

天线规格书

Antenna Specification

Product Name: FPC Antenna

Model Number: AN0827-FPC73BFK

Product Spec.:4G FPC antenna L=200mm

Manufacturer Information

Company Name: Guangzhou Xaircraft

Technology CO.,LTD

Address: Block C, No.115, Gaopu Road,
Tianhe District,

GuangzhouCity, Guangdong, P.R.China

Product Number: AN0827-FPC73BFK
Product Name: Antenna

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Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2024.1.9	1.0	
1.1	2024.6.24	1.1	Added data of 700-780MHz

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1. Specification

Sample Photo



A. Electrical Characteristics

Frequency 频率	700-960MHz/1710-2700MHz
S.W.R. 驻波比	Reference waveform
Antenna Gain 增益	2.74dBi / 3.51 dBi
Polarization 极化方式	Linear
Impedance 阻抗	50 Ohm

B. Material & Mechanical Characteristics

Cable Type 线材规格	RG316
Connector Type 连接器规格	FAKRA A Female head

C. Environmental

Storage Temperature 存储温度	-40°C ~ +80 °C
Operation Temperature 工作温度	- 40°C ~ +80 °C

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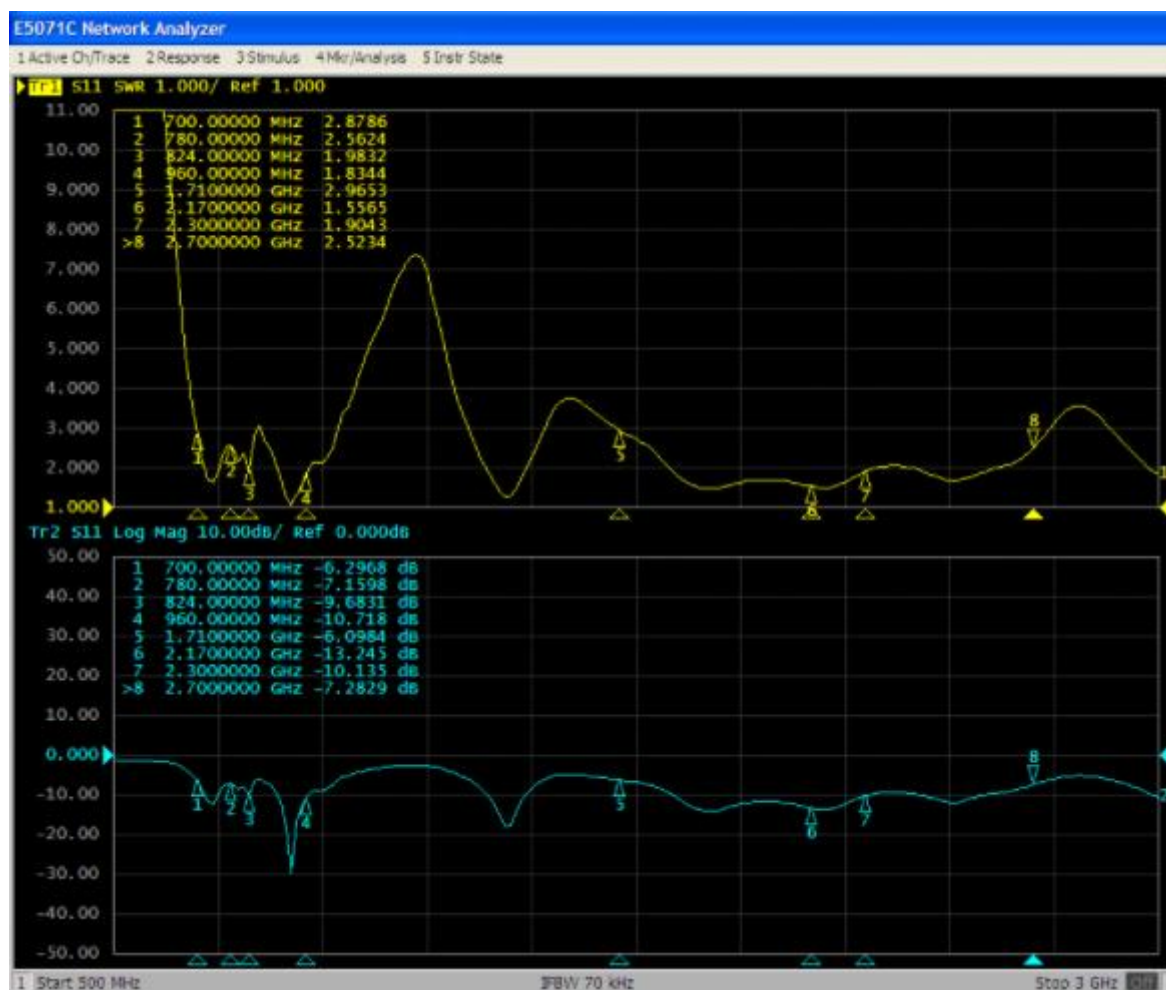
2. Characteristics and Reliability Test

