

DONGGUAN HUANGJIE COMMUNICATION TECHNOLOGY CO., LTD.

东莞市皇捷通讯科技有限公司

SPECIFICATION FOR APPROVAL

承 认 书

客 户 CUSTOMER	益而益
客户料号 CUS. CODE	
客户机型 CUS. MODEL	
皇捷料号 HJ-Tech CODE	3N0401BK-061
产品名称 PRO. NAME	射频天线组件
规格描述 SPECIFICATION DESCRIPTION	2. 4G内置天线 OD0. 81银锡线黑色, P1端铆接三代端子, P2端焊接FPC, 裁线长L=35mm
制作日期 DATE	2023/7/18

供 应 商 / SUPPLIER		
制 作 PREPARED	审 核 CHECKER	核 准 APPROVER
S. He	何修明	

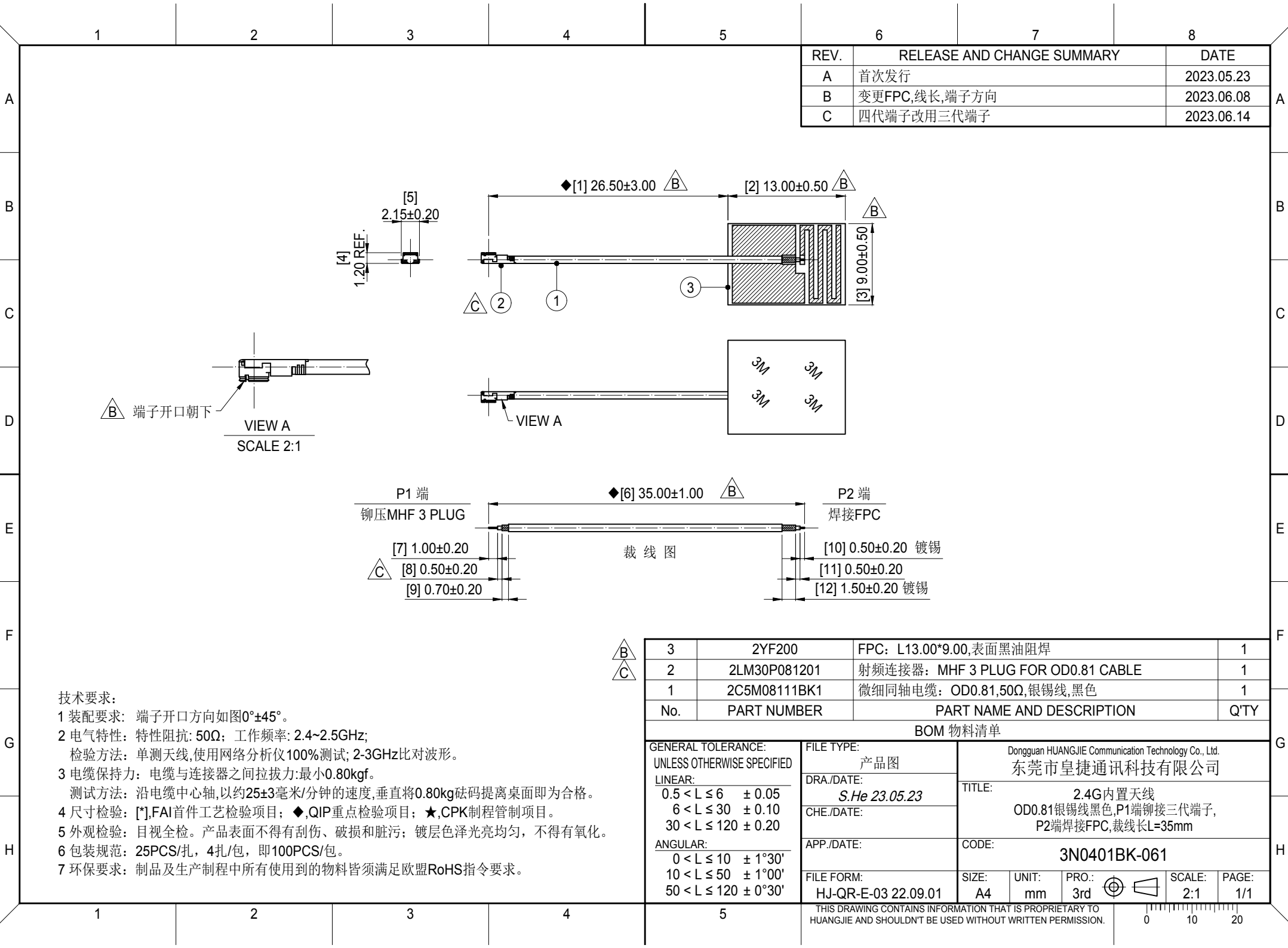
客 户 / CUSTOMER		
承 办 TRANSCOR	审 核 CHECKER	核 准 APPROVER

