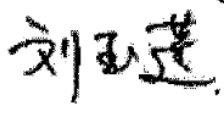


规格承认书

SPECIFICATION FOR APPROVAL

客户名称 (CUSTOMER)	POWERMAX
客户型号 (MODEL NO)	
客户料号 (PART NO)	
供方型号 (MODEL NO)	PCB Antenna L=65MM,
供方料号 (PART NO)	G121-02-D65-B1
最小包装量 (MPQ)	
品牌 (BRAND)	
送样日期 (DATE)	2023-05-30
样品数量 (QUANTITY)	

供方确认 APPROVED SIGNATURES			客户确认 APPROVED SIGNATURES		
承办 PREPARED BY	审核 CHECKED BY	核准 APPROVED BY	检测 TESTED BY	审核 CHECKED BY	核准 APPROVED BY
					

备注：送样时一式一份由供方手工签名和加盖公司公章，规格书需要提供纸档一份
电子档一份。

地址：广东省惠州市仲恺高新区 9 号小区

电 话:0752-2619176

传真:0752-2619186

联系人:郑双旺

手机:13802875820

电子邮箱: zsw_ele@163.com

公司网址: <http://www.desanwire.com/>

承认书项目表List of items

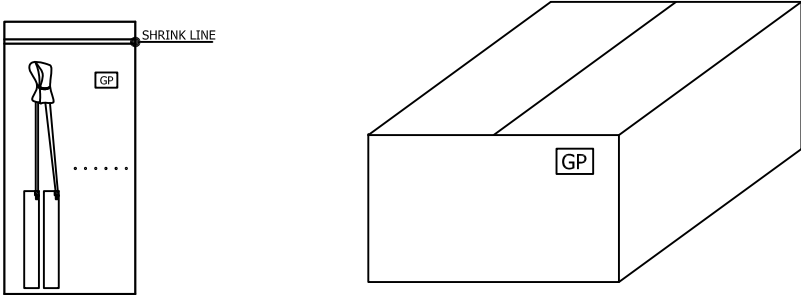
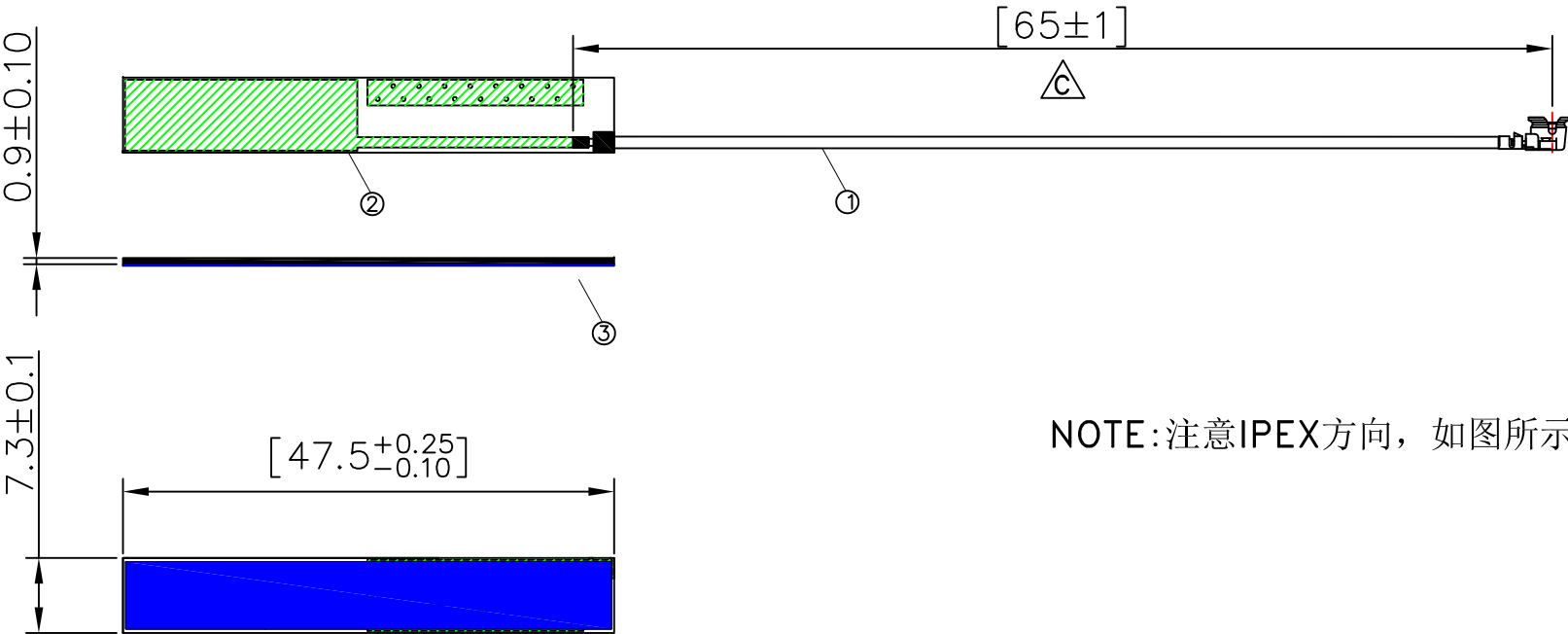
1	承认书封面..... APPROVAL Cover	NO. 1
2	承认书项目表..... APPROVAL List	NO. 2
3	产品规格书..... Product specification	NO. 3
4	工程图面..... Product drawings	NO. 4
5	电性测试报告..... Electrical test report	NO. 5~8
6	线材规格书..... Cable spec.	NO. 9~10
7	PCB规格书..... PCB spec.	NO. 11

