深圳市锦鸿无线科技有限公司

产品规格书Product Specification

产品描述 Part Description	客户： 长虹网络 Vendor:	规格型号：JH1801-027-F1 Description:
	产品名称：R-射频天线 Product Name:	所承认项目：CM102-2 Project:
	物料代码： Part NO:	版本：A4 Version:
附件 Attachments	■规格书 Spec ☑工程图面 Drawing ☐样品 Sample ☑ROHS 报告 ROHS Repot ☐CPK 报告 Cpk Report ☐关键尺寸报告 FAI Report ■可靠性测试报告 Reliability Report ☐安规报告 Safety Report ☐制造流程图 QC Flow Chart ☐成型条件 Molding conditions ■材质证明书 Material Verification Sheet ■包装方式 Packing Content C3C 证书 3C Certificate ☐物料检验标准 *Material inspection standard*	
供应商签核 Vendor	拟制：胥万芳 Design: 审核：郑翠兰 Check: 批准：彭发辉 Approval:	
技术确认 Technology check	结构意见/签名： Mechanical 硬件意见/签名： Hardware 工业/包材设计意见/签名： ID 项目意见/签名： Market 品质意见/签名： DQE/SQE	
最终确认 Final check	质量策划： Quality planning	ROHS: ☐ Rohs 物料 ☐ 非 Rohs 物料
承认条件 Approval condition	☐承认 Approved ☐拒绝承认 Reject ☐条件承认 Condition approved 需满足条件:_____ ☐临时承认 Temporary approved 限量_____PCS 采购	
审批 Approval by	研发总工（技术总监）： RD Leader(Technology Director)	质量总监： Quality Director
分发部门 Distribute	☐IQC ☐ 采购（供应商） ☐样品管理/文控 ☐外协厂 ☐其它	

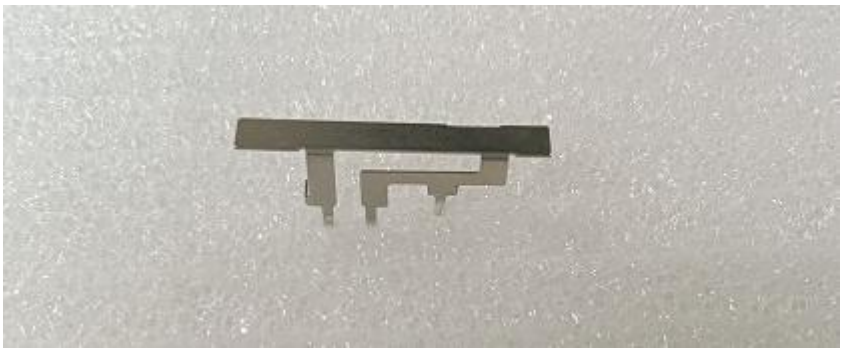
目录 Content

1 目录 Content.....2
2 说明书Instructions.....3
3 产品技术指标 Product specifications.....3
4 耐久性测试 Reliability test.....5
5 电气性能测试 Electrical performance test.....6
5.1 测试设备Test equipment and environment.....6
5.2 天线回损与驻波Antenna Return Loss(RL) and SWR.....7
5.3 天线无源数据 Antenna passive test data.....7
5.4 方向图 3D Chart.....8
6 工程图纸 Engineering drawings.....9
7 安装说明 Installation instructions.....10
8 包装方式 Packing method.....10

2 说明instructions

这份报告包含天线电性能测试的若干设备、测试环境和测试结果，以及天线的结构图纸和检验报告. 以下为天线图片。

This report includes several equipment, test environment and test results for the electrical performance of the antenna, as well as structural drawings and inspection reports of the antenna.Below is a picture of the antenna。



3 产品技术指标 Product specifications

电性能指标 Electrical Specifications	
频率范围 Frequency Range（MHz）	2400-2500&5100-5850
增益 Gain（dBi）	3.3
电压驻波比 VSWR	≤2
输入阻抗 Input Impedance（Ω）	50
极化方式 Polarization	Vertical
最大功率 Maximum input power（W）	2
接头型号 Input connector type	
机械指标 Mechanical Specifications	
天线尺寸 Dimensions (mm)	28.5*4.3*9
天线重量 Antenna weight（kg）	2g
天线颜色 Antenna color	银白色