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规 格 书

Specification

RF0.81 系列

RF0.81 SERIES

50 Ω 射频电缆

50 Ω Coaxial Cable

1. 适用范围:

Scope

本规格书制定了 RF0.81 50 Ω FEP 绝缘射频电缆的结构和电气特性.This specification covers the construction and the electrical properties of RF0.81 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 plated Copper
	构成(根/mm)/Composition (No. /mm)	7/0.05 $\pm$ 0.005
	标称直径/NOM. O. D	0.15 $\pm$ 0.01
绝缘层 /Insulation	材料/Material	聚全氟乙丙烯/FEP
	标称外径/NOM. O. D	0.41 $\pm$ 0.03
	颜色/Color	透明
编织层/Braid Shield	材料/Material	镀锡铜线 Tinned copper
	构成/Composition	16/3/0.05 $\pm$ 0.005
	遮蔽率/ Shielding rate	$\geq$ 90%
	节距/Pitch	6.5
	标称直径/NOM. O. D	0.60 $\pm$ 0.03
护套/Jacket	材料/Material	聚全氟乙丙烯/FEP
	标称外径/NOM. O. D	0.81 $\pm$ 0.05
	颜色/Color	按客户要求

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

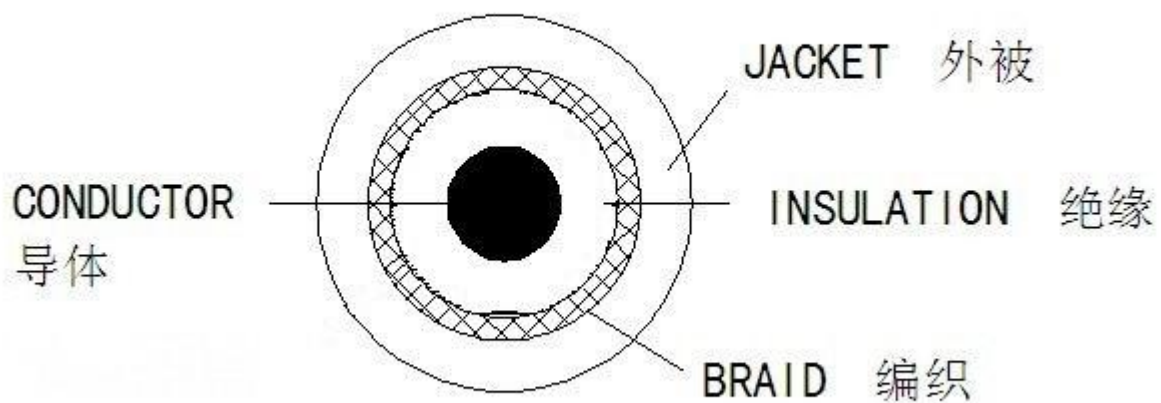
项目/Item	单位/Unit	详细资料/Details	
电容/Capacitance	pF/m	98	
特性阻抗/Conductor Resistance	Ω	50 $\pm$ 3.0	
耐压强度/Dielectric Strength	A. C V/1min	1000	
最大工作频率/Max. oper. frequency	MHz	6000	
抗拉强度/Tensile strength	kgf/mm ²	1.76	
工作温度范围/Operating Temp.	℃	-55to200	
衰减/Attenuation	/	频率 /Frequency (MHz)	dB/1m
		1000	$\leq$ 3.6
		2000	$\leq$ 5.1
		3000	$\leq$ 6.2
		4000	$\leq$ 7.5
		5000	$\leq$ 8.5
		6000	$\leq$ 9.4
驻波比/Standing wave (0-6GHz)	/	$\leq$ 1.4	