Test Items 测试项目		Test Condition and Procedure 测试方法	Requirements 要求	Result 结果
1	V.S.W.R. 电压驻波比	Set DUT on Network Analyzer; make individual calibration to test 设置网络分析仪参数进行测试	Directive DUT specification 符合待测物规范	PASS
2	Insertion Loss 插入损失	Set DUT on Network Analyzer; make individual calibration to test 设置网络分析仪参数进行测试	Directive DUT specification 符合待测物规范	PASS
3	Antenna Gain 天线增益	Set DUT on Antenna Chamber; make individual calibration to test 设置天线暗室参数进行测试	Directive DUT specification 符合待测物规范	PASS
4	Solderability 可焊性	GB / T2423.28-2005 Temp: 260±5° C;Duration: 5 seconds 温度 260±5° C;持续 5 秒	Tin evenly on full 上锡均匀饱满	PASS
5	Dimension 尺寸	Inspection of dimension, color, material, package, surface process.检查尺寸,颜色,材料,包装,表面处理	Directive DUT specification 符合待测物规范	PASS
6	Salt Spray 盐雾	GB / T 2423.17-2008 Temp: 35°C; RH: ≥ 95%; NaCl solution: ≥ 5%;Time: 72H 温度 35°C; 湿度≥95%;盐水浓度≥5%; 测试 72H	1. No Visual Damage 2. Frequency Tol.≤5% 无明显外观不良;频率偏移≤5%	PASS
7	Temperature and Humidity Chamber 恒温恒湿	GB / T 2423.3-2006 Temp: 80°C / 12 H; -40°C / 12H RH: ≥ 90%; Time: 24H 温度 80°C 测试 12H 转-40°C 测试 12H; 湿度≥ 90%; 时间 48H	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.≤5% 恢复 2H 后, 无明显外观不良;频率偏移≤5%	PASS
8	Thermal Shock 冷热冲击	GB / T 2423.22 - 2008 - 40° C (30 minutes) to + 80° C (30 minutes); Cycles: 24 - 40° C 测试 30 分转 80° C 测试 30 分为一个周期; 共 24 周期	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.≤5% 恢复 2H 后, 无明显外观不良;频率偏移≤5%	PASS
9	RoHS	With Reference to IEC 62321:2008 with flow chart 参考 IEC 62321 测试流程	Directive RoHS 2015/863/EU 符合 RoHS 2015/863/EU 标准	PASS

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3. Antenna - S Parameter Test Data



4. Antenna - Radiation Pattern Test Data

Frequency ID	1	2	3	4	5	6	7	8	9	10
Frequency (MHz)	700.0	780.0	824.0	960.0	1710.0	1894.0	2032.0	2170.0	2300.0	2700.0
Gain (dBi)	1.22	0.54	0.35	2.74	2.92	3.26	2.25	3.51	3.40	3.30
Efficiency (%)	41.08	45.60	41.22	55.35	51.67	59.91	68.17	69.94	67.45	57.63

