

Antenna Specification

Product Name: FPC Antenna

Model Number: AN0827-FPC167BX

Product Spec.: 4G FPC antenna L=100mm+IPEX

Manufacturer Information

Company Name: Guangzhou Xaircraft Technology CO., LTD

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

Tianhe District, Guangzhou City, Guangdong, P. R. China

Product Number:AN0827-FPC167BX
Product Name: Antenna

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Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2025.3.7	初版	

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1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency 频率	824-960 MHz /1710-2700MHz
S.W.R. 驻波比	≤ 4.0 / ≤ 3.0
Antenna Gain 增益	1.03dBi /2.89dBi
Polarization 极化方式	Linear
Impedance 阻抗	50 Ohm
B. Material & Mechanical Characteristics	
Cable Type 线材规格	OD1.13mm ,Black
Connector Type 连接器规格	I-PEX
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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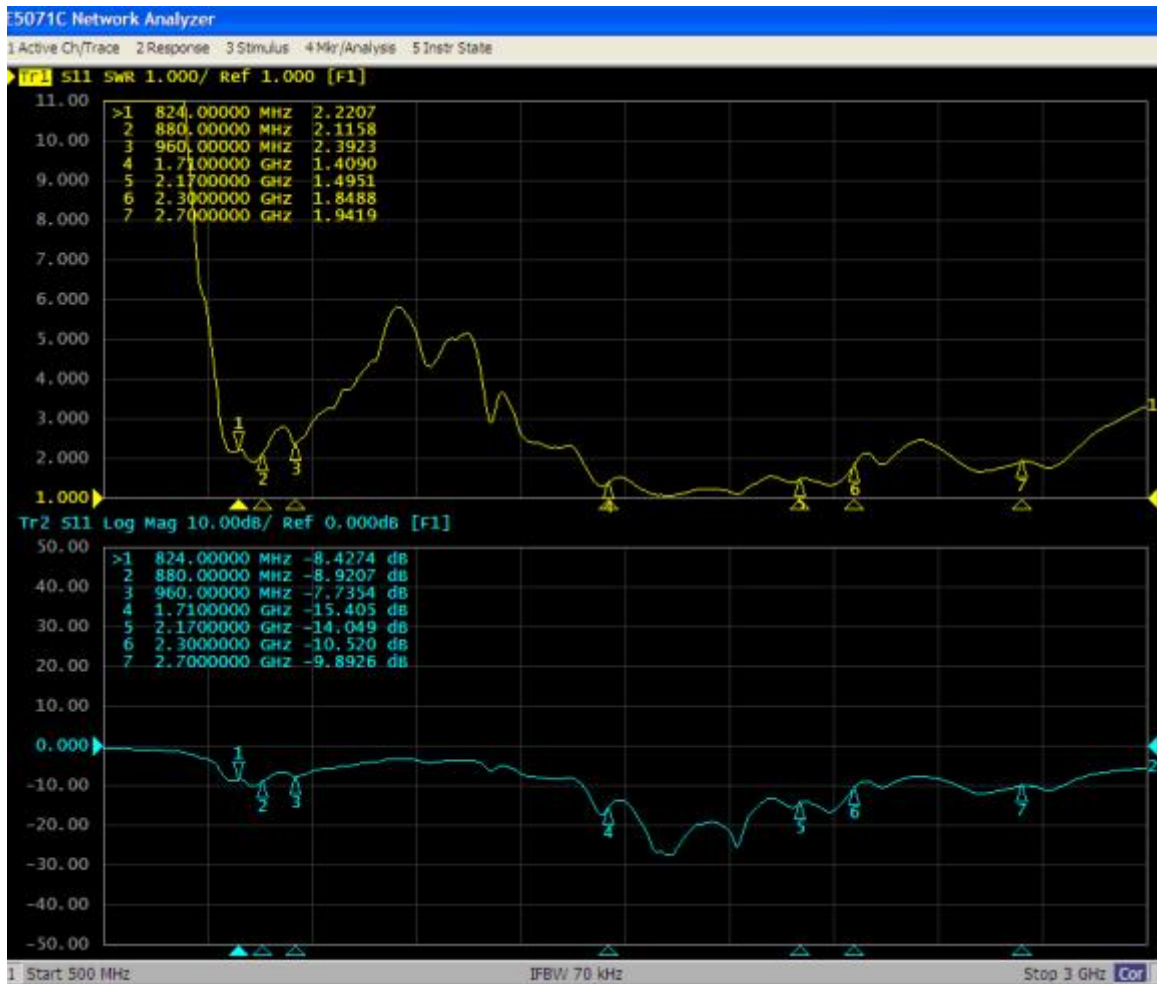
2. Characteristics and Reliability Test