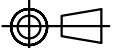
Specification

A.Electrical Properties	
Frequency Rang 频段	2400~2500MHz
Impedance 阻抗	50Ω Nominal
VSWR 电压驻波比	2.0 Max.
Gain(peak) 增益（峰值）	2.23 dBi
Radiation 辐射方式	Omni-Directional/ 全向
Polarization 极化方式	Linear Vertical/ 垂直
B.Physical Properties	
Connector Type 连接方式	
Cable Type 线材	Ø1.13mm CABLE 灰色
Antenna Body 天线本体	PCB 黑色
C.Environmental	
Operating Temp 工作环境	-40℃ ~ +65℃
Storage Temp 存储环境	-40℃ ~ +80℃

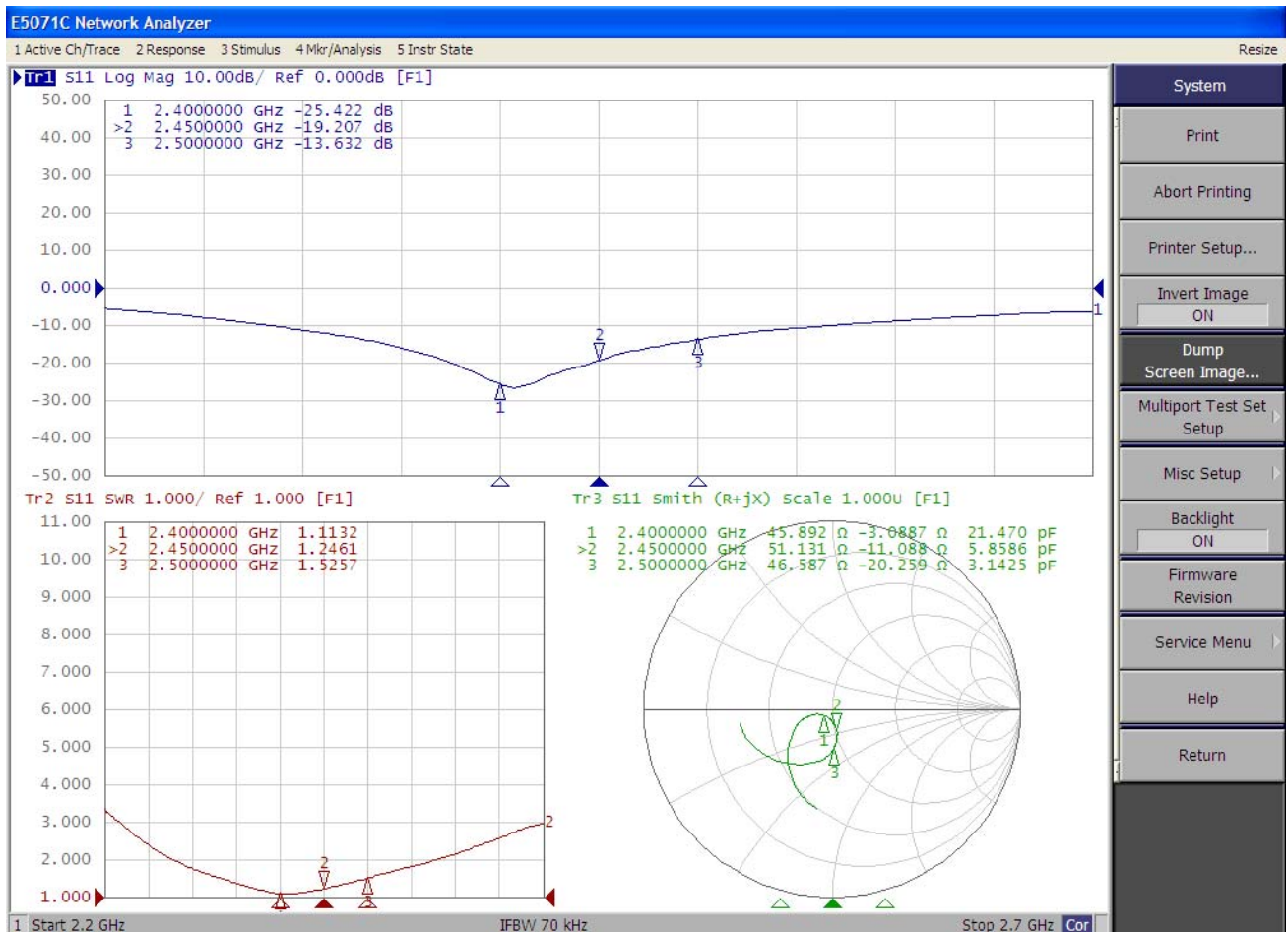
工程图

REV.	修 订 内 容	修订时间
A	新 版 发 行	2015.07.17
B	变更端子方向	2015. 07. 28
C	变更线材长度	2022. 09. 28
D	变更PCB尺寸标示值	2022. 11. 9



4	CONNECTOR	IPEX(20278-112R-13)	1			
3	泡棉双面胶	T0.3mm	1			
2	BODY	PCB L47.8*W7.3*T0.6mm 黑色	1			
1	CABLE	Ø1.13mm CABLE,GRAY	1			
NO.	PART NAME	DESCRIPTION	Q'TY	REMARK		
TITLE:		内置PCB天线				
P/N:		G121-02-D65-B1				
CUSTOMER:						
DRAW NO.:		G115-10050-A				
DIMENSIONS TOLERANCES UNLESS OTHERWISE NOTED		 惠州市德亿科技有限公司 				
一般公差 TOLERANCE					APPROVED	
					CHECKED	
					DRAWED	
					2022.09.28	
		SHEET: 1/1		SCALE: NONE		
		UNIT: mm		REV.A		