4 耐久性测试

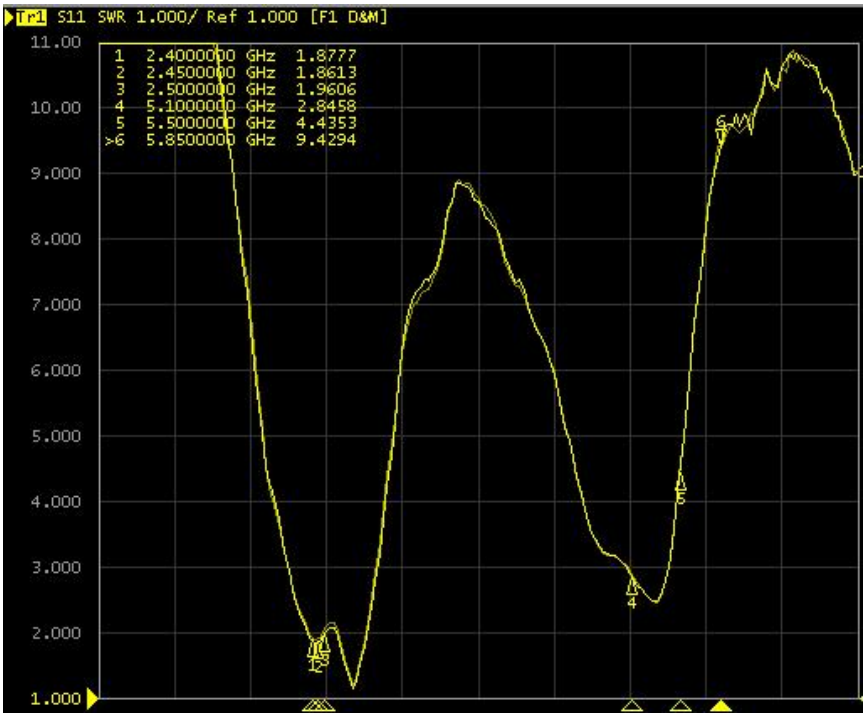
1	盐雾试验 SAIT SPRAY TEST	盐水喷雾试验：依 GB1266-86 标准蒸馏水： 一次蒸馏PH6.5~7 喷雾量：1.4me80cm² /h 压缩空气压力： 1Kgf/ cm² 试验相对度：98° 温度：45° ~47° 压力温度：35° 测试时间：24hr Brine spray test: distilled water according to GB1266-86 standard: single distillationPH6.5~7 Spray volume: 1.4me80cm ²/ H compressed air pressure: 1kgf / cm² Test Relativity: 98 ° Temperature: 45 ° ~ 47 ° Pressure temperature: 35 ° Test time: 24hr	所有规格变华范围初始值30% All characteristic range is 30% of the initial value
2	高温试验 HEAT TEST	在 85+2℃环境中放 96 小时，再放在正常环境中 30 分钟后进行测试 85+2℃ for 96 hours, after keep in normal condition for 30mim the to test.	
3	中温试验 HUMIDITY TEST	在 40+2℃ 90-95%RH 环境中放 96 小时， 再放在正常环境中 30 分钟后进行测试40+2℃ 90-95%RH for 96hours, after keep in normal condition for 30mim the to test.	
4	底温试验 COLD TEST	在-40+2℃ 环境中放 96 小时，再置放正常环境中 30 分钟后进行测试 -40+2℃ for 96hours, after keep in normal condition for 30mim the to test.	