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: $260 \pm 5^{\circ} \text{C}$; Duration: 5 seconds 温度 $260 \pm 5^{\circ} \text{C}$; 持续 5 秒	Tin evenly on full 上锡均匀饱满	PASS
5	Pull Test 拉力	Holding with individual specification; force applied to axis of terminal .单独定义产品端子拉力	1. Directive DUT specification 2. Frequency Tol. $\leq 5\%$ 符合待测物规范; 频率偏移 $\leq 5\%$	PASS
6	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
7	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



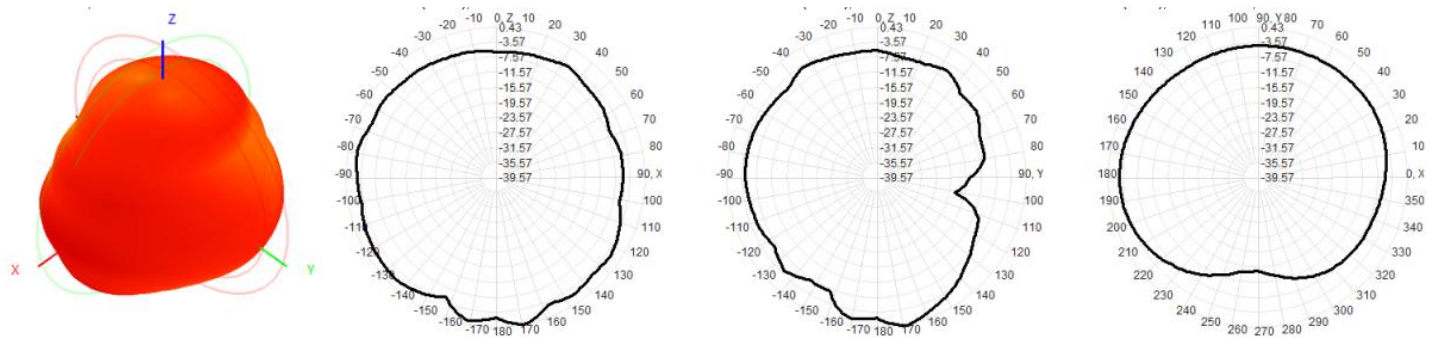
Product Number:AN0827-FPC167BX
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4. Antenna - Radiation Pattern Test Data