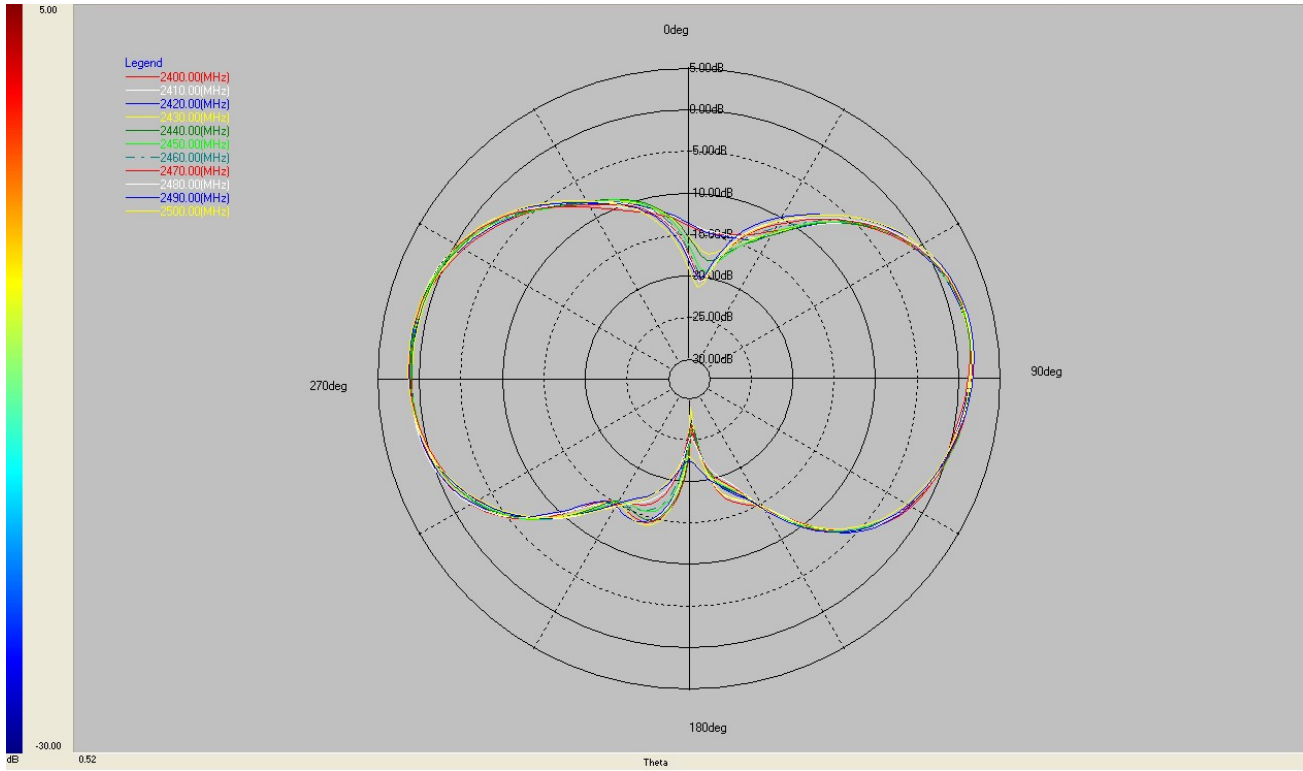
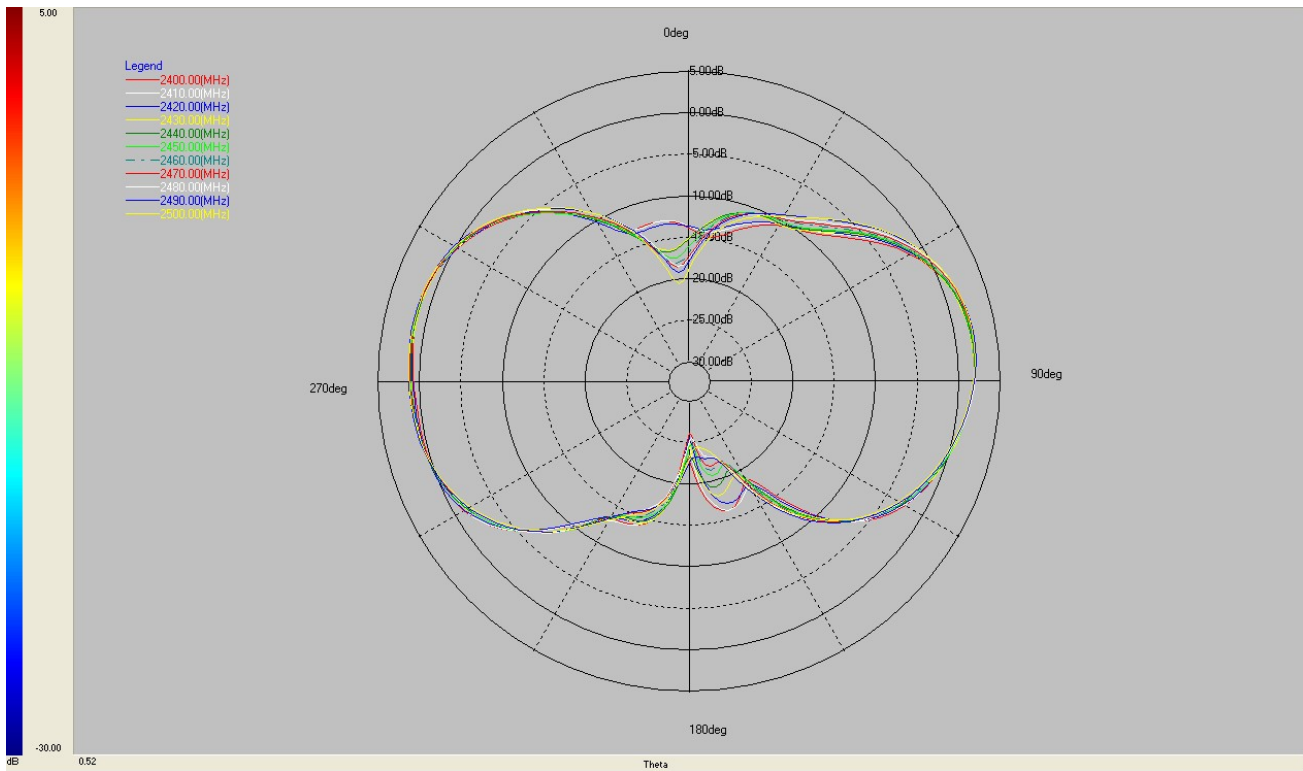
电压驻波比 VSWR:



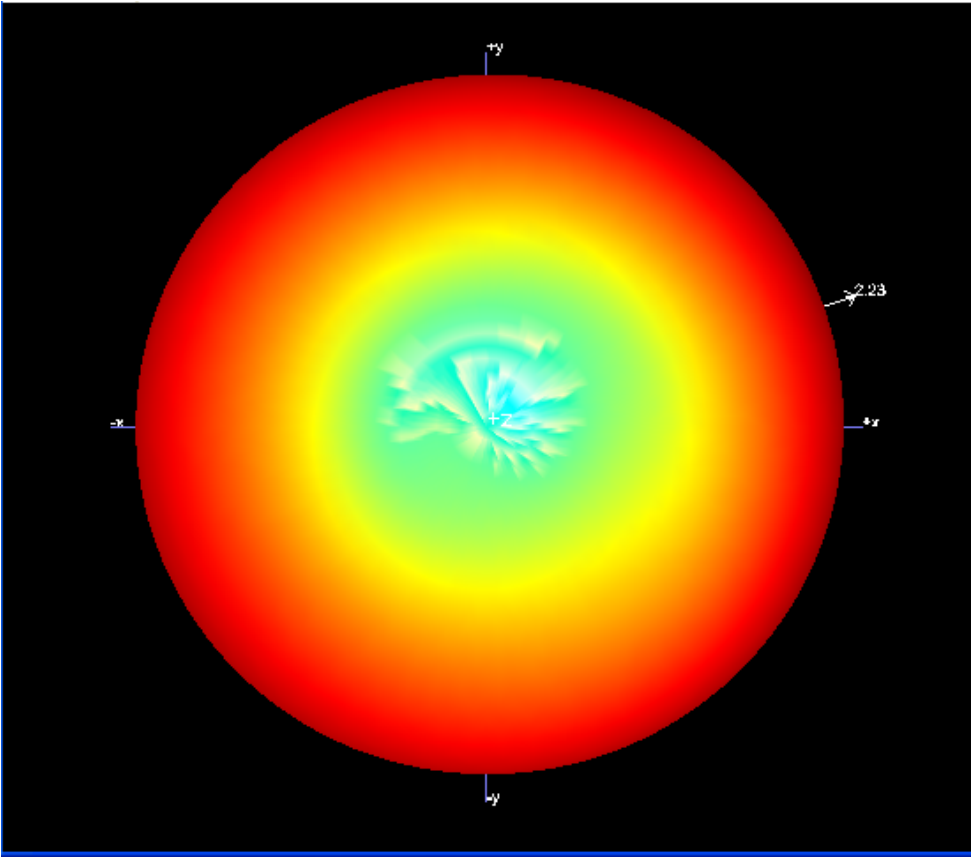
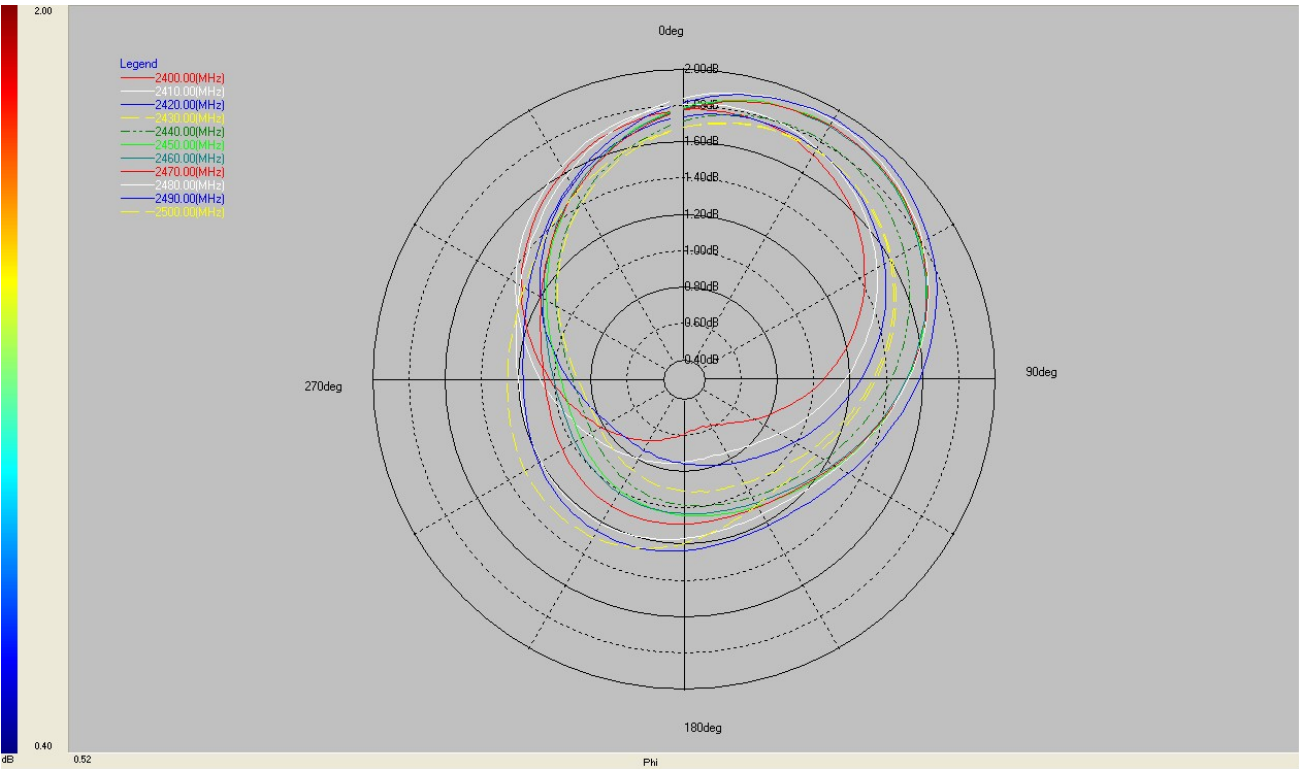
