



Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number:AN2400-FPC159GX

Product Name: Antenna

Specification For Approval

Date: 2025.11.12

Version: 1.0

客户名称

Customer:

联吉星

客户料号

Customer P/N:

腾祥料号

T X P/N:

AN2400-FPC159GX

规格描述

Description :

2.4G FPC 天线 1.13mm 灰色线 L=110mm+IPEX

Tengxiang Checked By: 腾祥审核		Customer Approved By: 客户审核	
DRAWN 制作	路婷	TESTED BY 检测	
CHECKED BY 审核	胡超	CHECKED BY 审核	
Q.C.DEPT. 品管	周志红	Q.C.DEPT. 品管	
APPROVED BY 核准	韦佳	APPROVEDBY 核准	



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Product Number:AN2400-FPC159GX

Product Name: Antenna

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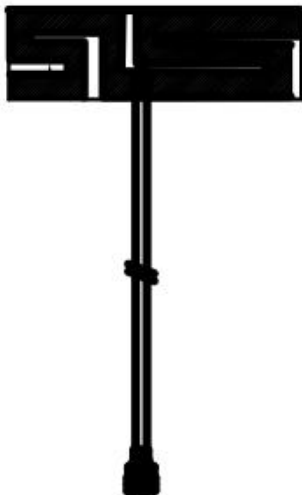
Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2025.11.12	初版	

Product Number: AN2400-FPC159GX

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1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency 频率	2400-2500 MHz/5100-5850MHz
S.W.R. 驻波比	≤ 2.0
Antenna Gain 增益	2.69dBi(2.4GHz)/2.52dBi(5GHz)
Polarization 极化方式	Linear
Impedance 阻抗	50 Ohm
B. Material & Mechanical Characteristics	
Cable Type 线材规格	1.13mm ,gray
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