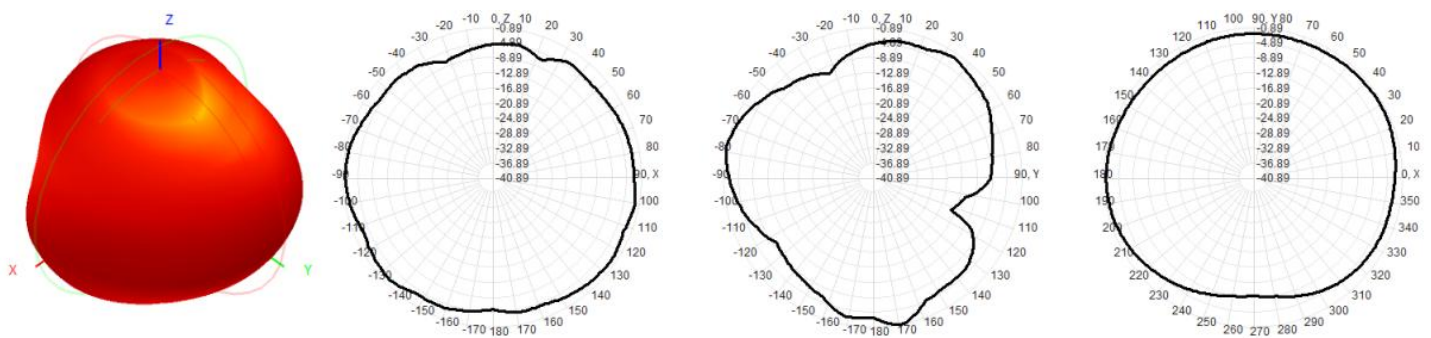
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Frequency (MHz)	824.0	858.0	892.0	926.0	960.0	1710.0	1756.0	1802.0	1848.0	1894.0	1940.0	1986.0	2032.0	2078.0	2124.0	2170.0	2300.0	2400.0	2500.0	2600.0	2700.0
Gain (dBi)	0.78	0.85	0.92	1.03	0.88	1.91	1.85	1.95	2.37	2.69	2.48	2.26	2.39	2.39	2.65	2.89	2.74	2.69	2.45	2.65	2.46
Efficiency (%)	32.83	33.29	34.11	35.41	34.28	51.30	52.71	53.61	54.19	53.51	54.79	55.52	53.16	52.74	53.09	52.10	53.49	54.18	52.89	54.30	53.01

XZYZXY

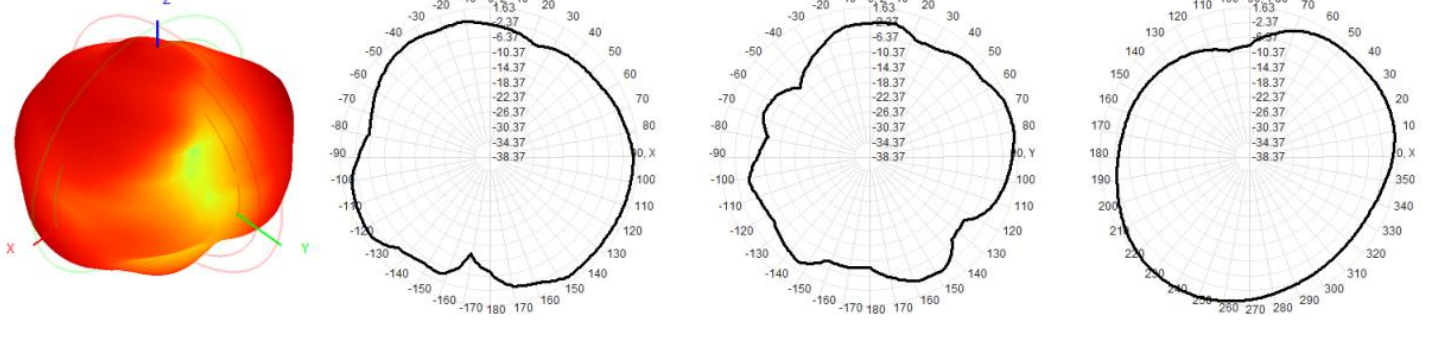
824MHz



960MHz



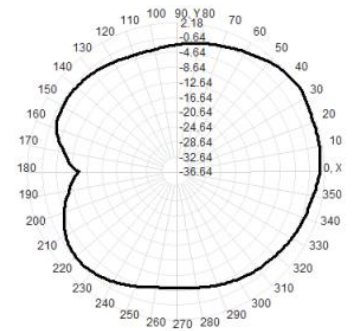
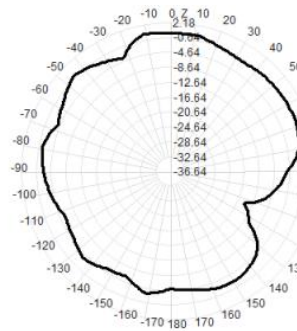
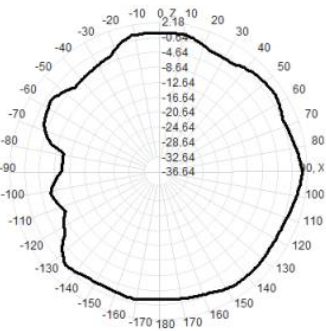
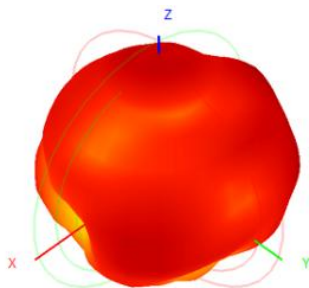
1710MHz



