



Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number:AN2450-FPC123BX

Product Name: Antenna

Specification For Approval

Date: 2023.11.27

Version: 1.0

客户名称

Customer:

客户料号

Customer P/N:

腾祥料号

T X P/N:

AN2450-FPC123BX

规格描述

Description :

2.4G/5G FPC 天线 1.13mm 黑色线 L=90mm+I-PEX

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	梁凤珍	Q.C.DEPT. 品 管	
APPROVED BY 核 准	韦佳	APPROVEDBY 核 准	



NO.53 Shatou ShaChong Road, ChangAn Town, Guangdong province, China

中国广东省东莞市长安镇沙头区沙涌路 53 号

TEL:86-769-81873082 FAX:86-769-82663788

<http://www.tenxiang.cn>



Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number:AN2450-FPC123BX

Product Name: Antenna

Index:

1. Specification (规格)
2. Characteristics and Reliability Test (产品特性和可靠性测试标准)
3. Antenna - S Parameter Test Data (样品测试数据)
4. Antenna - Radiation Pattern Test Data (辐射模式测试数据)
5. Mechanical and Packing Drawing (图纸包装规范)

Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2023.11.27	初版	

Product Number:AN2450-FPC123BX

Product Name: Antenna

1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency 频率	2400-2500 MHz/5150-5850MHz
S.W.R. 驻波比	≤ 2.0 / ≤ 2.0
Antenna Gain 增益	4.22dBi / 4.26dBi
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