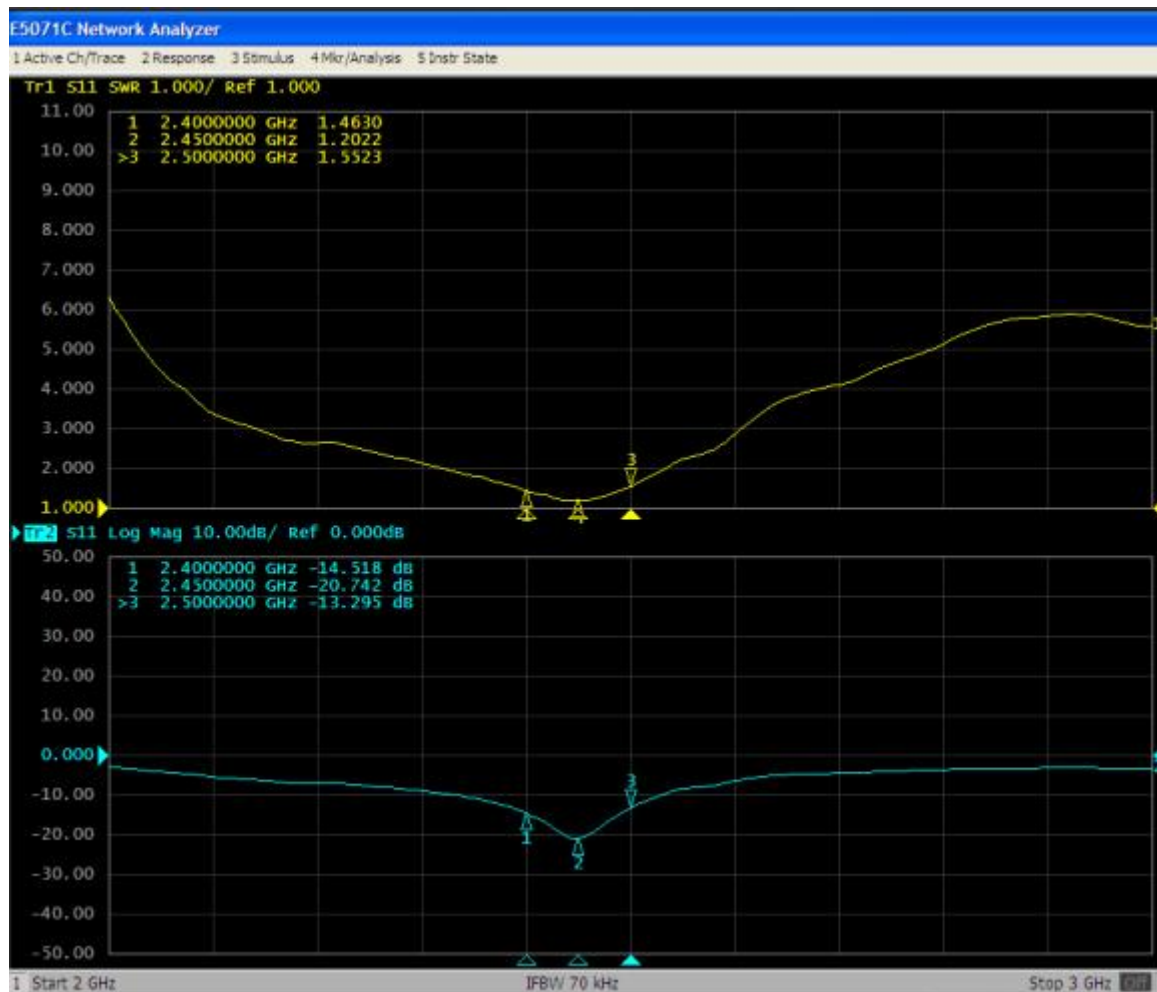
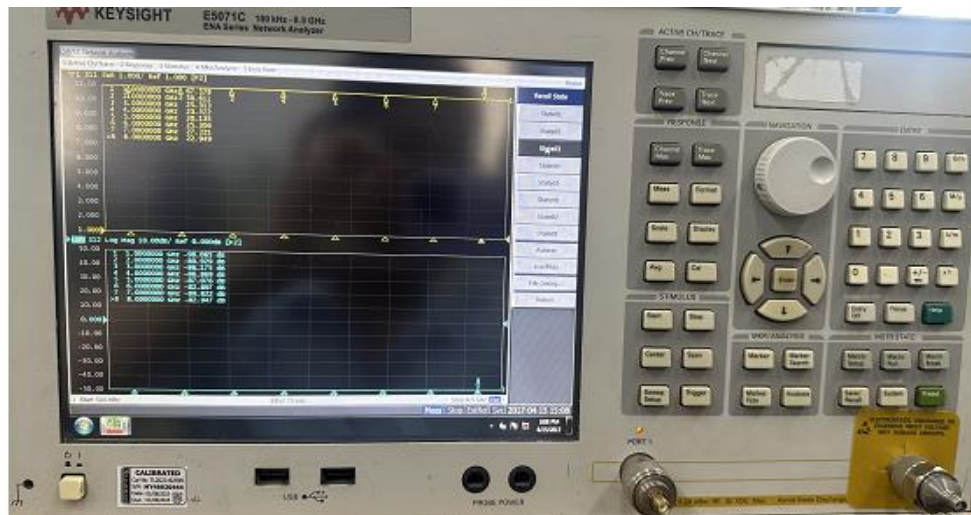
Test Items 测试项目		Test Condition and Procedure 测试方法	Requirements 要求	Result 结果
1	V.S.W.R. 电压驻波比	Set DUT on Network Analyzer; make individual calibration to test 设置网络分析仪参数进行测试	Directive DUT specification 符合待测物规范	PASS
2	Insertion Loss 插入损失	Set DUT on Network Analyzer; make individual calibration to test 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±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	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. ≤5% 符合待测物规范; 频率偏移 ≤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

