

产 品 承 认 书

SPECIFICATION

客户名称 Customer: 艾睿光电 IRay Technology Co., Ltd.

客户料号 Customer P.N./: 3019900204

产品名称 Product Name: WiFi 天线 WiFi antenna

产品料号 Number: HC-ANT-AR2457011

规格描述 Description: WiFi, FPC, 1.13 黑色线长 70mm, IPEX 端子

版本 Version: V1.0

编制: 刘斌

审核: 高磊

批准: 宋伟强

编制日期: 2022 年 07 月 13 日

品质部:

研发部:

采购部:

承认日期:

备注: 请客户仔细查阅承认书, 在确认与贵司需求同步后将承认书确认签字, 盖章回传一份到我司 (PDF 电子档或传真件), 如客户未对产品承认书回签, 而向我司下单采购该物料, 我们将视为贵司已承认该产品。谢谢!

Note: Please consult the acknowledgement form carefully, sign the acknowledgement form after confirming the synchronization with your requirement, and return a copy of the acknowledgement form to us (PDF electronic file or facsimile) with the seal. If the customer does not sign back the product acknowledgement form, and order the material from us, we will be regarded as your company has recognized the product. Thank you!

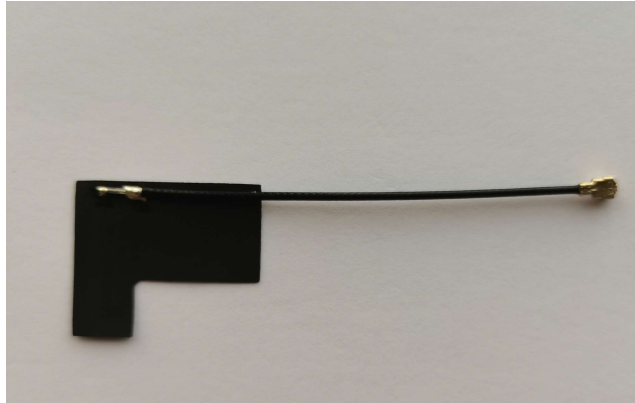
-----专注射频领域 服务全球客户-----

目录

1、产品图片 Picture.....	3
2、主要部件组成 Part specification	3
3、特性参数 Pharacteristic parameter	4
4、成品尺寸图纸 Drawing	5
5、电路匹配 Circuit matching	6
6、电性能驻波测试 VSWR experiment	7
6.1、驻波测试图 VSWR	7
6.2、暗室测试数据 OTA test.....	7
7、环境可靠性测试 Environmental test experiment	10
7.1、盐雾试验 Salt spray test experiment.....	10
7.2、高低温试验 High and low temperature.....	11

版本	制定	修订内容	修订原因	日期
V1.0	刘斌		新增	20220713

1 、产品图片 Picture



2 、主要部件及组成 Part specification

产品名称：WiFi 天线		型号 Part no: HC-ANT-AR2457011
1	连接器 Connector Type	IPEX
2	连接器镀层 Connector Coating	Gold plated
3	馈线 Cable Type	1.13
6	特殊工艺 Technology	-
7	辐射阵子 Radiating Element	FPC
8	镀层 Coating	Black