Product Number: AN2450-FPC123BX

Product Name: Antenna

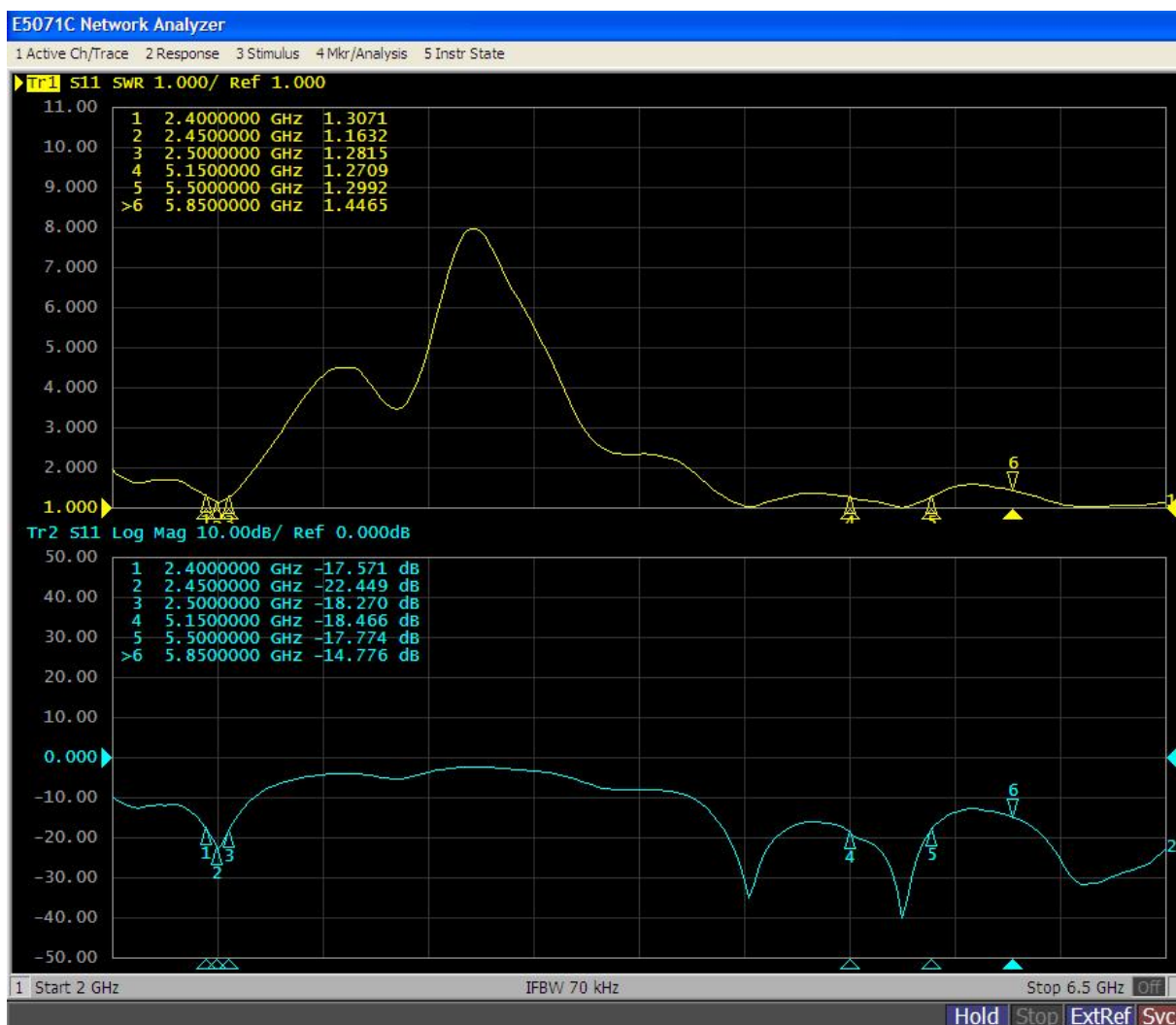
2. Characteristics and Reliability Test

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	Salt Spray 盐雾	GB / T 2423.17-2008 Temp: 35°C; RH: ≥ 95%; NaCl solution: ≥ 5%; Time: 24H 温度 35°C; 湿度 ≥95%; 盐水浓度 ≥5%; 测试 24H	1. No Visual Damage 2. Frequency Tol. ≤5% 无明显外观不良; 频率偏移 ≤5%	PASS
8	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

Product Number:AN2450-FPC123BX

Product Name: Antenna

3. Antenna - S Parameter Test Data



4. Antenna - Radiation Pattern Test Data

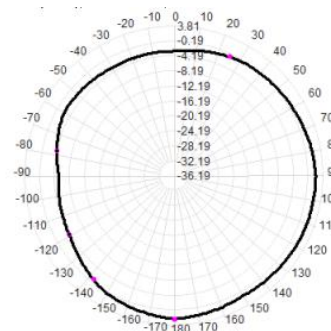
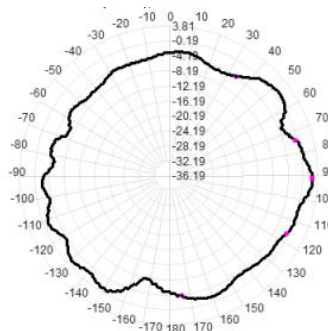
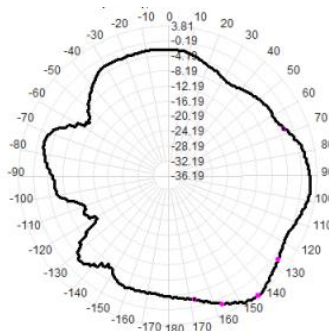
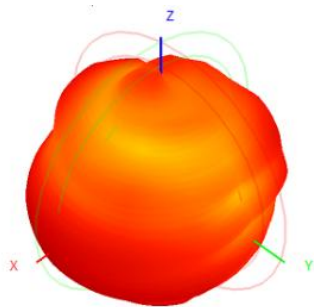
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	3.81	3.98	3.95	4.05	4.13	4.22	4.06	4.12	3.84	3.83	3.90
Efficiency (%)	63.93	66.62	66.62	66.97	67.19	67.58	66.74	65.88	63.02	63.13	63.16

12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
3.88	3.04	3.13	3.02	3.85	4.26	4.08	3.70	4.08	3.91	3.83	3.49	3.84	3.75	3.64
65.09	65.88	66.21	66.78	65.27	66.22	65.21	63.58	64.18	65.69	65.11	67.92	66.67	65.35	64.33

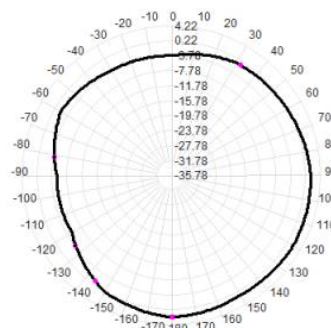
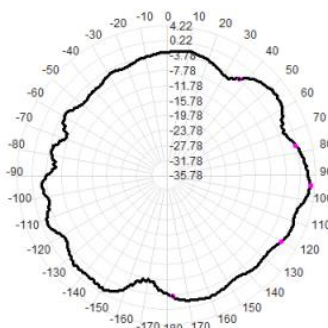
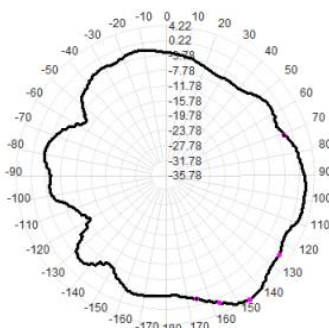
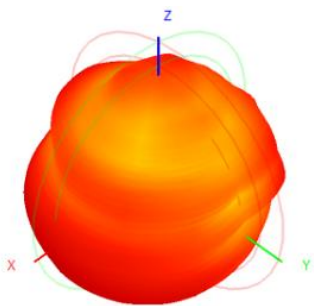
Product Number:AN2450-FPC123BX