5 电气性能测试 Electrical performance test

5.1 测试设备 Test equipment and environment

测试系统	测试环 境	有源测试	无源测试
SATIMO—24 ETS	温度：22℃±3℃ 湿度：50%±15%	支持2G/3G/4G BT/WIFI/GPS	400MHZ——6G

5.2 天线回损与驻波Antenna Return Loss(RL) and SWR



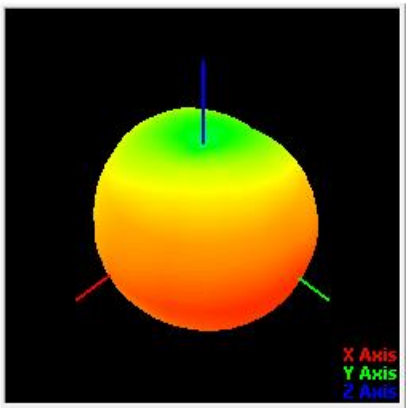
5.3 天线无源数据 Antenna passive test data

Test Point ID	Freq. (MHz)	TRP (dBm)	Gain (dBi)	Directivity (dBi)	Efficiency (%)
1	2400.0	2400.00	1.41	5.53	48.8%
2	2410.0	2410.00	1.39	5.40	50.0%
3	2420.0	2420.00	1.57	5.28	51.6%
4	2430.0	2430.00	2.17	5.47	51.8%
5	2440.0	2440.00	2.26	5.36	54.7%
6	2450.0	2450.00	2.50	5.49	53.2%
7	2460.0	2460.00	2.95	5.45	55.8%
8	2470.0	2470.00	3.06	5.55	55.9%
9	2480.0	2480.00	3.16	5.48	58.9%
10	2490.0	2490.00	3.31	5.50	61.1%
11	2500.0	2500.00	3.00	5.48	55.2%
12	5100.0	5100.00	2.84	4.87	53.9%
13	5140.0	5140.00	2.64	4.61	55.1%
14	5180.0	5180.00	2.45	4.76	58.8%
15	5220.0	5220.00	2.27	4.86	54.3%
16	5260.0	5260.00	2.48	5.17	52.6%
17	5300.0	5300.00	2.48	5.05	54.6%
18	5340.0	5340.00	1.17	5.24	45.3%
19	5380.0	5380.00	1.11	5.72	40.5%
20	5420.0	5420.00	2.25	6.15	45.3%
21	5460.0	5460.00	0.74	4.23	44.8%
22	5500.0	5500.00	0.65	5.37	33.7%
23	5750.0	5750.00	-3.87	3.93	26.6%
24	5760.0	5760.00	-1.26	4.12	24.5%
25	5770.0	5770.00	-1.30	4.60	26.2%
26	5780.0	5780.00	-1.35	5.48	26.5%
27	5790.0	5790.00	-1.66	5.05	26.9%
28	5800.0	5800.00	-1.43	5.11	27.6%
29	5810.0	5810.00	-1.14	5.55	27.1%
30	5820.0	5820.00	-1.87	4.77	27.2%
31	5830.0	5830.00	-1.59	5.11	27.0%
32	5840.0	5840.00	-1.84	4.62	27.9%
33	5850.0	5850.00	-1.69	4.88	27.5%

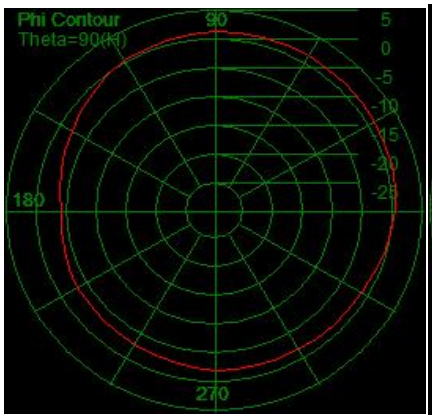
5.4 方向图 3D Chart

2.4G

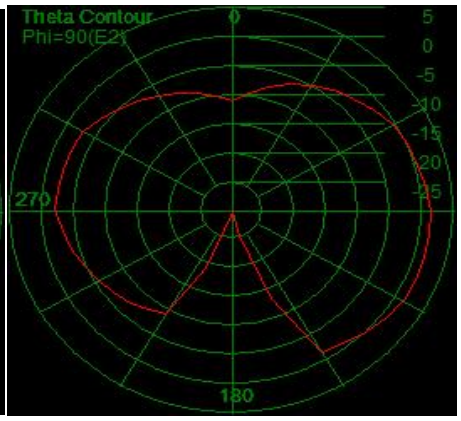
3D



T=90(H)