4. 包装 Packing

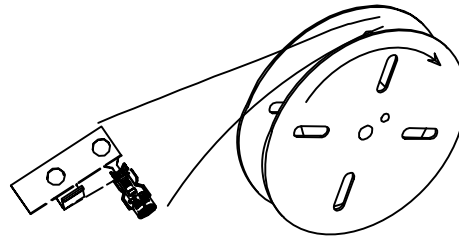
标准单位包装长度为1000米/盘, 每盘最多允许5个接头, 接头最短长度10米, 在搬运过程中不能损坏包装.

Standard unit for the 1000m/reel length of packaging, each set up to allow 5 joints, the joint shortest length of 10m, The finished cable shall be packed not be damaged during transportation

结构图/Configuration



Histroy	DR.	REV.	DATE
New drawing	Roy	A	2014/06/27



说明:

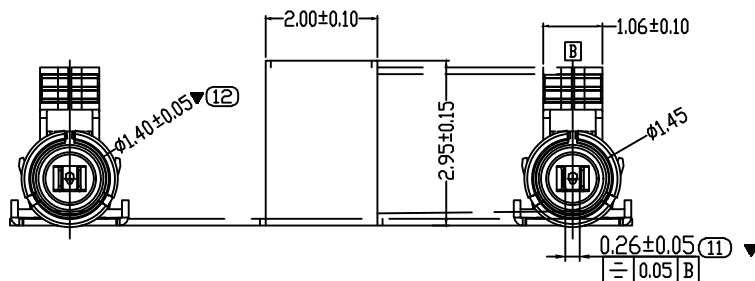
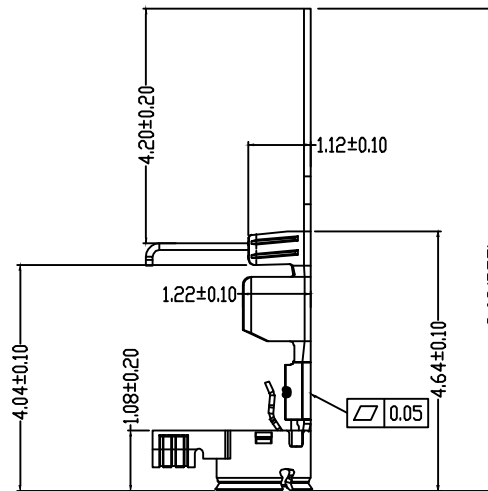
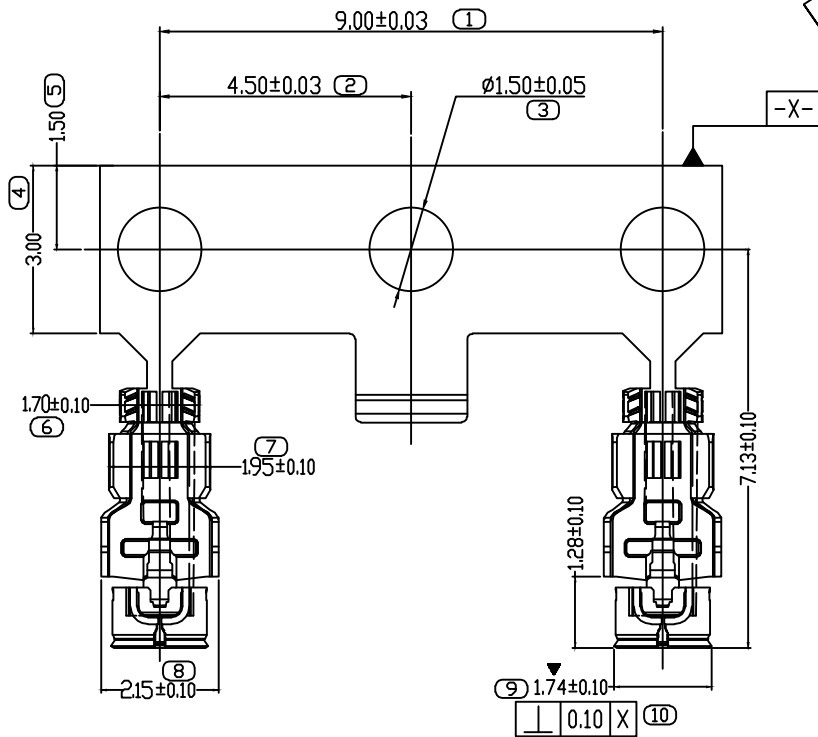
- 1, 塑胶材料: PBT, 白色, UL 94V-0;
端子材料: C5210-H, 整体镀金1~3u" 镍底50~80u";
外壳材料: C5210-H, 整体镀金1~3" 镍底50~80u";