Product Name: Antenna

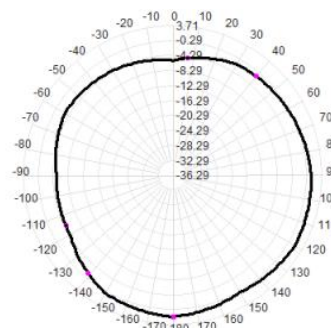
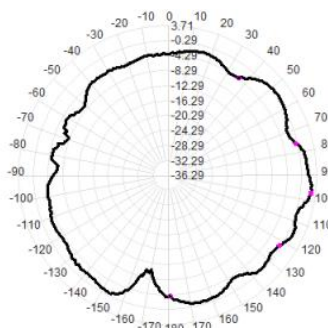
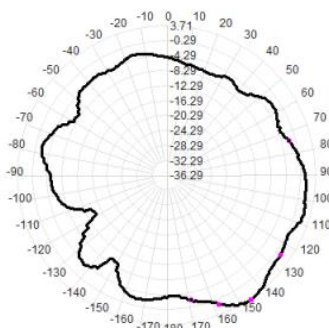
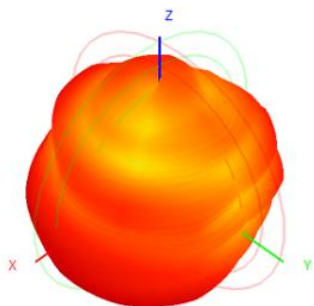
2400MHz



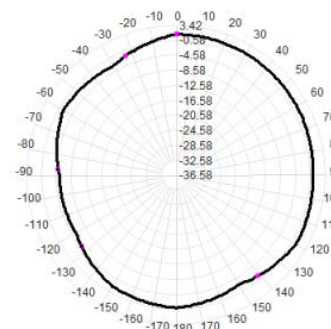
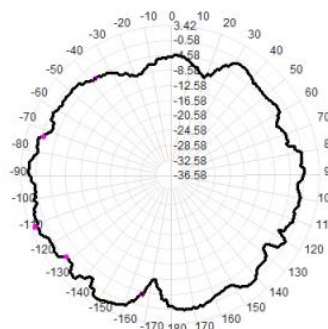
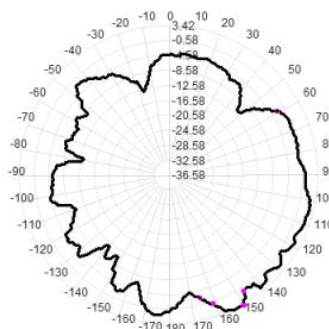
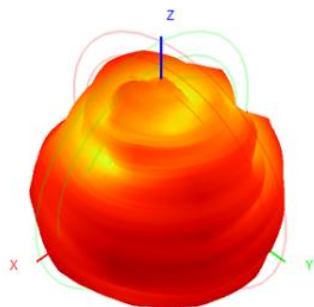
2450MHz



2500MHz



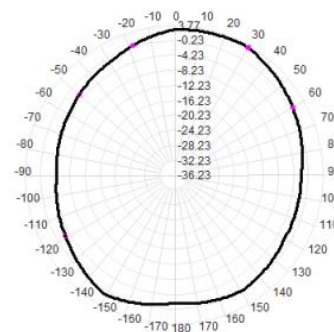
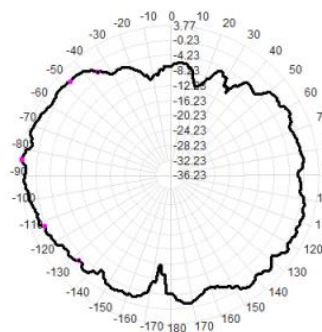
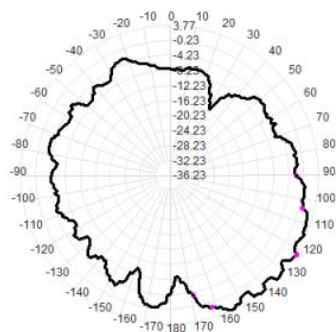
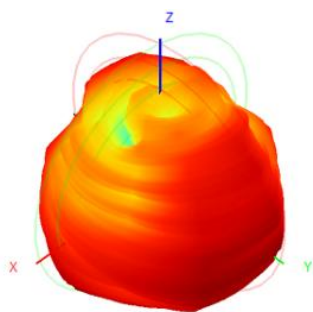
5150MHz