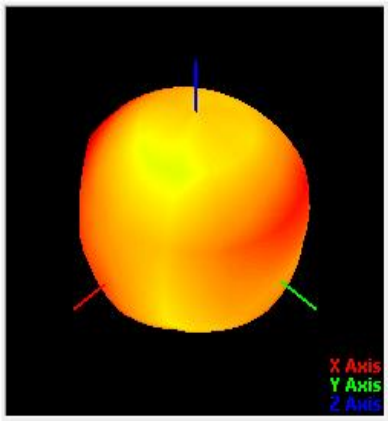


P=90(E)

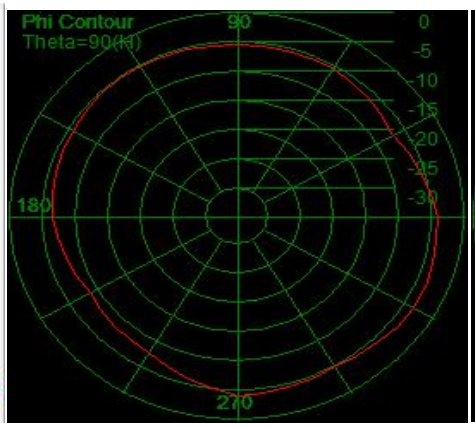


5.8G

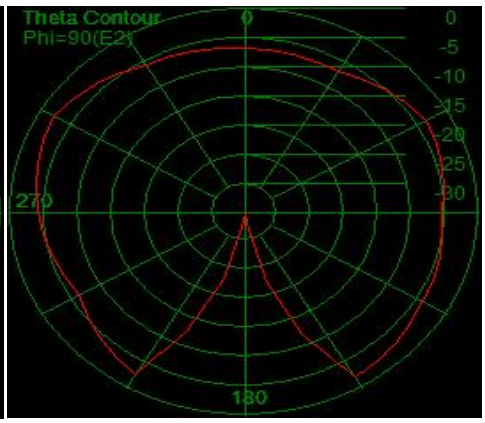
3D



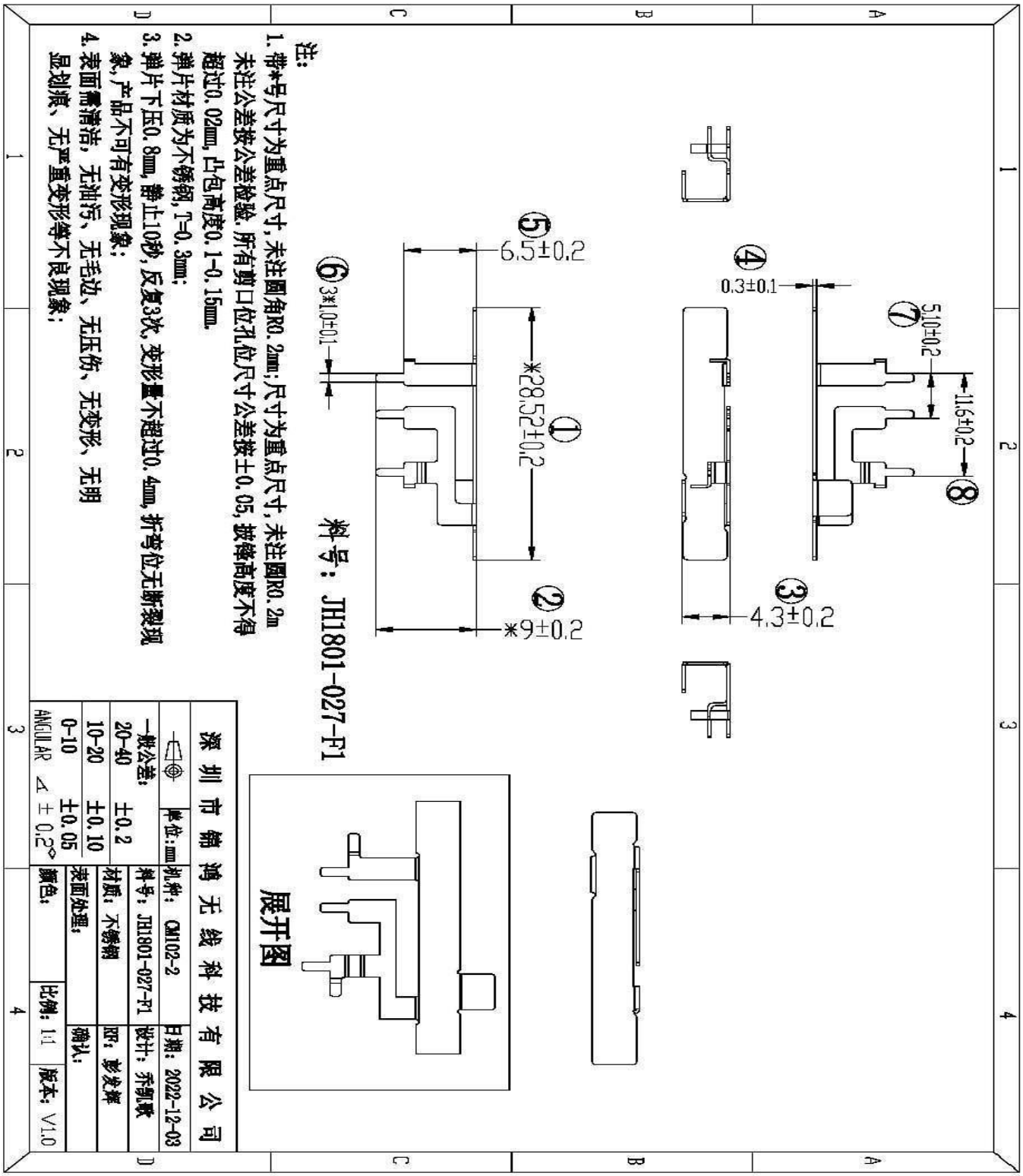
T=90(H)