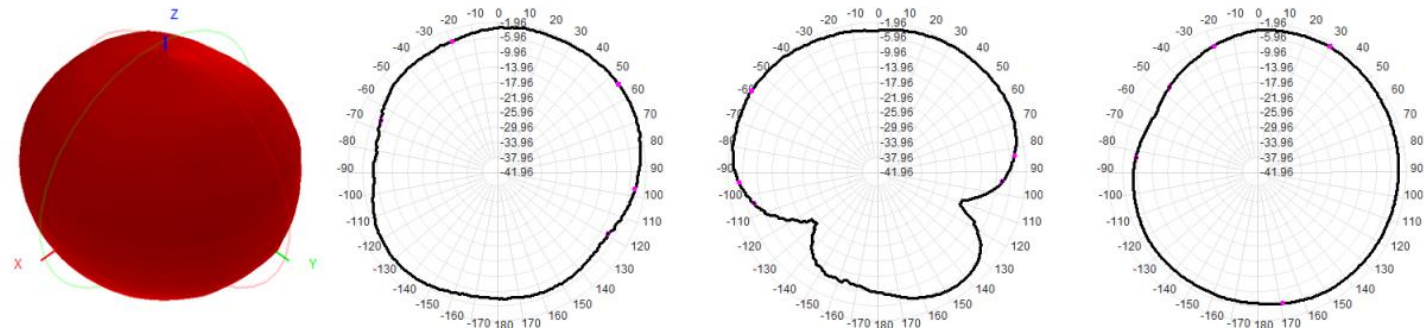
Product Number: AN0827-FPC73BFK
Product Name: Antenna