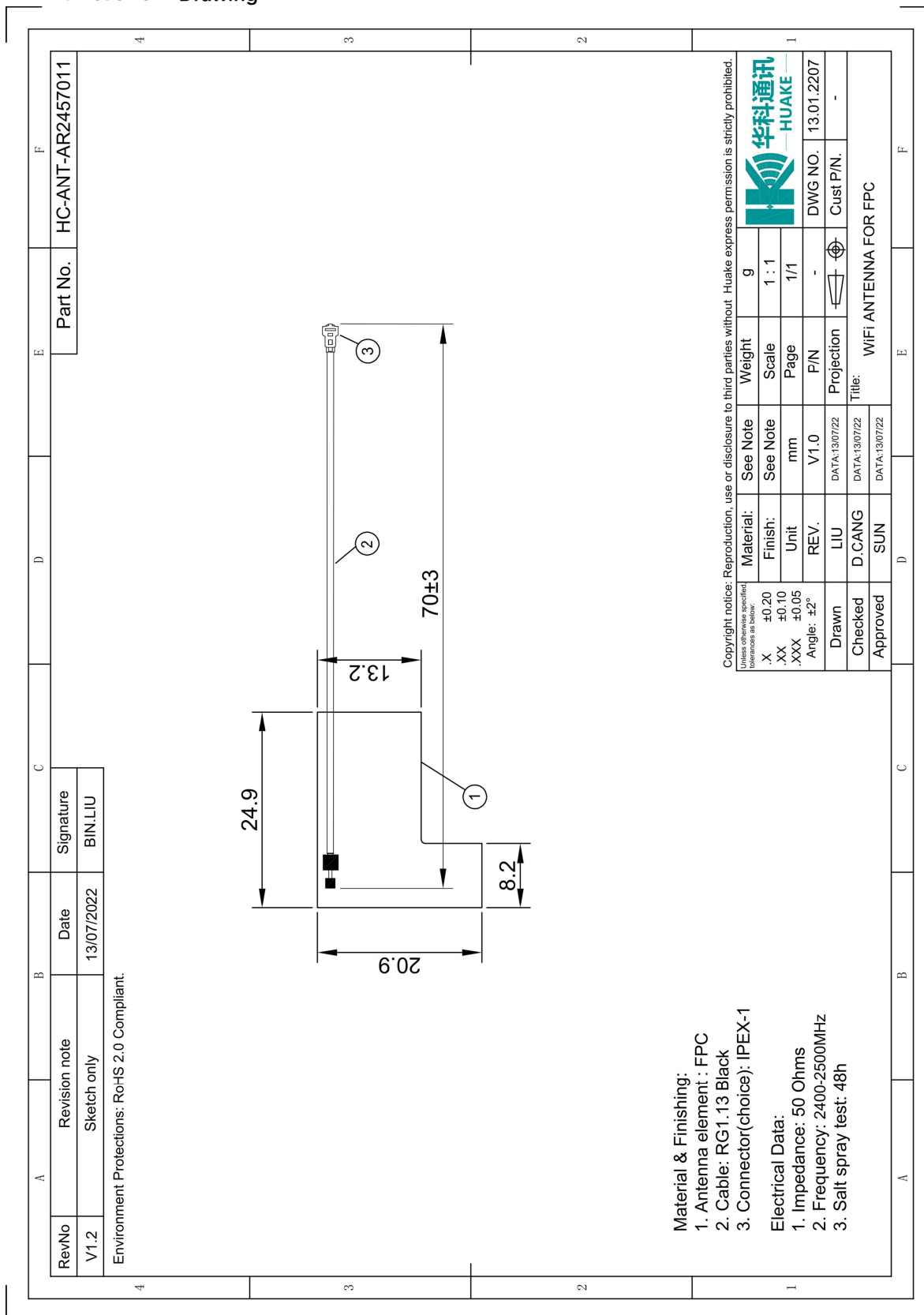
-----专注射频领域 服务全球客户-----

3、特性参数 Pharacteristic parameter

频率范围 Frenquency Rang	2400-2500MHz
输入阻抗 Impedance	50Ω
辐射方向 Radiation	全向 (Omni)
极化方式 Polarization	Linear
镀层 Coating	Gold
天线高度 Height	24.9*20.9mm
馈线长度 Cable Length	70mm
工作温度 working Temperature	-45- + 85℃
存储温度 Storage Temperature	-45- + 85℃
适用频段 Applicable Band	WiFi
湿度 Humidity	< 95%
安装方式 Installation mode	Paste and press