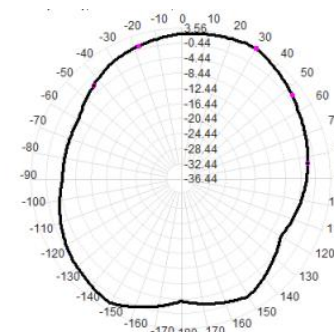
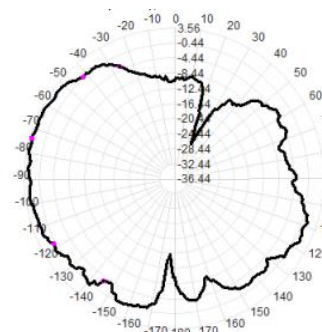
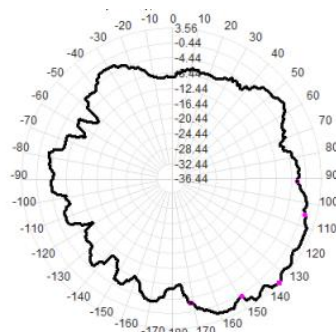
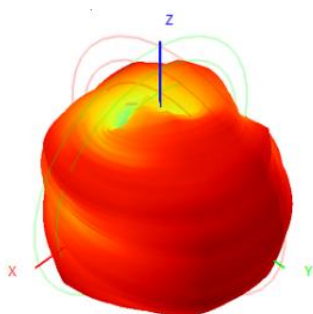
Product Number:AN2450-FPC123BX

Product Name: Antenna

5550MHz



5850MHz



5. Mechanical Drawing See attached files

1		2		3		4		5		6		7		8																																																																																																								
HF ☐										SIGN		DATE		DESCRIPTION		APPROVER																																																																																																						
RoHS2.0 ☒										△																																																																																																												
REACH ☐										△																																																																																																												
CONFIDENTIAL										△																																																																																																												
端子朝上																																																																																																																						
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.																																																																																																																						
<table><tr><td>3</td><td>CR-113-ZP-A</td><td>I-PEX</td><td>Cu</td><td>Au Plated</td><td>1</td></tr><tr><td>2</td><td>CB-113BS</td><td>Coaxial Cable</td><td>OD1.13</td><td>Black</td><td>1</td></tr><tr><td>1</td><td>AN2450-FPC1132</td><td>FPC</td><td></td><td>Black</td><td>1</td></tr><tr><td>No.</td><td>Part Number</td><td>Name</td><td>Material</td><td>Finish</td><td>Q'ty</td></tr></table>																	3	CR-113-ZP-A	I-PEX	Cu	Au Plated	1	2	CB-113BS	Coaxial Cable	OD1.13	Black	1	1	AN2450-FPC1132	FPC		Black	1	No.	Part Number	Name	Material	Finish	Q'ty																																																																														
3	CR-113-ZP-A	I-PEX	Cu	Au Plated	1																																																																																																																	
2	CB-113BS	Coaxial Cable	OD1.13	Black	1																																																																																																																	
1	AN2450-FPC1132	FPC		Black	1																																																																																																																	
No.	Part Number	Name	Material	Finish	Q'ty																																																																																																																	
Tengxiang Electronics Co., Ltd. <table><tr><td colspan="17">TITLE: Antenna</td></tr><tr><td colspan="12">PART NO.: AN2450-FPC123BX</td><td colspan="5">CUSTOMER P/N: /</td></tr><tr><td colspan="2">APP BY</td><td colspan="2">CHK BY</td><td colspan="2">RF BY</td><td colspan="2">DES BY</td><td colspan="2"></td><td colspan="2">Tolerance</td><td colspan="5"></td></tr><tr><td colspan="2">YCX</td><td colspan="2">WJ</td><td colspan="2">HC</td><td colspan="2">SY</td><td colspan="2">UNITS: mm</td><td colspan="2">X.X ±0.3</td><td colspan="5"></td></tr><tr><td colspan="2">2023.11.27</td><td colspan="2">2023.11.27</td><td colspan="2">2023.11.27</td><td colspan="2">2023.11.27</td><td colspan="2">SCALE: 1/1</td><td colspan="2">X.XX ±0.1</td><td colspan="5"></td></tr><tr><td colspan="2"></td><td colspan="2"></td><td colspan="2"></td><td colspan="2"></td><td colspan="2">REVISION: A</td><td colspan="2">X° ±1</td><td colspan="5"></td></tr></table>																	TITLE: Antenna																	PART NO.: AN2450-FPC123BX												CUSTOMER P/N: /					APP BY		CHK BY		RF BY		DES BY				Tolerance							YCX		WJ		HC		SY		UNITS: mm		X.X ±0.3							2023.11.27		2023.11.27		2023.11.27		2023.11.27		SCALE: 1/1		X.XX ±0.1															REVISION: A		X° ±1						
TITLE: Antenna																																																																																																																						
PART NO.: AN2450-FPC123BX												CUSTOMER P/N: /																																																																																																										
APP BY		CHK BY		RF BY		DES BY				Tolerance																																																																																																												
YCX		WJ		HC		SY		UNITS: mm		X.X ±0.3																																																																																																												
2023.11.27		2023.11.27		2023.11.27		2023.11.27		SCALE: 1/1		X.XX ±0.1																																																																																																												
								REVISION: A		X° ±1																																																																																																												

