ line length	485±3mm	485	486	485	Pass
最终结论 Conclusion					PASS
测试人&日期 Inspector & Date	许燕芳 2023. 12. 07		批准&日期 Approval & Date		



射频性能测量报告

RF Performance Test Report

天线测试设备简介

Antenna Test Equipment Introduction

测试天线输入特性使用 Agilent E5071C and Agilent 5062A 矢量网络分析仪；辐射特性利用广屏三维近场暗室进行测试，并分别使用 8960 E5515 和 Agilent E4438C 进行了分析。暗房的测试坐标如下：

Test of antenna input characteristics using Agilent E5071C and Agilent 5062A vector network analyzer; The radiation pattern of the antenna are tested using the guangping 3D near field Anechoic Chamber, and the instrument is used to agilent8960 E5515 and Agilent E4438C. The test coordinates of the darkroom are as follows:

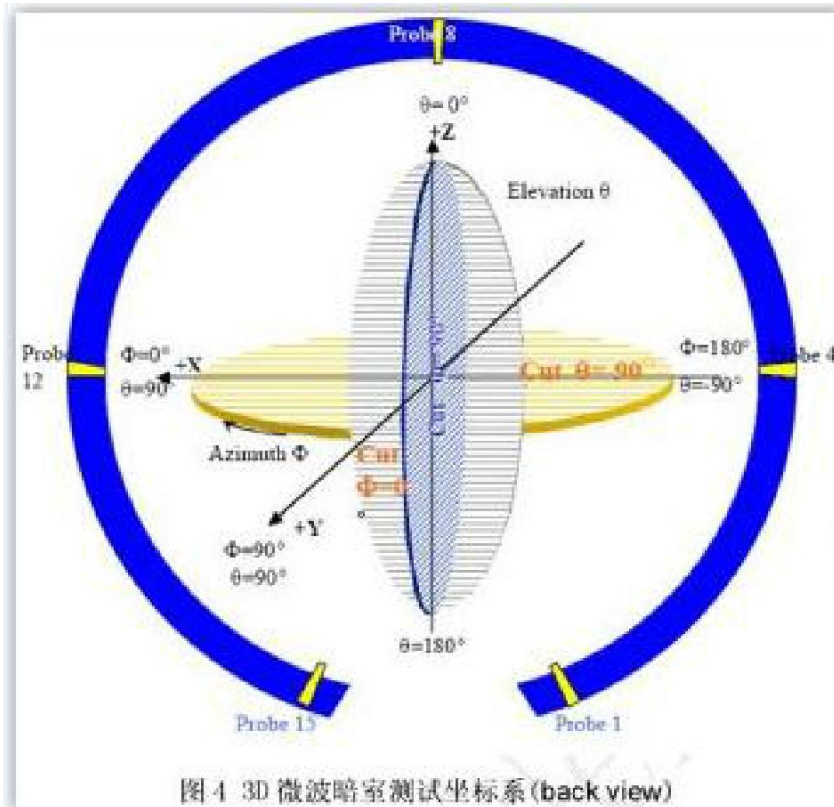


图4 3D 微波暗室测试坐标系 (back view)