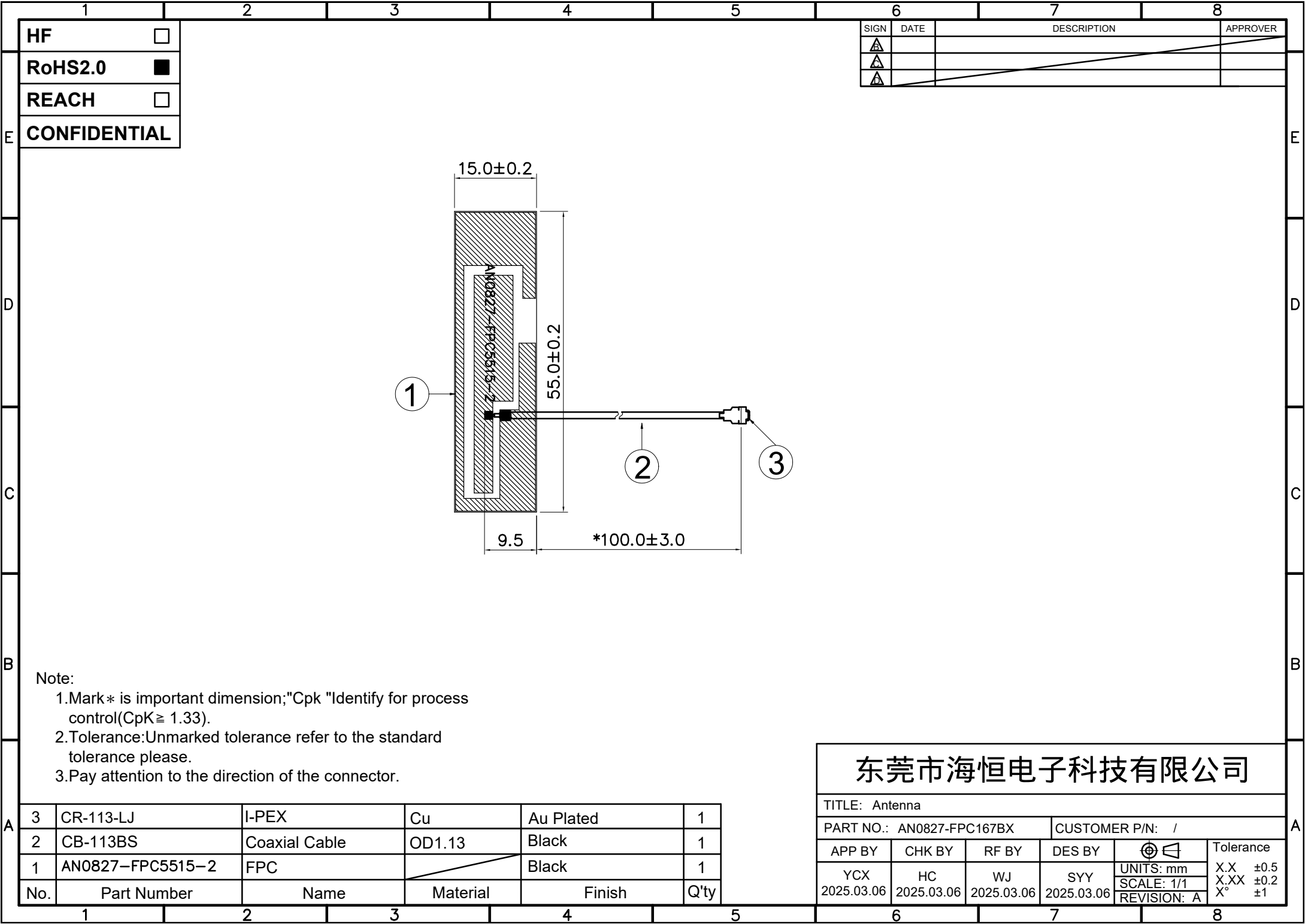
Product Number:AN0827-FPC167BX

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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 tolerance please.
 - 3.Pay attention to the direction of the connector.