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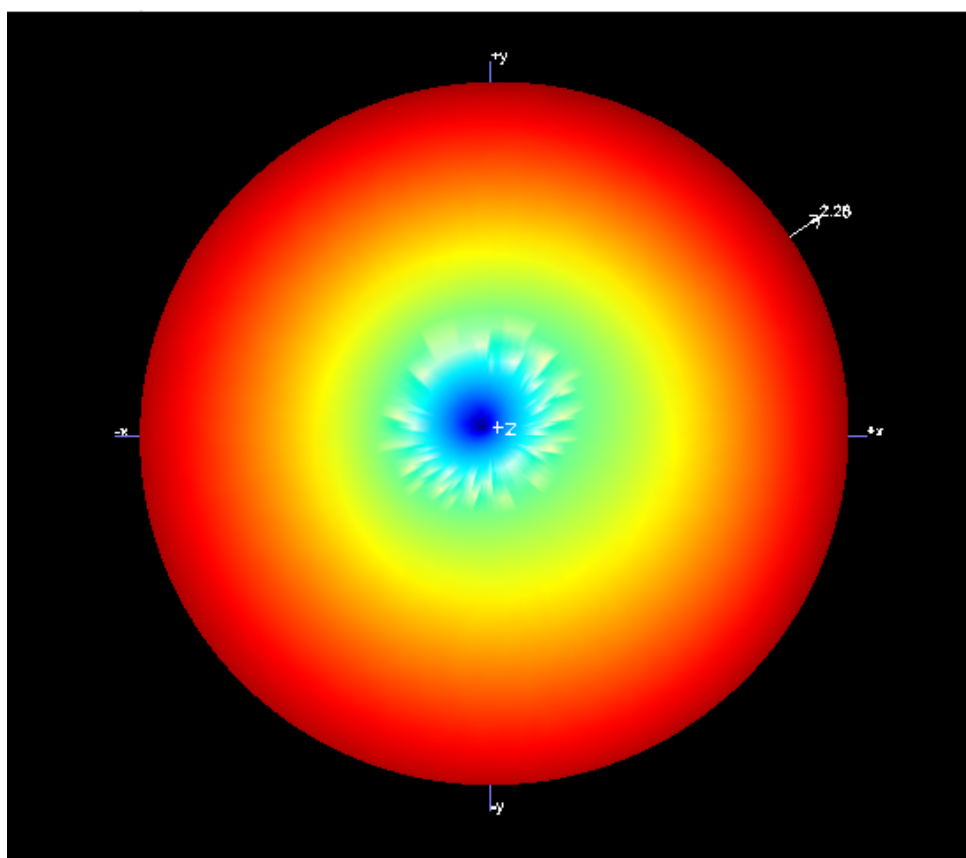