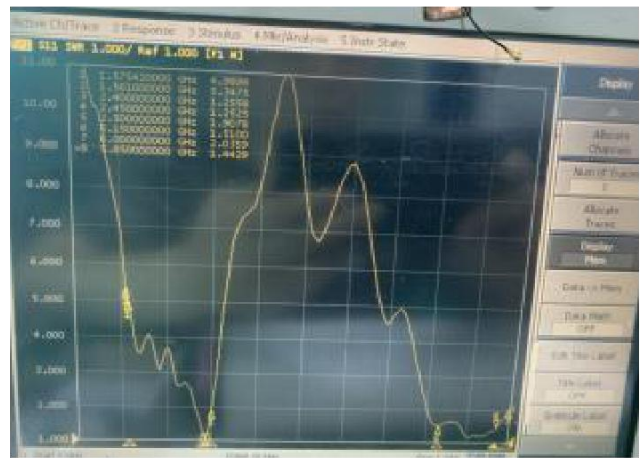
1. S11 参数测量/S11 Parameter-VSWR

使用一根 50Ω同轴电缆连接到天线，然后该电缆连接到网络分析仪测量 S11 参数，被测量产品远离金属至少 20厘米。

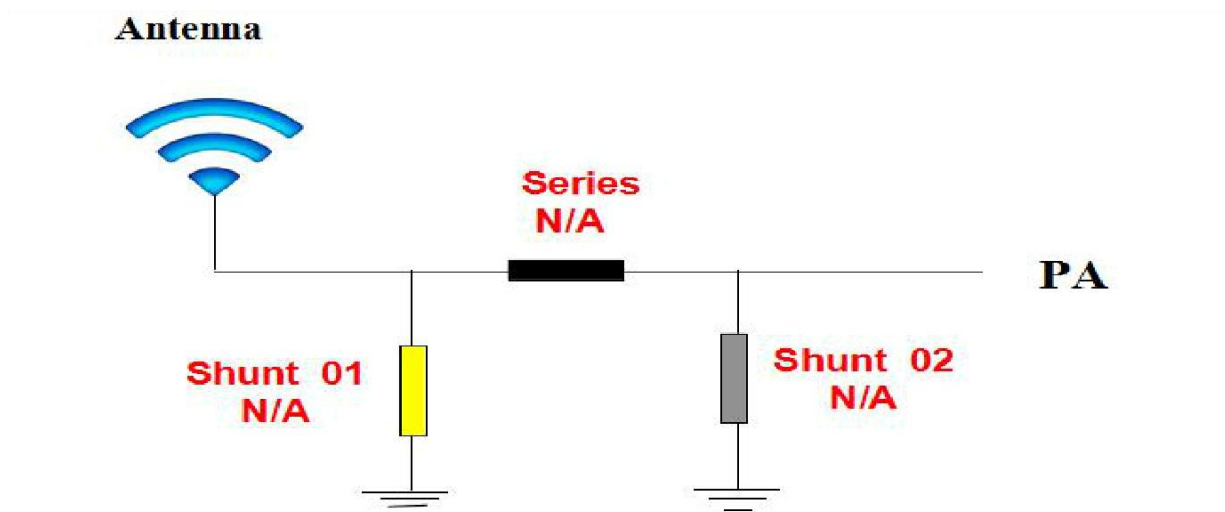
Measuring Method is a 50Ωcoaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the S11 parameter, Keeping this fixture away from metal at least 20cm.



S11 Parameter-VSWR



2. 天线匹配网络/Antenna Matching Network



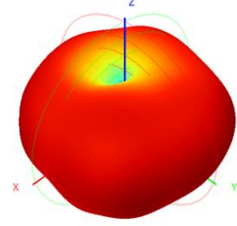
3. Gain & Efficiency



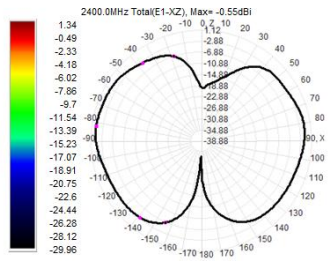
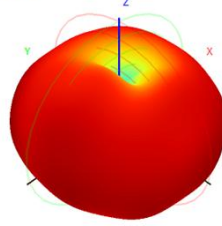
WIFI 主		
Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	57.7	1.34
2450	59.7	1.29
2500	59.6	1.37

WIFI 副		
Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
5150	40.0	1.27
5700	35.1	1.22
5850	39.6	1.25

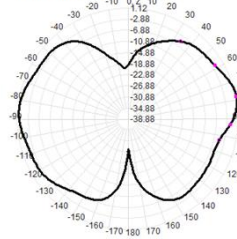
2400.0MHz H+V, Eff. 57.7%



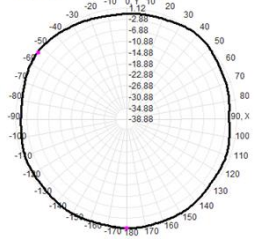
Back View



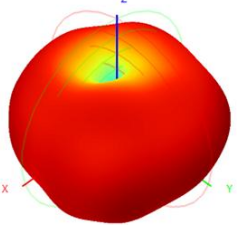
2400.0MHz Total(E2-YZ), Max= 1.04dBi



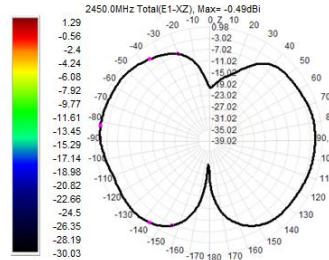
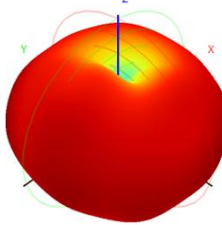
Total(H-XY), Max= 1.12dBi, CrD=2.99