2, 产品性能:

- 2,1, 接触阻抗: 20mΩ Max,
- 2,2, 耐电压: 200V AC, 1 Minute;
- 2,3, 绝缘阻抗: 500MΩ Min,
- 2,4, 插拔耐久性: 30次 Min,

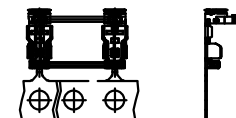
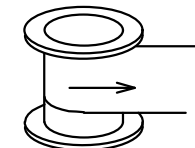
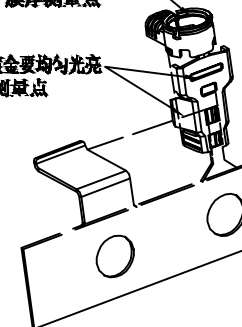
3, ▼ 为重点管控尺寸

- 4, 产品需满足48H的盐雾需求
- 5, 标准单位每卷包装3000pcs/盘, 每盘最多允许2个接头, 每卷最多缺 pin 10pcs 连续缺PIN不允许3个。



△ 杯口为接触区
膜厚测量点

外表面镀金要均匀光亮
膜厚测量点



产品拉出方向

X.±		UNITS: mm		HJ-Tech 东莞市皇捷通讯科技有限公司 DONGGUAN HUANGJIE COMMUNICATION TECHNOLOGY CO., LTD.			
.X± 0.10				PART NO.: 2LM30P081201		TITLE: RF3 REC CONN	
.XX± 0.05		MAT'L.: 1		APPD.:		DWG NO.:	
.XXX±0.02				RD.:			
X.'± 2'		FINISH: 7		DR.: Roy 09/18'14			
.X'±							