-----专注射频领域 服务全球客户-----

4、尺寸结构图 Drawing

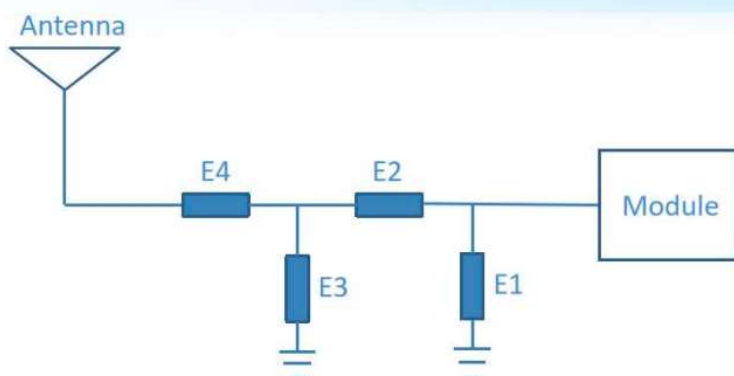


-----专注射频领域 服务全球客户-----

5 、电路匹配 Circuit matching

未对客户板端增加匹配

匹配电路：



E1	E2	E3	E4
N/A	N/A	N/A	N/A

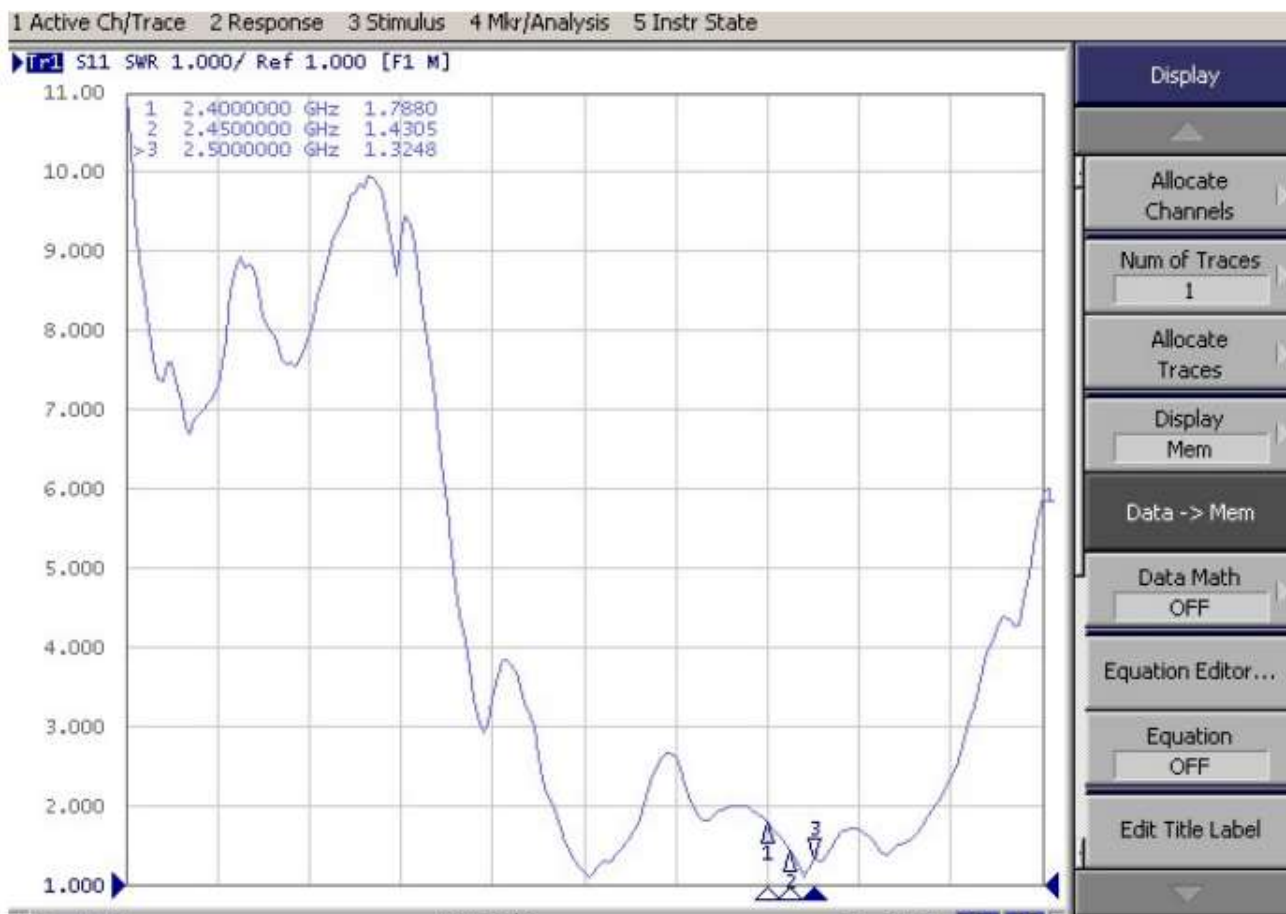
-----专注射频领域 服务全球客户-----

网站：www.huake-china.com 电话：0755-82595196 地址：深圳市宝安区永和路 23 号永和大厦 9 楼 518000

Nine floor, Yonghe building, 23 Yonghe Road, Baoan District, Shenzhen, Guangdong, China 518000 6 / 11

6 、电性能测试图 VSWR experiment

6.1, 驻波测试图 VSWR



-----专注射频领域 服务全球客户-----

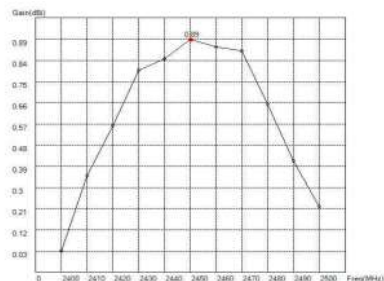
网站: www.huake-china.com 电话: 0755-82595196 地址: 深圳市宝安区永和路 23 号永和大厦 9 楼 518000

Nine floor, Yonghe building, 23 Yonghe Road, Baoan District, Shenzhen, Guangdong, China 518000 7 / 11