XZ

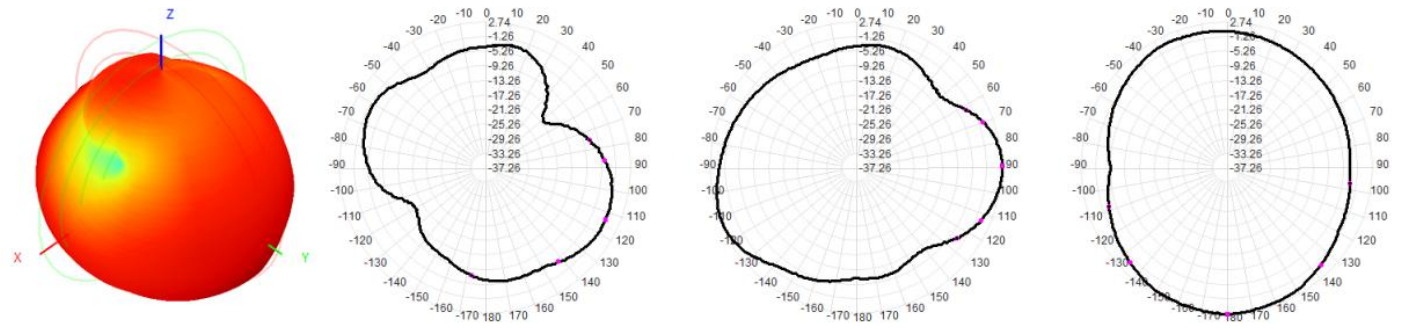
YZ

XY

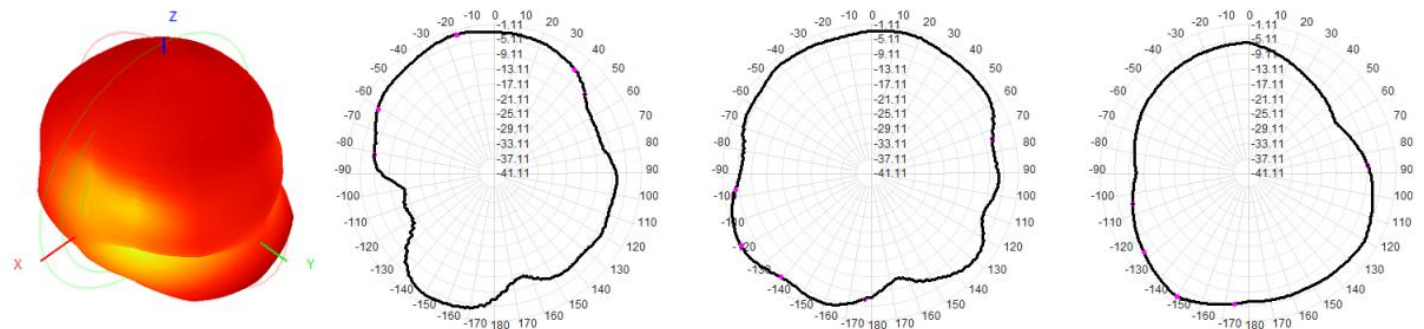
700MHz



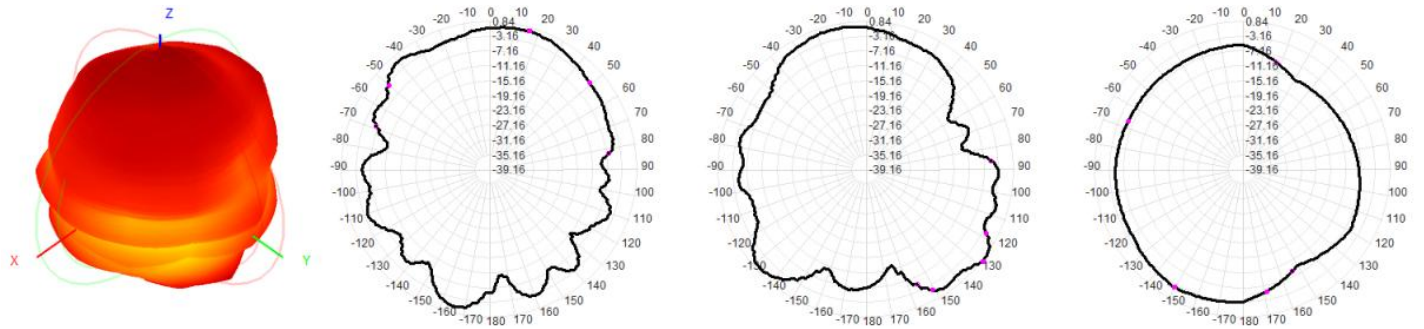
960MHz



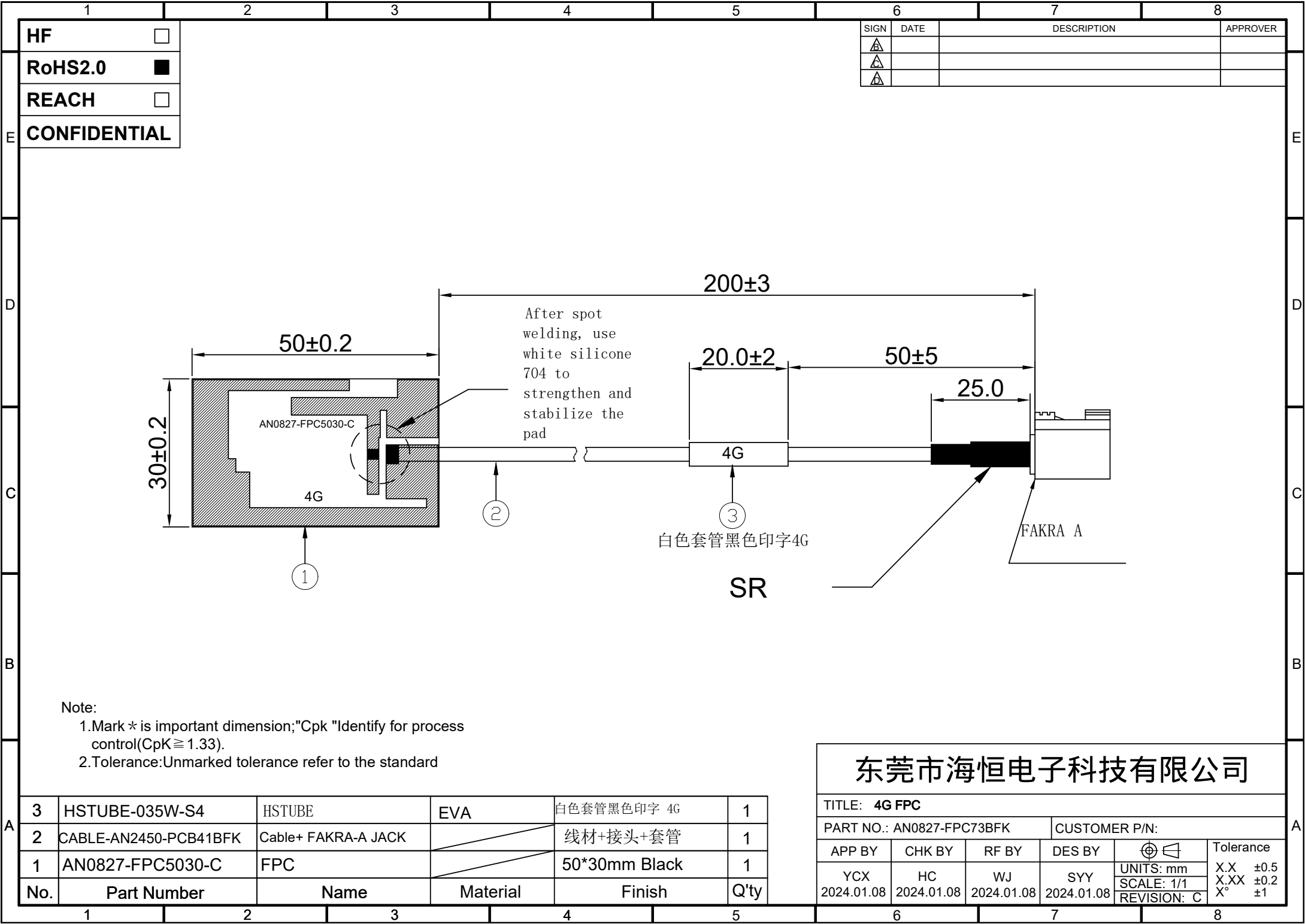
1710MHz



2700MHz



5. Mechanical Drawing See attached files



HF	☐
RoHS2.0	☒
REACH	☐
CONFIDENTIAL	

SIGN	DATE	DESCRIPTION	APPROVER

Note:
1.Mark * is important dimension;"Cpk "Identify for process control(CpK≧1.33).
2.Tolerance:Unmarked tolerance refer to the standard

3	HSTUBE-035W-S4	HSTUBE	EVA	白色套管黑色印字 4G	1
2	CABLE-AN2450-PCB41BFK	Cable+ FAKRA-A JACK		线材+接头+套管	1
1	AN0827-FPC5030-C	FPC		50*30mm Black	1
No.	Part Number	Name	Material	Finish	Q'ty

东莞市海恒电子科技有限公司					
TITLE: 4G FPC					
PART NO.: AN0827-FPC73BFBK				CUSTOMER P/N:	