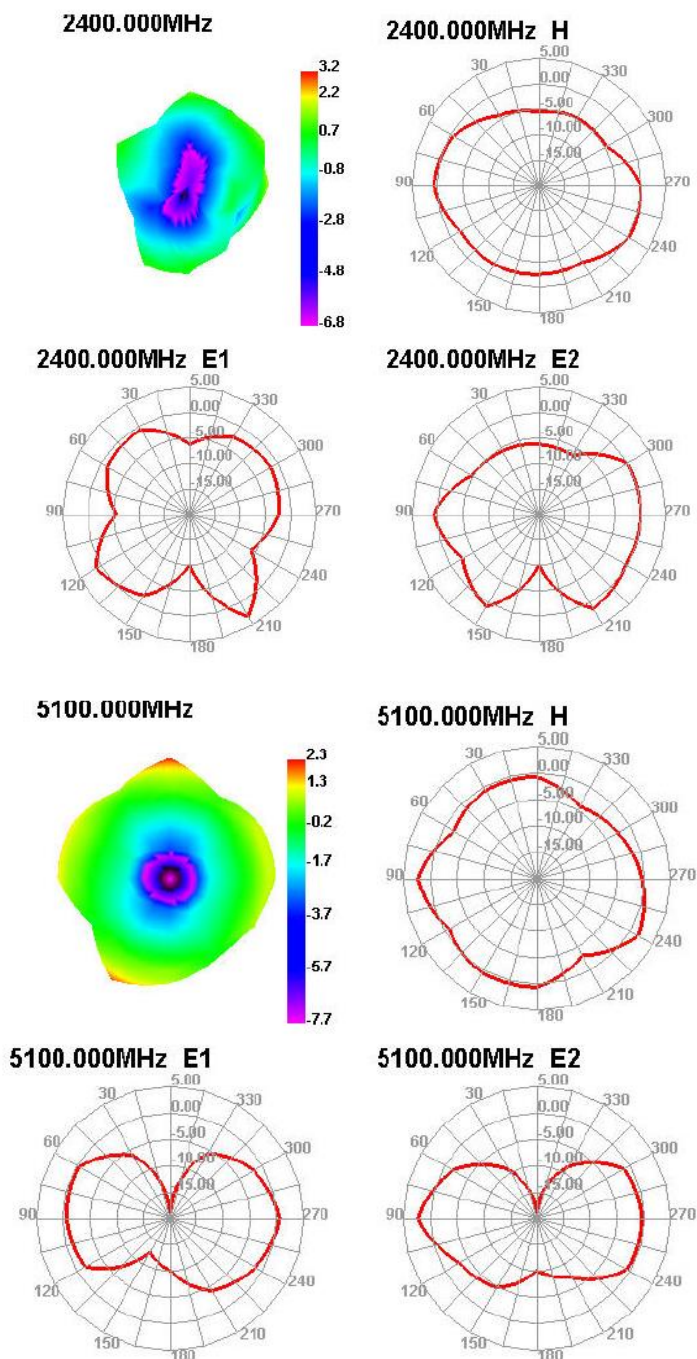
测试仪器: VSWR 是使用安捷伦 E5071C 连接到治具来测试, 状态为自由空间。



