

广州极飞科技股份有限公司

样品承认书

产品料号: _____

产品版本: **A0**

产品名称: **WIFI内置FPC天线**

产品规格: **2.4G FPC 天线,1.13mm 黑色线 L=50mm + I-PEX**

原料牌号: _____

表面处理: **丝印**

供 应 商: **东莞市海恒电子科技有限公司**

极飞签核		
结构设计	可靠性质量	中试审批
说明:		

供应商签核		
制作	审核	核准
邓文兵	胡超	陈鹏
说明:		

Product Number: AN2400-FPC27BX
Product Name: Antenna

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Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2023.9.5	初版	

Product Number: AN2400-FPC27BX

Product Name: Antenna

1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency 频率	2400-2500 MHz
S.W.R. 驻波比	≤ 2.0
Antenna Gain 增益	2.14dBi
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	- 30°C ~ +80 °C
Operation Temperature 工作温度	- 30°C ~ +80 °C

Product Number: AN2400-FPC27BX

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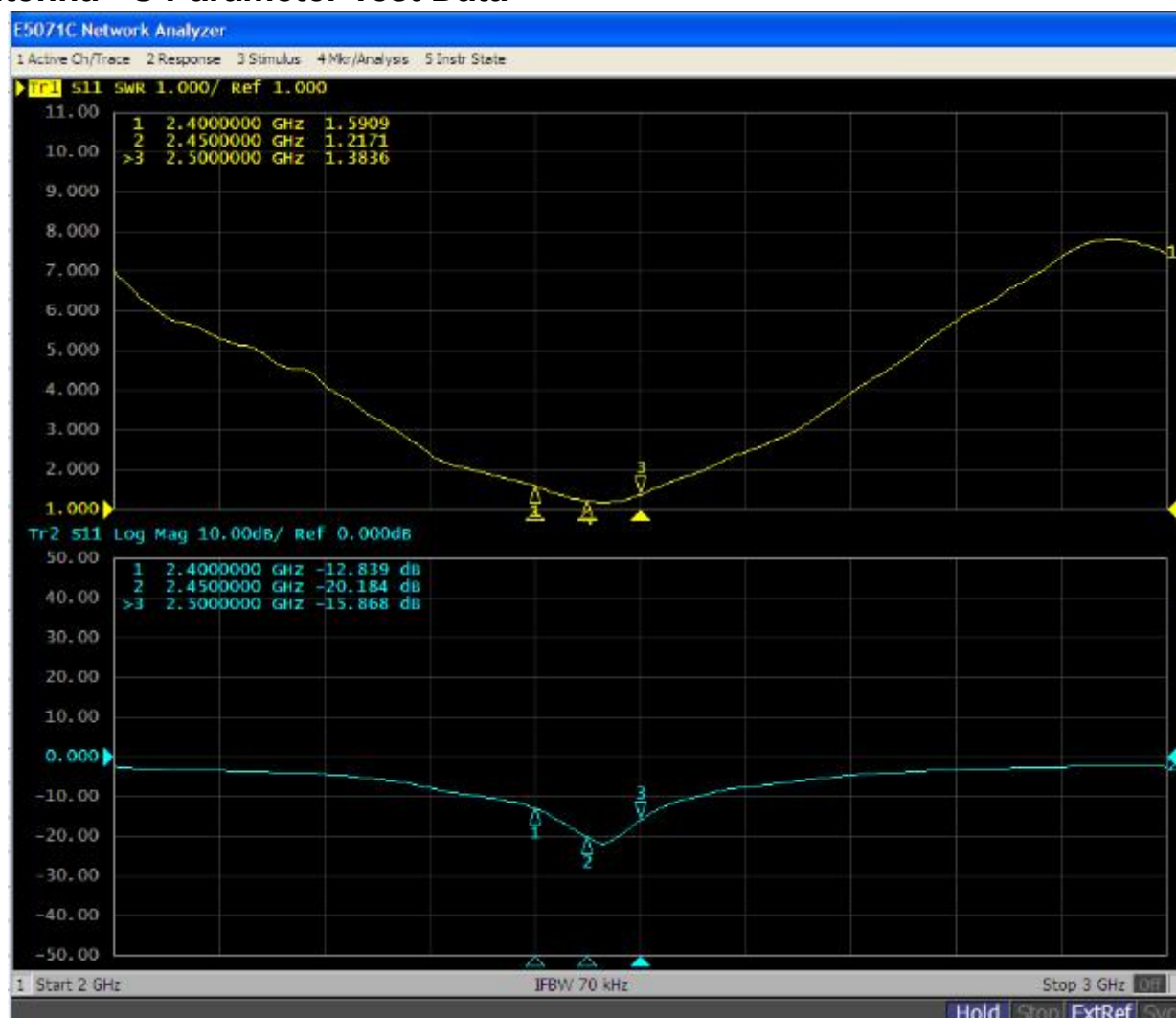
2. Characteristics and Reliability Test