產品包裝規範

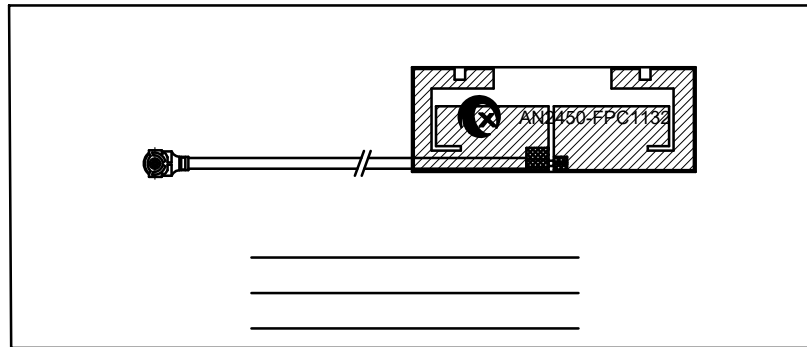
PACKING CRITERION

Date: 2023.11.27

Page: 1 of 1

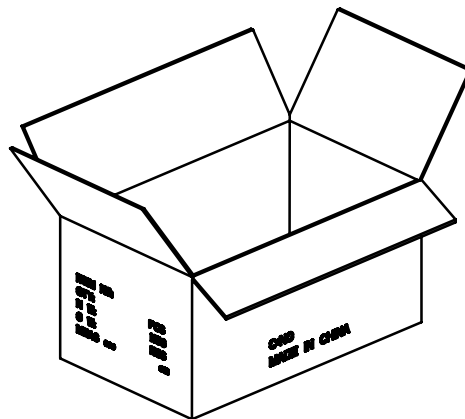
Part Number : AN2450-FPC123BX	Revision : A
Name: Antenna	Customer : ALL

1 . Enter PE bag。



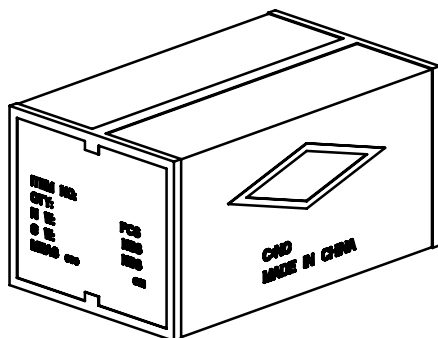
100pcs/ PE bag

2.PACKING。

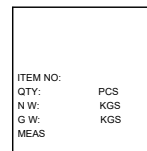


8000pcs/Carton

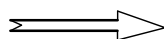
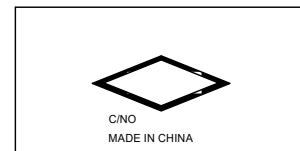
3. SEALING。



SIDE



FRONT



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