客 户

Customer : 益而益

客户料号

Customer P/N: /

产品名称

Part Name: WiFi FPC天线

皇捷料号

HJ P/N: 3N0401BK-061

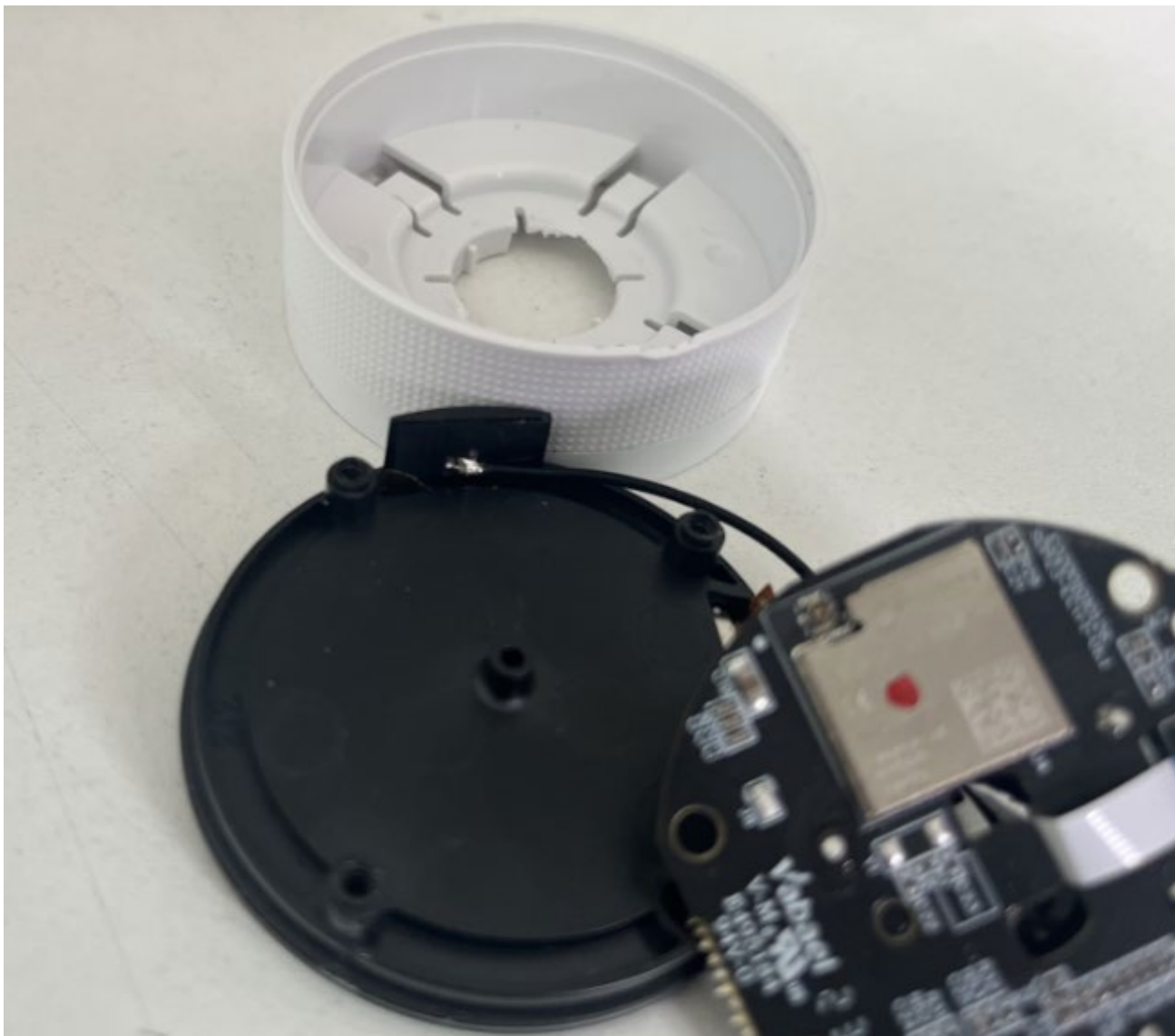
规格描述

Spec Description :FPC(2YF200)+0.81线+4代Ipex

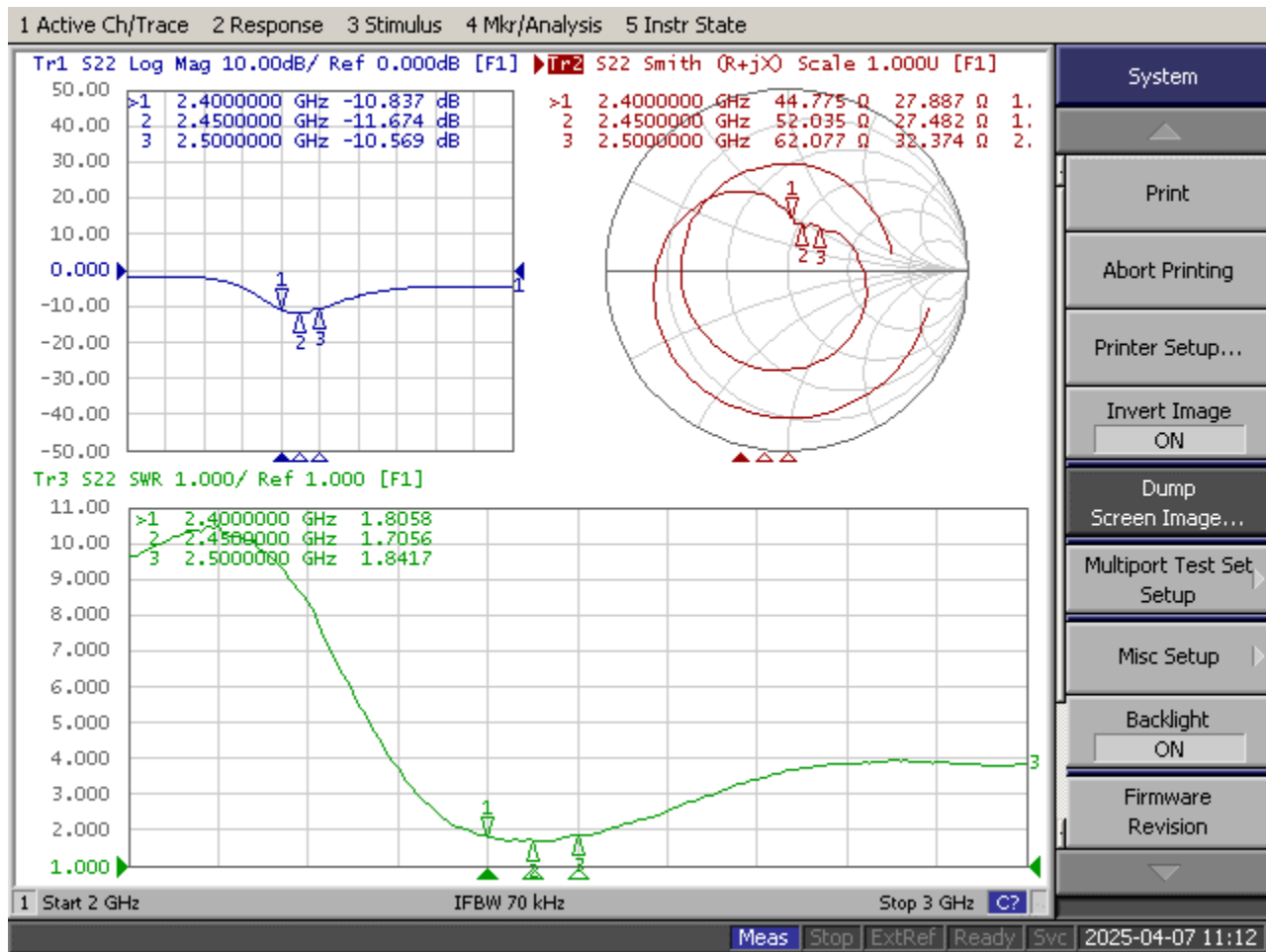
编制日期

Prepared Date: 2024/04/07

天线图



匹配图



暗室数据

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
Efficiency (dBi)	-3.74	-3.53	-3.53	-3.52	-3.43	-3.42	-3.35	-3.28	-3.36	-3.34	-3.42
Gain (dBi)	0.21	0.33	0.17	0.08	0.21	1.00	0.24	0.39	0.37	0.26	0.19
Efficiency (%)	42.24	44.33	44.34	44.47	45.44	45.55	46.27	47.03	46.08	46.36	45.49
Directivity (dB)	5.95	5.86	5.70	5.60	5.63	5.66	5.75	5.86	5.88	5.95	5.96
Peak Gain Position (Theta)	133.00	133.00	132.00	132.00	132.00	132.00	132.00	132.00	132.00	132.00	131.00
Peak Gain Position (Phi)	100.00	99.00	98.00	98.00	98.00	97.00	97.00	96.00	96.00	96.00	96.00
Efficiency ThetaPol (%)	26.14	27.41	27.42	27.55	28.16	28.21	28.63	29.06	28.47	28.76	28.28
Efficiency PhiPol (%)	16.10	16.92	16.92	16.92	17.28	17.34	17.64	17.97	17.62	17.60	17.21
Upper Hem. Efficiency (%)	16.59	17.19	17.25	17.32	17.32	17.25	17.09	16.91	16.55	16.41	16.17
Lower Hem. Efficiency (%)	25.65	27.13	27.09	27.15	28.12	28.30	29.19	30.12	29.54	29.96	29.33