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	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: $\geq 95\%$; NaCl solution: $\geq 5\%$; Time: 72H 温度 35°C ; 湿度 $\geq 95\%$; 盐水浓度 $\geq 5\%$; 测试 72H	1. No Visual Damage 2. Frequency Tol. $\leq 5\%$ 无明显外观不良; 频率偏移 $\leq 5\%$	PASS
7	Temperature and Humidity Chamber 恒温恒湿	GB / T 2423.3-2006 Temp: 80°C / 12 H; -30°C / 12H RH: $\geq 90\%$; Time: 24H 温度 80°C 测试 12H 转 -40°C 测试 12H; 湿度 $\geq 90\%$; 时间 48H	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. $\leq 5\%$ 恢复 2H 后, 无明显外观不良; 频率偏移 $\leq 5\%$	PASS
8	Thermal Shock 冷热冲击	GB / T 2423.22 - 2008 - 30°C (30 minutes) to + 80°C (30 minutes); Cycles: 24 - 30°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. $\leq 5\%$ 恢复 2H 后, 无明显外观不良; 频率偏移 $\leq 5\%$	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



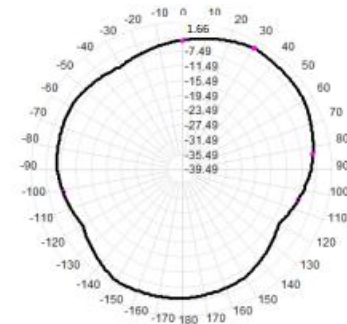
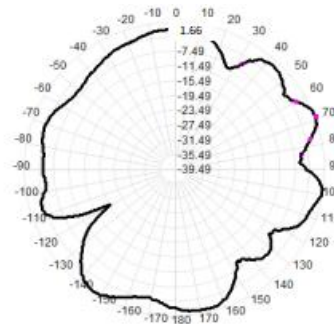
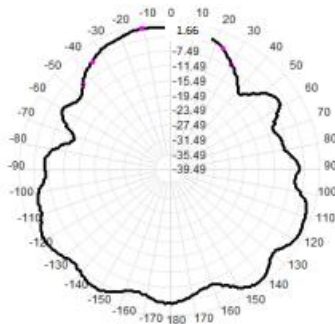
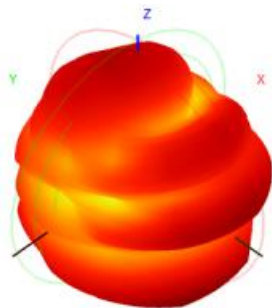
4. Antenna - Radiation Pattern Test Data

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	1.66	1.71	1.72	1.68	1.85	1.90	2.08	2.14	2.04	1.94	1.82
Efficiency (%)	52.30	53.00	55.04	54.47	58.39	60.81	52.45	56.04	53.56	54.98	53.74

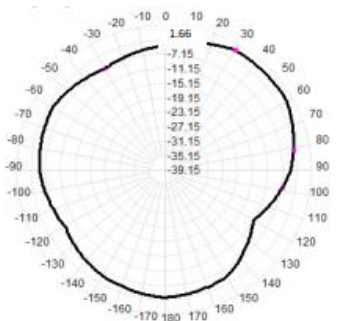
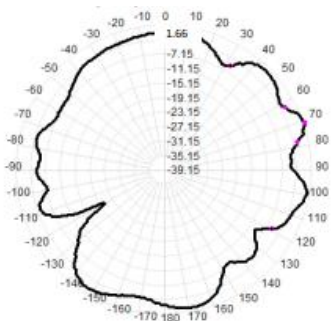
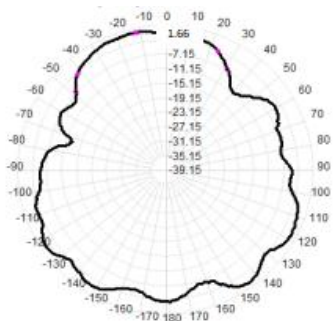
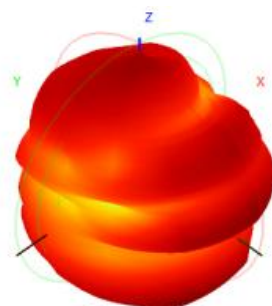
Product Number: AN2400-FPC27BX