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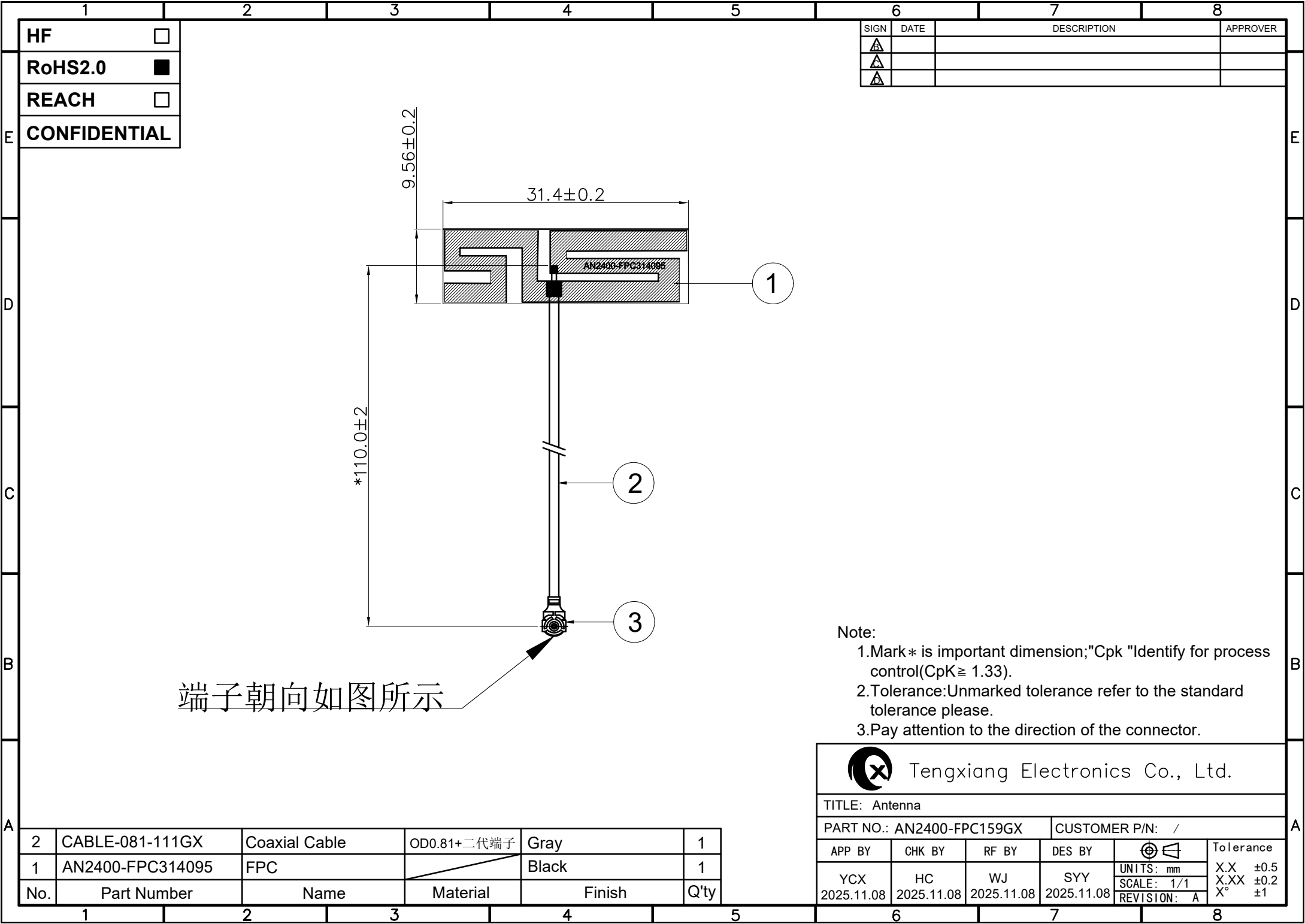
Product Name: Antenna

4. Antenna - Radiation Pattern Test Data



Frequency (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400.00	32.22	-7.32	1.32
2410.00	32.90	-8.62	1.36
2420.00	32.93	-8.32	1.56
2430.00	35.20	-8.12	1.14
2440.00	33.47	-8.63	2.26
2450.00	31.92	-8.61	2.69
2460.00	32.28	-7.21	2.24
2470.00	31.97	-8.01	2.18
2480.00	35.53	-9.03	2.25
2490.00	32.30	-9.14	2.04
2500.00	34.20	-9.04	2.32
5100.00	45.90	-8.21	1.69
5150.00	49.69	-9.31	1.64
5200.00	53.12	-8.62	1.84
5250.00	51.77	-6.31	1.48
5300.00	49.90	-5.63	2.52
5350.00	45.79	-7.62	1.81
5400.00	53.19	-8.63	1.86
5450.00	51.99	-7.63	1.85
5500.00	47.73	-8.62	1.36
5550.00	50.85	-8.62	1.98
5600.00	47.89	-7.82	1.03
5650.00	52.27	-8.63	1.65
5700.00	49.20	-9.12	1.03
5750.00	47.22	-8.52	2.15
5800.00	46.38	-10.61	2.08
5850.00	51.27	-8.36	2.13