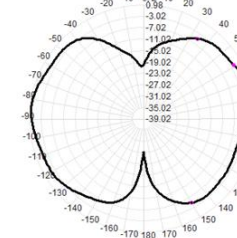
2450.0MHz H+V, Eff. 59.7%



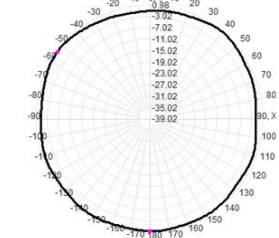
Back View



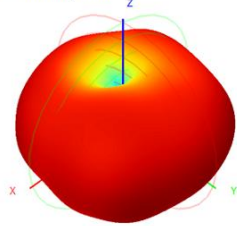
2450.0MHz Total(E2-YZ), Max= 0.93dBi



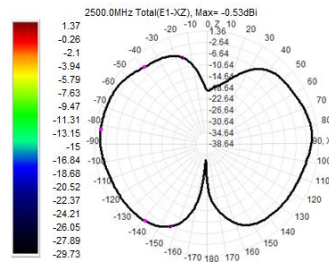
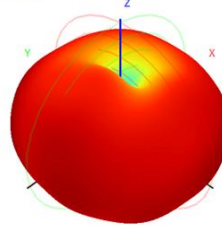
Total(H-XY), Max= 0.98dBi, CrD=2.90



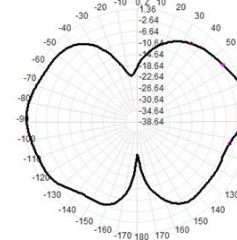
2500.0MHz H+V, Eff. 59.6%



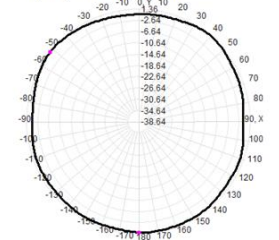
Back View



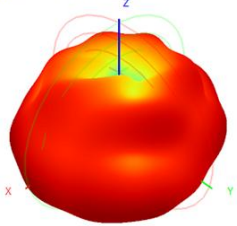
2500.0MHz Total(E2-YZ), Max= 1.36dBi



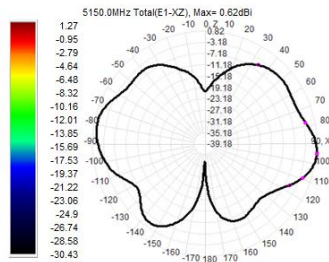
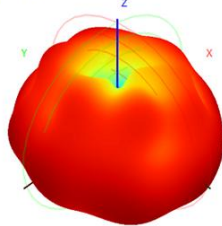
Total(H-XY), Max= 1.34dBi, CrD=2.76



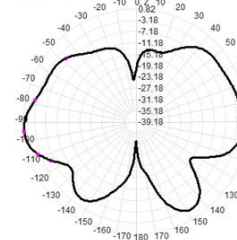
5150.0MHz H+V, Eff. 40.0%



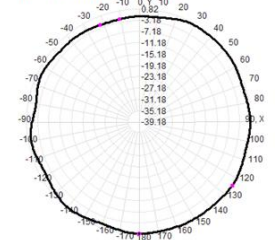
Back View



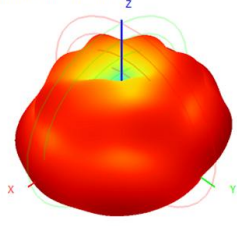
5150.0MHz Total(E2-YZ), Max= 0.58dBi



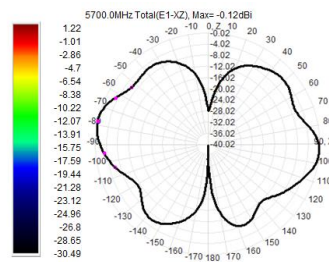
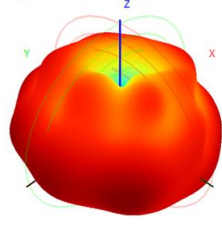
Total(H-XY), Max= 0.82dBi, CrD=3.14



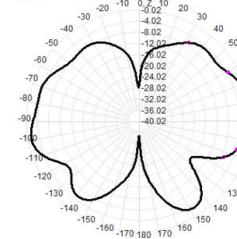
5700.0MHz H+V, Eff. 35.1%



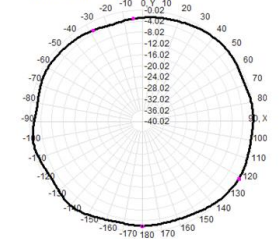
Back View



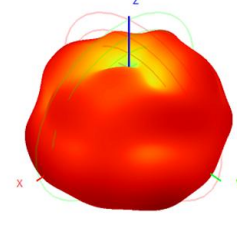
5700.0MHz Total(E2-YZ), Max=-0.75dBi



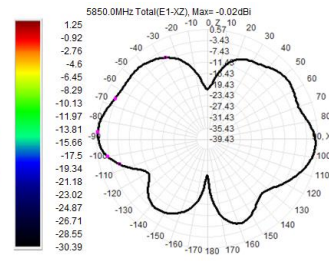
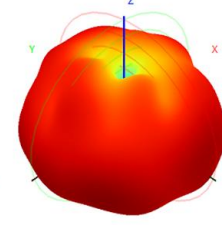
Total(H-XY), Max=-0.02dBi, CrD=3.68