Product Name: Antenna

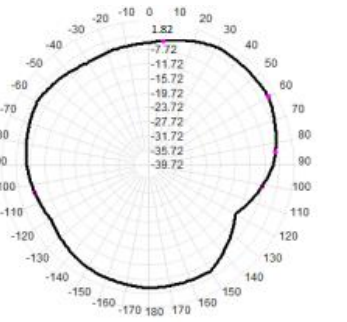
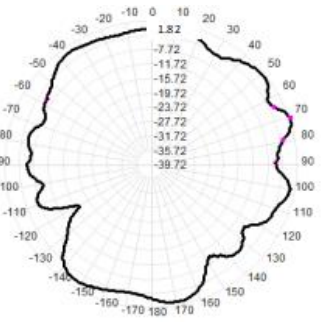
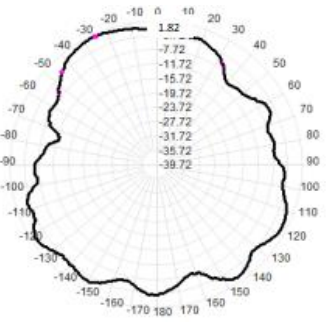
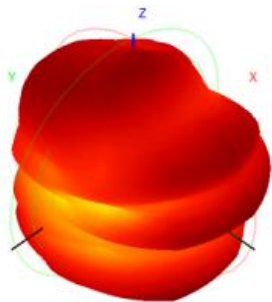
2400MHz