APP BY	CHK BY	RF BY	DES BY		Tolerance
YCX	HC	WJ	SY	UNITS: mm	X.X ±0.5
2024.01.08	2024.01.08	2024.01.08	2024.01.08	SCALE: 1/1	X.XX ±0.2
				REVISION: C	X° ±1

产品包装规范

PACKING CRITERION

Date: 2024.01.08

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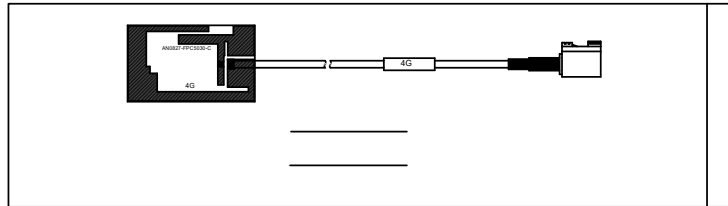
Part Number : AN0827-FPC73BFBK

Revision : A

Name: Antenna

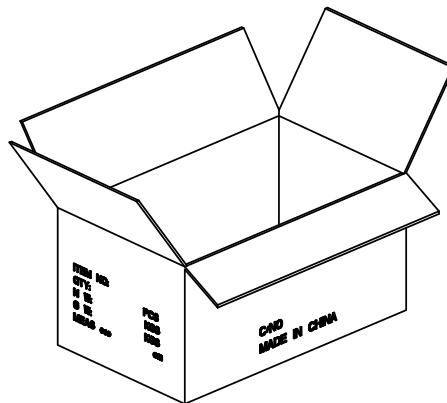
Customer : ALL

1 . Enter PE bag。



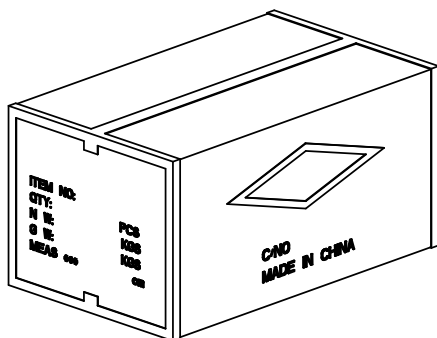
50PCS/PE BAG

2.PACKING 。

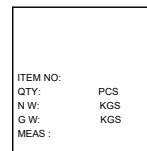


2000pcs/Carton

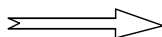
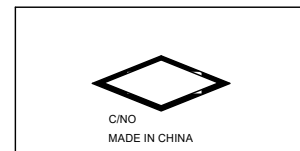
3. SEALING 。



SIDE



FRONT



APPROVED BY : YCX

CHECKED BY : WJ

DESIGNED BY : SY