6.2, 暗室测试数据 OTA test

Efficiency、Gain (2400-2500MHz)

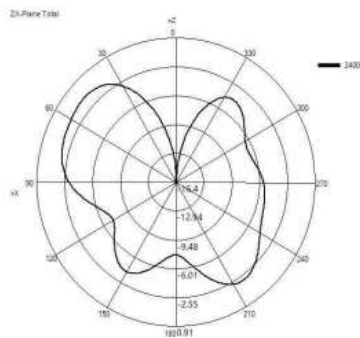
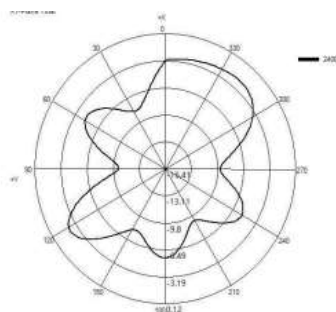
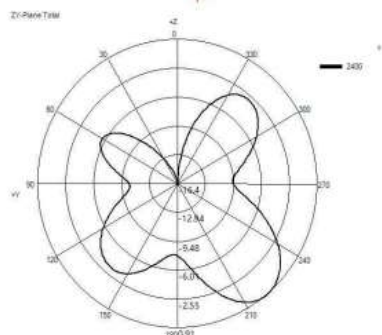
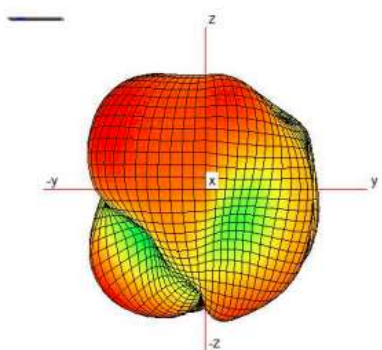
Freq (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
2400	0.033454099	-4.495229398	35.52033558
2410	0.340271715	-4.394727712	36.35190952
2420	0.541855595	-4.313644496	37.03697859
2430	0.767060321	-4.198110417	38.03548499
2440	0.813532685	-4.162170386	38.35155358
2450	0.891441241	-4.053208358	39.3259447
2460	0.862296891	-4.055161394	39.30826367
2470	0.844639151	-4.070142699	39.17290056
2480	0.629767858	-4.234781505	37.71567194
2490	0.399189825	-4.437213531	35.99802273
2500	0.213221797	-4.687654907	33.98087122