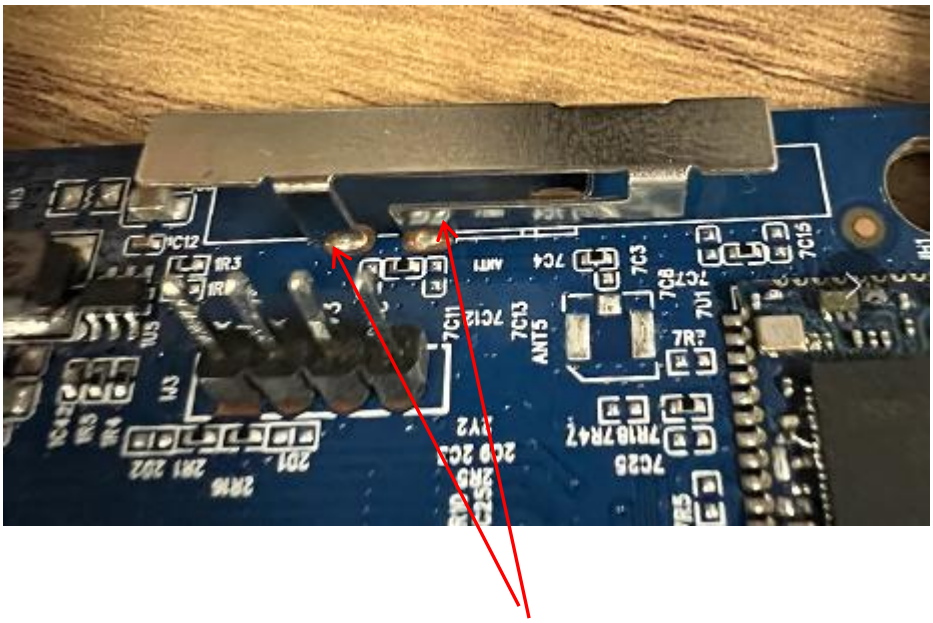
P=90(E)



6 工程图纸 Engineering drawings



7安装说明 Installation instructions



Insert the antenna pin into the corresponding socket of the motherboard

8 包装方式 Packing method

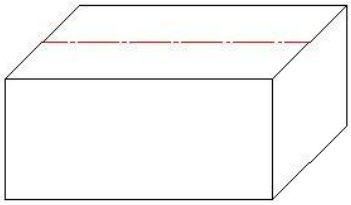
Inside:

PE bag packaging, 100pcs / bag

PE bag size: 30*180

External :

carton packaging, 100 bags / box



carton packaging size330*270*220