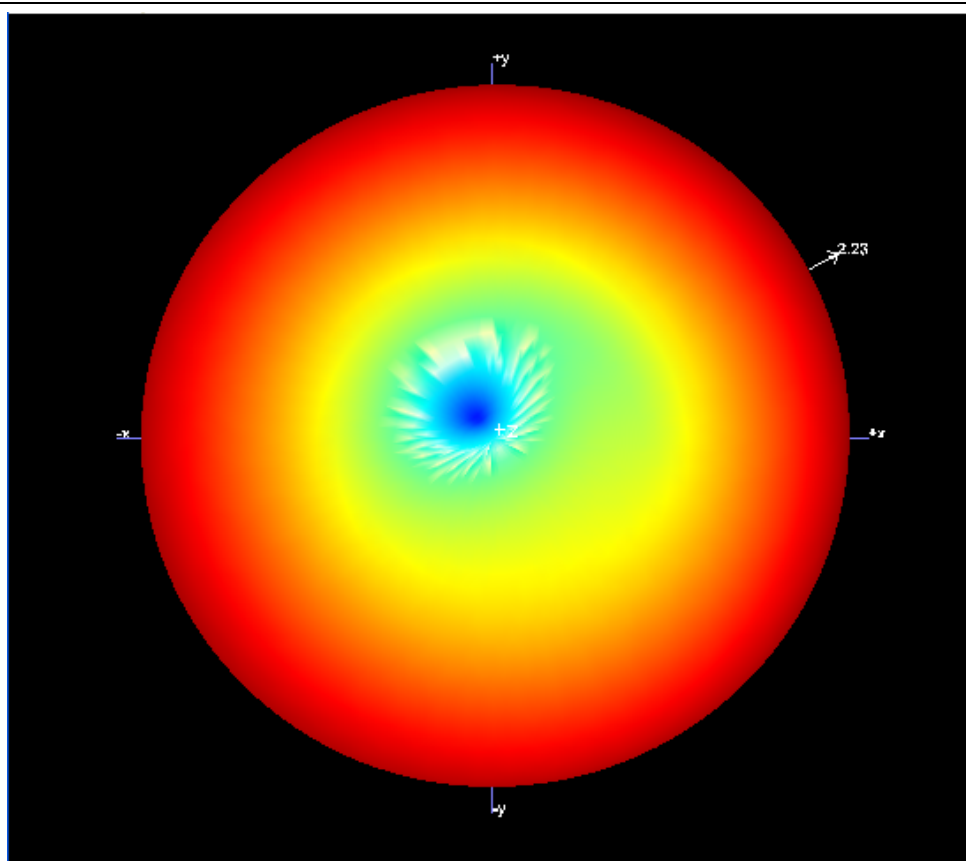
Frequency(GHz)	Peak Gain (dBi)
2.400	2.23
2.450	2.23
2.500	2.23