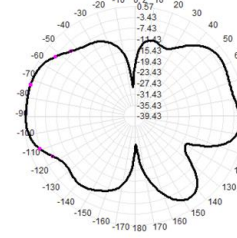
5850.0MHz H+V, Eff. 39.6%



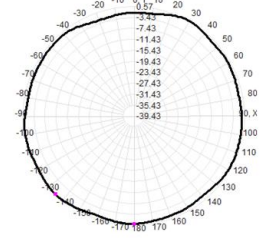
Back View



5850.0MHz Total(E2-YZ), Max=-0.27dBi



Total(H-XY), Max= 0.57dBi, CrD=2.92





4. OTA Data

2.4G	802.11b, (2.4G) 11M		
	Channel	CH1	CH6
TRP	12.15	12.26	12.23
TIS	-76.39	-76.58	-76.81

5G	802.11a, 54M		
	Channel	CH36	CH60
TRP	11.12	11.25	11.49
TIS	-66.26	-66.56	-66.38



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Reliability Test Report

测试日期 Test Date	2023. 12. 07	样品数量 Sample Qty.	3	测试人 Inspector	许燕芳	
测试项目 Test Item	要求 Requirement	试验设备 testing equipment	样品 1 Sample 1	样品 2 Sample 2	样品 3 Sample 3	判定 PASS/NG
High temperature storage	Exposed at +85°C 24H, 2H after recovery try	Constant temperature and humidity chamber	OK	OK	OK	Pass
Cryogenic storage	Exposed at -40°C 24H, 2H after recovery try	Constant temperature and humidity chamber	OK	OK	OK	Pass
High-temperature operation	Electrician at +60°C Work for 24 hours	Constant temperature and humidity box	OK	OK	OK	Pass
Low temperature operation	Electrician at -20°C Work for 24 hours	Constant temperature and humidity box	OK	OK	OK	Pass
Salt spray test	(5 s 0.5)% sodium chloride, pH value is 6.5 ~ 7.2, experiment Box temperature (35 ±2)°C <input type="checkbox"/> 24H <input checked="" type="checkbox"/> 48H	Salt spray tester	OK	OK	OK	Pass
Connector rivet and pull Pull out force	1.13 Wire diameter ≥10N 0.81 Wire diameter ≥8N RG174 ≥60N RG178 ≥50N	Push-pull gauge	≥10N	≥10N	≥10N	Pass
最终结论 Conclusion						Pass
测试人&日期 Inspector & Date	许燕芳 2023. 12. 07		批准&日期 Approval & ate			

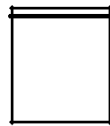


包装规范

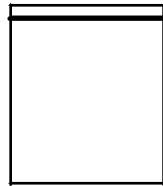
项目名：MX50

成品名称：FPC天线

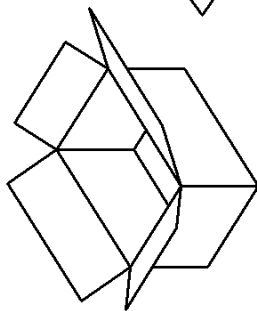
FPC成品天线 (一)



(二) 每PE袋装100pcs产品 (以实际包装为准)



(三) 再将装好的天线小包装袋整齐放入
(图三) 装10小袋 (以实际包装为准)



(四) 包装好的天线放入纸箱, 可装5大袋,
每箱可装5000PCS (图四)。(以实际
包装为准)



产品名称	
规格型号	
数量	
日期	

(五) 包装完成后需贴上出货标签 (图五)。



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Install Wizard or Other

Installation Process:

Take the 1PCS product, tear off the release paper on the back of the FPC by hand, and then align the position of the FPC positioning hole with the positioning hole position of the shell (positioning rib position or positioning line), and attach it to the shell flatly, the specific position is shown in the following figure:

Precautions during the installation process:

- ensure that the FPC is fully attached to the shell after attaching the antenna;
- positioning hole is aligned with the position of the housing positioning post;
- FPC edges aligned with housing edges;
- with terminal antenna When snapping the terminals to the PCBA end of the motherboard, align the terminals first, and then snap them vertically; When disassembling the antenna terminal, need to use a tool (such as a special crowbar) to the terminal vertically, and do not directly pull the wire to disassemble it