Gain-Plane



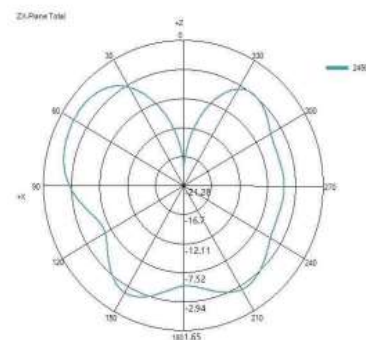
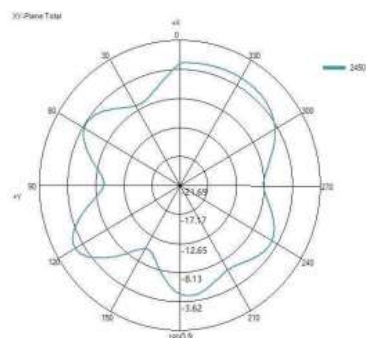
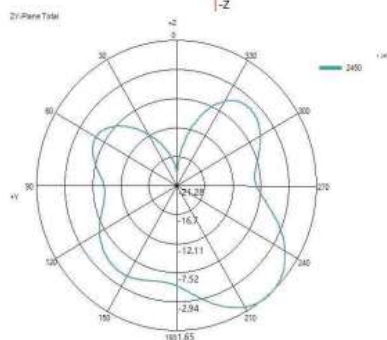
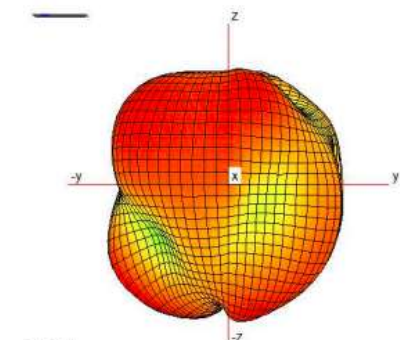
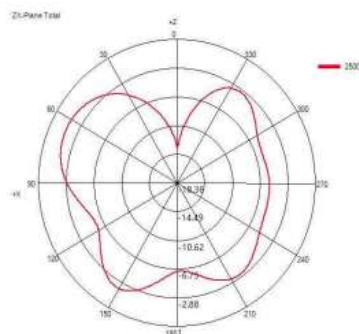
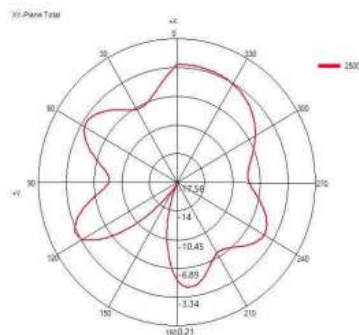
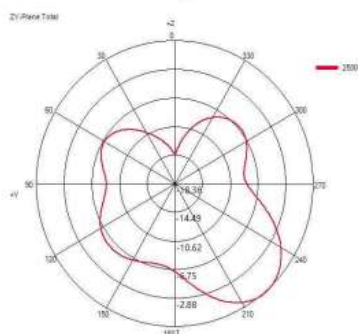
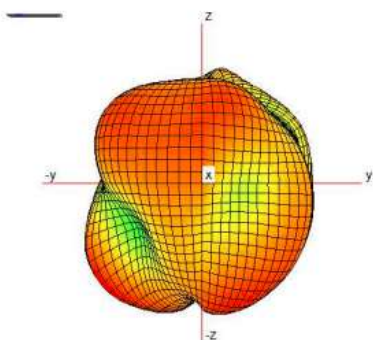
Efficiency-Plane