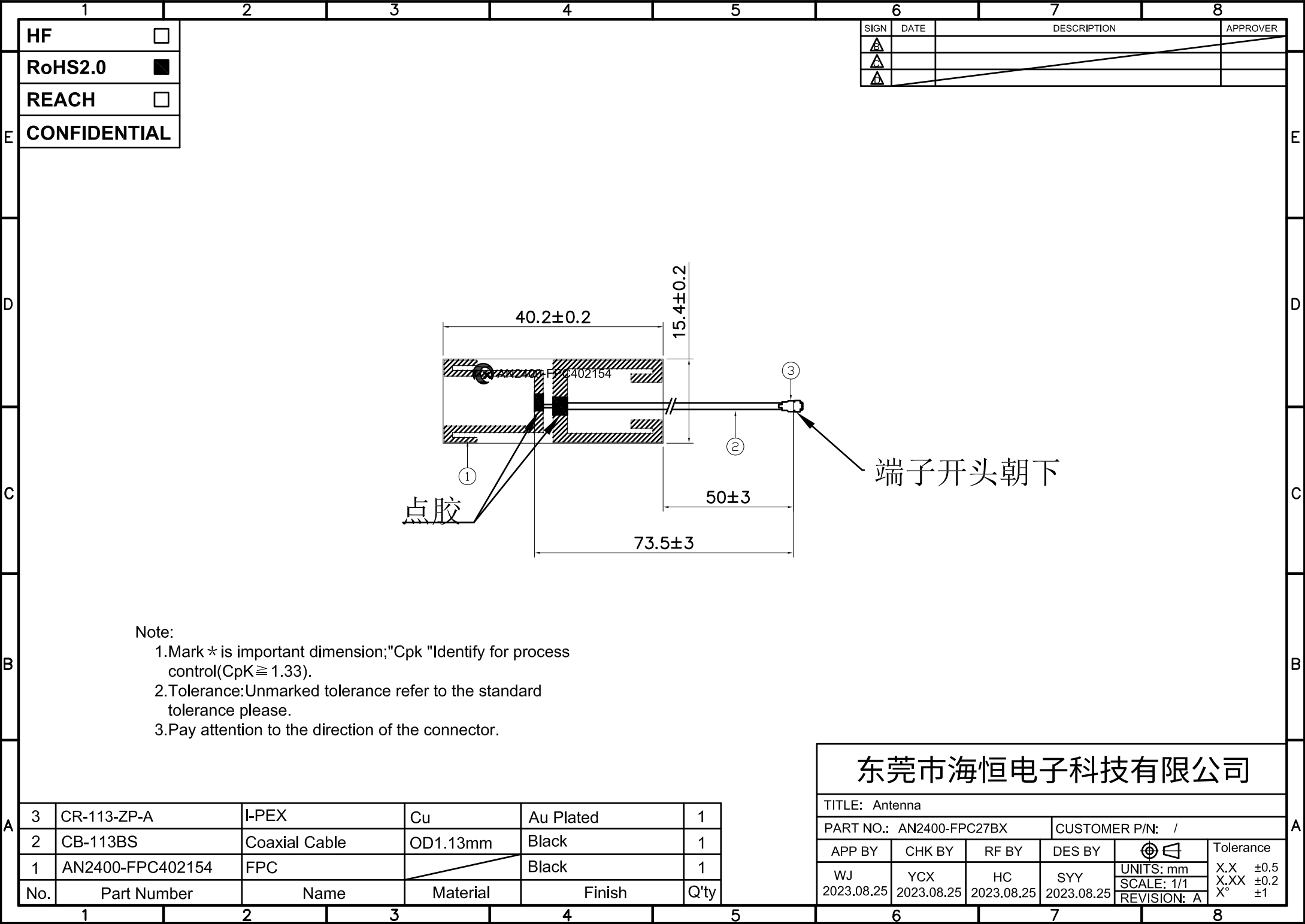
2450MHz



2500MHz



5. Mechanical Drawing See attached files



- 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-ZP-A	I-PEX	Cu	Au Plated	1
2	CB-113BS	Coaxial Cable	OD1.13mm	Black	1
1	AN2400-FPC402154	FPC		Black	1
No.	Part Number	Name	Material	Finish	Q'ty

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			

东莞市海恒电子科技有限公司					
TITLE: Antenna					
PART NO.: AN2400-FPC27BX			CUSTOMER P/N: /		
APP BY	CHK BY	RF BY	DES BY		Tolerance
WJ	YCX	HC	SY		X.X ±0.5
2023.08.25	2023.08.25	2023.08.25	2023.08.25	UNITS: mm	X.XX ±0.2
				SCALE: 1/1	X° ±1
				REVISION: A	

产品包装规范

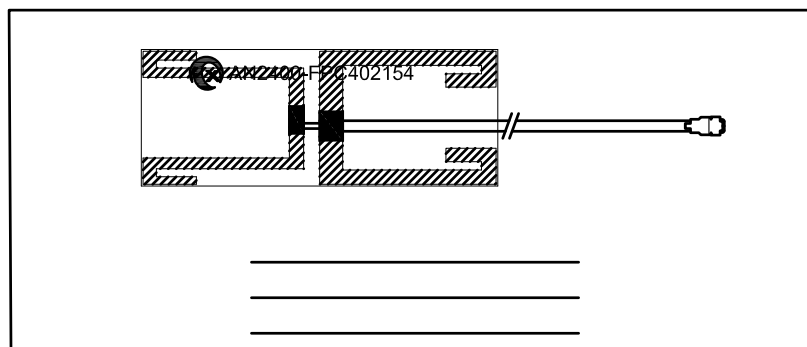
PACKING CRITERION

Date: 2023.08.25

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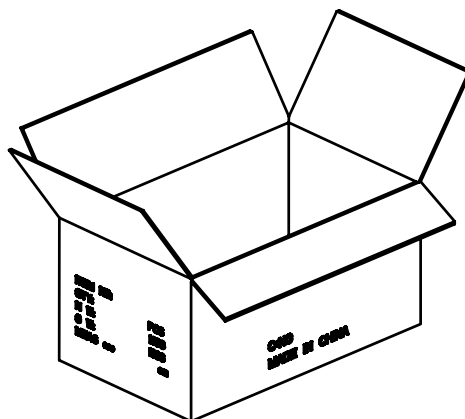
Part Number : AN2400-FPC27BX	Revision : A
Name: Antenna	Customer : ALL

1 . Enter PE bag。



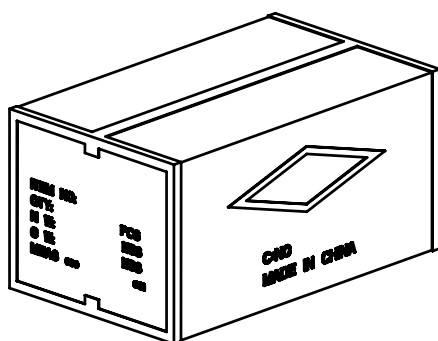
100pcs/ PE bag

2.PACKING。

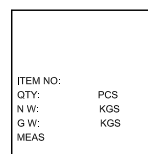


8000pcs/Carton

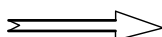
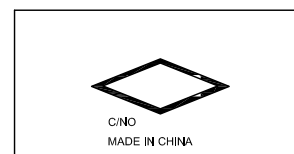
3. SEALING。



SIDE



FRONT



APPROVED BY: YCX

CHECKED BY: HC

DESIGNED BY: SY Y