3	CR-113-LJ	I-PEX	Cu	Au Plated	1
2	CB-113BS	Coaxial Cable	OD1.13	Black	1
1	AN0827-FPC5515-2	FPC		Black	1
No.	Part Number	Name	Material	Finish	Q'ty

东莞市海恒电子科技有限公司					
TITLE: Antenna					
PART NO.: AN0827-FPC167BX			CUSTOMER P/N: /		
APP BY	CHK BY	RF BY	DES BY		Tolerance
YCX	HC	WJ	SY		X.X ±0.5
2025.03.06	2025.03.06	2025.03.06	2025.03.06		X.XX ±0.2
				UNITS: mm	X° ±1
				SCALE: 1/1	
				REVISION: A	

产品包装规范

PACKING CRITERION

Date: 2025.03.06

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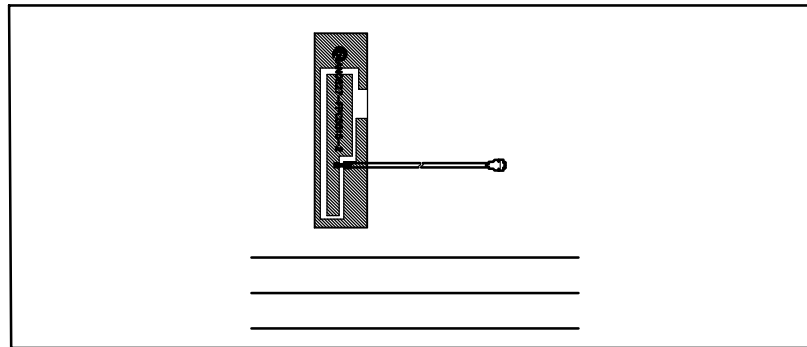
Part Number : AN0827-FPC167BX

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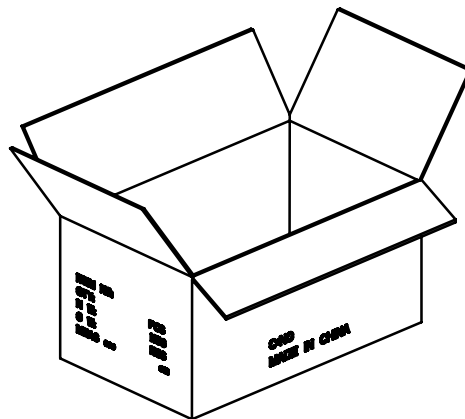
Customer : ALL

1 . Enter PE bag。



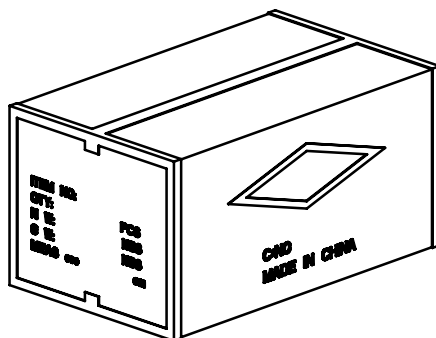
100pcs/ PE bag

2.PACKING。

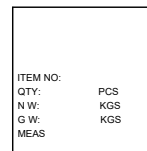


8000pcs/Carton

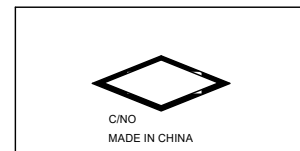
3. SEALING。



SIDE



FRONT



APPROVED BY : YCX CHECKED BY : HC DESIGNED BY : SY Y