惠州市德亿科技有限公司
Huizhou DeYi Technology Co.,Ltd



惠州市德亿科技有限公司
Huizhou DeYi Technology Co.,Ltd





江阴市源达电工材料有限公司

JIANGYIN CITY YUANDA ELECTRICAL MATERIAL CO., LTD.

中国江苏省江阴市青阳镇南陈村 邮编 214401

Nachen, Qingyang Town, Jiangyin City 214400, Jiangsu, China

1. 适用范围:

Scope

本规格书制定了 50 Ω FEP 绝缘射频电缆 YD113 系列的结构和电气特性。

This specification covers the construction and the electrical properties of YD113 series of 50 Ω FEP Insulation Coaxial Cable.

2. 结构/Construction:

单位/Unit:mm

项目/Item		详细资料/Details
导体/Conductor	材料/Material	镀银铜线/Silver-coated Copper Wire
	构成(根/mm) Composition(No. /mm)	7/0.080
	标称直径/NOM. O. D	0.24 $\pm$ 0.03
绝缘层 /Insulation	材料/Material	聚全氟乙丙烯(自然色) /FEP(Natural)
	标称绝缘厚度/Nom. Thick. (mm)	0.23
	标称外径/NOM. O. D	0.70 $\pm$ 0.03
屏蔽层/Shield	材料/Material	镀锡铜线/Tinned annealed copper wire
	构成/Composition	0.05 单线编织/Single Braid of 0.05
护套/Jacket	材料/Material	聚全氟乙丙烯/FEP
	标称护套厚度 / Nom. Thick (mm)	0.10
	标称外径/Nom. O. D (mm)	1.13 $\pm$ 0.05
	颜色/Color	按与客户确认的颜色/According to corresponding have approved by the suppliers and customers

3. 电气特性(20℃时)/Electrical Properties(at 20℃)

项目/Item	单位/Unit	详细资料/Details
导体电阻/Conductor Resistance	Ω /km	Max. 581
绝缘电阻/Insulation Resistance	M Ω . km	Min. 200
耐压强度/Dielectric Strength	V(AC)/min	1000
静电容/Capacitance	pF/m	105

江阴市源达电工材料有限公司

JIANGYIN CITY YUANDA ELECTRICAL MATERIAL CO., LTD.