-----专注射频领域 服务全球客户-----

网站: www.huake-china.com 电话: 0755-82595196 地址: 深圳市宝安区永和路 23 号永和大厦 9 楼 518000

Nine floor, Yonghe building, 23 Yonghe Road, Baoan District, Shenzhen, Guangdong, China 518000 **8 / 11**



-----专注射频领域 服务全球客户-----

网站: www.huake-china.com 电话: 0755-82595196 地址: 深圳市宝安区永和路 23 号永和大厦 9 楼 518000

Nine floor, Yonghe building, 23 Yonghe Road, Baoan District, Shenzhen, Guangdong, China 518000 9 / 11

7、环境可靠性试验 Environmental test experiment

7.1、盐雾试验 Salt spray test

盐雾试验报告 Salt spray test report			
测试部门 Testing part:	QC	测试人员 Testers: 余飞	测试日期 Date: 2022.07.12
试验样板名称 Name of test sample:	五金连接器 Connector	样板型号 Type: HC-ANT-AR2457011 (IPEX)	样板数量 Number: 3PCS
试验项目 Test item:	盐雾试验 Salt spray test	设备名称 Device name:	盐雾腐蚀试验箱 Salt spray corrosion test chamber
试验方法 test method:	将测试样板放入调制好的盐溶液试验箱内、盐雾腐蚀箱进行连续喷雾试验 The test samples were put into the modulated salt solution test chamber and salt spray corrosion chamber for continuous spray test.		
盐溶液浓度 Concentration of salt solution:	52g/L	盐溶液 PH 值: 6.7	试验周期 Test cycle: 50h
试验标准 Test standard:	按照 GB/T10125《人造气氛腐蚀试验、盐雾试验》进行试验；结果按照 GB/T6461-2002《金属基体上金属和其他无机覆盖层经腐蚀试验后是试样和试件的评级》评级 The test shall be carried out in accordance with GB / t10125 corrosion test in artificial atmosphere and salt spray test; the results shall be rated in accordance with GB / t6461-2002 corrosion test of metal and other inorganic coatings on metal substrate and the rating of test pieces and test pieces		
试验结果 Result			
编号 NO	耐腐蚀等级 Grade	评定结果 Result	备注 Remarks
1	Rp/Ra=10/10vsB	合格 OK	
2	Rp/Ra=10/10vsB	合格 OK	
3	Rp/Ra=10/10vsB	合格 OK	

-----专注射频领域 服务全球客户-----

7.2 高低温试验 High and low temperature test

环境可靠性测试 Environmental Performance		
测试项目 Test Description	测试程序和条件 Test Procedures & Condition	测试要求 Requirements
温湿测试 Humidity Temperature Cycling	测试条件 (Decay Test Conditions) : 温度: 25-65 °C: Temperature : 25 ~ 65°C 湿度: 90-95% Humidity : 90 ~ 95% (R.H) 持续时间: 24 小时 Duration : 24 hours	1, 外观良好 (No evidence of damage) 2, 电气性能符合产品规格要求 (The electrical performances should meet the spec. specified)
高温试验 High temperature test	测试条件 (Decay Test Conditions) : 温度: 90°C (Temperature: 90°C) 持续时间: 10 分钟 Duration: 10 Minute	1. 外观良好 (No evidence of damage) 2. 电气性能符合产品规格要求 (The electrical performances should meet the spec. specified)
低温试验 Low Temperature test	测试条件 (Decay Test Conditions) : 温度: -60±2°C (Temperature: -60±2°C) 持续时间: 10 分钟 Duration : 10 Minute	1. 外观良好 (No evidence of damage) 2. 电气性能符合产品规格要求 (The electrical performances should meet the spec. specified)

-----专注射频领域 服务全球客户-----