5. Mechanical Drawing See attached files



HF	☐
RoHS2.0	☒
REACH	☐
CONFIDENTIAL	

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			

端子朝向如图所示

- Note:
- 1.Mark * is important dimension;"Cpk "Identify for process control($CpK \geq 1.33$).
 - 2.Tolerance:Unmarked tolerance refer to the standard tolerance please.
 - 3.Pay attention to the direction of the connector.



Tengxiang Electronics Co., Ltd.

TITLE: Antenna					
PART NO.: AN2400-FPC159GX				CUSTOMER P/N: /	
APP BY	CHK BY	RF BY	DES BY		Tolerance
YCX	HC	WJ	SY		X.X ±0.5
2025.11.08	2025.11.08	2025.11.08	2025.11.08		X.XX ±0.2
				UNITS: mm	X° ±1
				SCALE: 1/1	
				REVISION: A	

2	CABLE-081-111GX	Coaxial Cable	OD0.81+二代端子	Gray	1
1	AN2400-FPC314095	FPC		Black	1
No.	Part Number	Name	Material	Finish	Q'ty

產品包裝規範

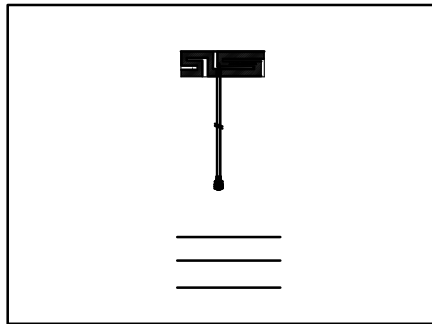
PACKING CRITERION

Date: 2025.11.08

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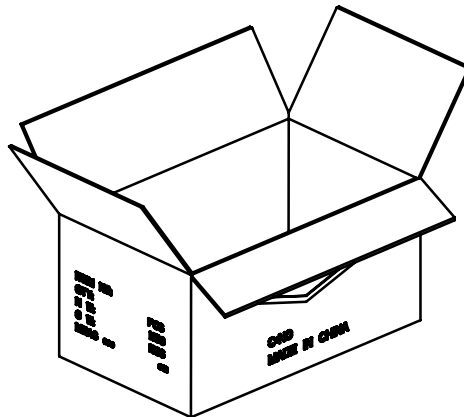
Part Number : AN2400-FPC159GX	Revision : A
Name: Antenna	Customer : ALL

1 . Enter PE bag。



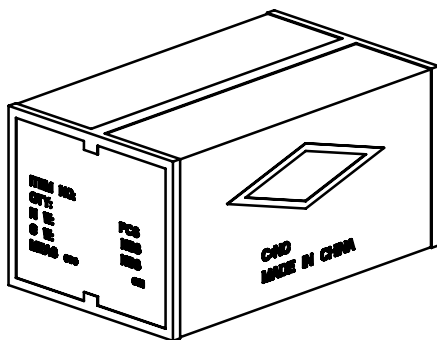
100pcs/ PE bag

2.PACKING。

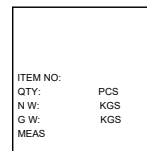


8000pcs/Carton

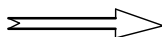
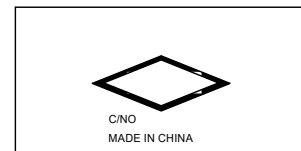
3. SEALING。



SIDE



FRONT



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