中国江苏省江阴市青阳镇南陈村 邮编 214401

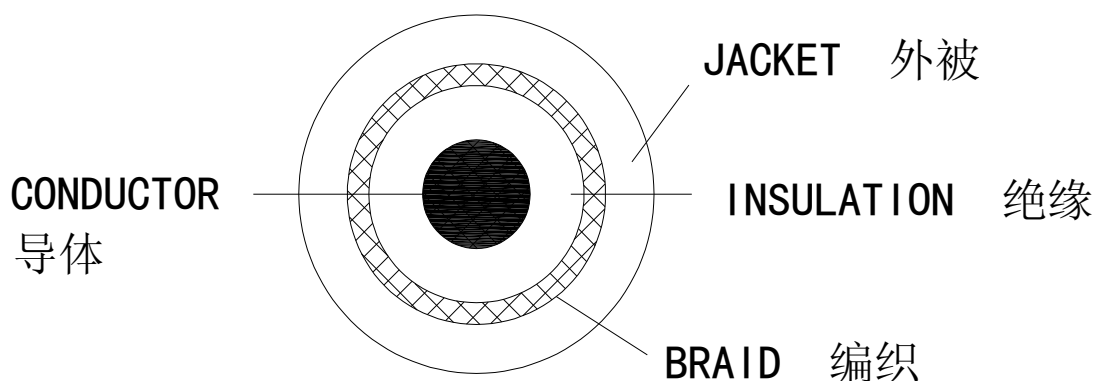
Nachen, Qingyang Town, Jiangyin City 214400, Jiangsu, China

特性阻抗 /Characteristic Impedance	Ω	50 ± 2.0	
衰减/Attenuation	dB/m	1GHz	2.20
		2GHz	3.10
		3GHz	3.90
		4GHz	4.50
		5GHz	5.00
		6GHz	5.50
驻波比/Standing wave (0-6GHz)	/	≤ 1.35	

4. 包装 Packing

标准单位包装长度为 1000 米/盘, 每盘最多允许 5 个接头, 接头最短长度 20 米, 在搬运过程中不能损坏包装.

Standard unit length of finished cable shall be 1000m on reel, frequency of joint max.5/reel, the mini length is 20m. The finished cable shall be packed not be damaged during transportation



本产品有时不适合车载用途的情况也有,所以使用前请先和本公司业务部门进行商谈.

This product is not suitable for automobile application in some cases. Please contact with our sales department before you use this product.

规格书完

End of specification

KB-6160/6160A/6160C (ANSI FR-4)

覆铜箔环氧玻纤布层压板

Features 特点

- 兼容紫外光阻挡及光学自动检查功能,可提高 PCB 生产效率与准确性
UVB and AOI (automatic optical inspection) compatible, so as to increase productivity and accuracy.
- 优良的耐热性能和机械性能
Excellent heat resistance and mechanical properties
- 符合 IPC-4101C/21 的规范要求
IPC-4101C/21 specification is applicable.

General Properties 一般特性

Test Item 测试项目	Unit 单位	Test Method (IPC-TM-650) 测试方法	Test Condition 处理条件	Specification (IPC-4101C) 规格值	Typical Value 典型值
Peel Strength (1 oz.) 铜箔剥离强度	N/mm	2.4.8	125℃	≥ 0.70	1.70
			Float 288℃ / 10 Sec	≥ 1.05	1.75
Thermal Stress 热应力	Sec	2.4.13.1	Float 288℃ / unetched	≥ 10	180
Bow / Twist 弯弓度/翘曲度	%	2.4.22.1	A	≤ 1.0	0.17 / 0.35
Flexural Strength 抗弯强度	N/mm ²	2.4.4	Warp	≥ 415	565
			Fill	≥ 345	416
Flammability 燃烧性	Rating	UL94	UL94	UL94 V-0	V-0
Glass Transition (T _g) 玻璃化转变温度	℃	2.4.25	E-2/105 DSC	≥ 130	135
Surface Resistivity 表面电阻	MΩ	2.5.17.1	C-96/35/90	$\geq 1.0 \times 10^4$	1.0×10^6
Volume Resistivity 体积电阻	MΩ-cm	2.5.17.1	C-96/35/90	$\geq 1.0 \times 10^6$	1.0×10^8
Dielectric Constant 介电常数	—	2.5.5.2	Etched/@1 MHZ	≤ 5.4	4.58
Loss Tangent 介质损耗	—	2.5.5.2	Etched/@1 MHZ	≤ 0.035	0.022
Arc Resistance 耐电弧性	Sec	2.5.1	D-48/50+D-0.5/23	≥ 60	125
Moisture Absorption 吸水率	%	2.6.2.1	D-24/23	≤ 0.35 (min0.51mm)	0.21
				≤ 0.80 (max0.51mm)	0.19
Z-Axis Expansion Z-轴热膨胀系数	ppm/℃	2.4.24	E-2/105 TMA	—	58/286
TD	℃	2.4.24.6	TGA	—	305
T-260	min	2.4.24.1	TMA	—	10

Remarks: Typical values for reference only 注: 典型值只作参考 Specimen Thickness: 1.6 mm 1/1 样品厚度: 1.6 mm 1/1

A = Keep the specimen originally without any process 保持原样,不作处理

C = Temperature and humidity conditioning 在恒温恒湿的空气中处理;

D = Temperature conditioning immersion in distilled water. 浸在恒温的水中处理

E = Immersing in distilled water with temperature control 在恒温的空气中处理;