

SPECIFICATION FOR APPROVAL/产品承认书

Manufacturer's Address 制造商地址:	1101, Tower A, Building 6, Shenzhen International Innovation Valley, Dashi 1st Rd, Nanshan, Shenzhen, China
Customer P/N. 客户料号:	
Product Description 产品描述:	APM835-W-10-90 WIFI/BT天线
FIBOCOM P/N 广和通料号:	GHT-065A (RB版)
Manufacturer 制造商:	深圳市广和通无线股份有限公司 FIBOCOM Wireless Inc.
Approve Date 承认日期:	2025/10/27

Customer Sign and Seal/客户签章

Change the content/变更内容	Version/版本	Date/日期
初版	RA	2024/7/19
变更出线方向	RB	2024/8/13

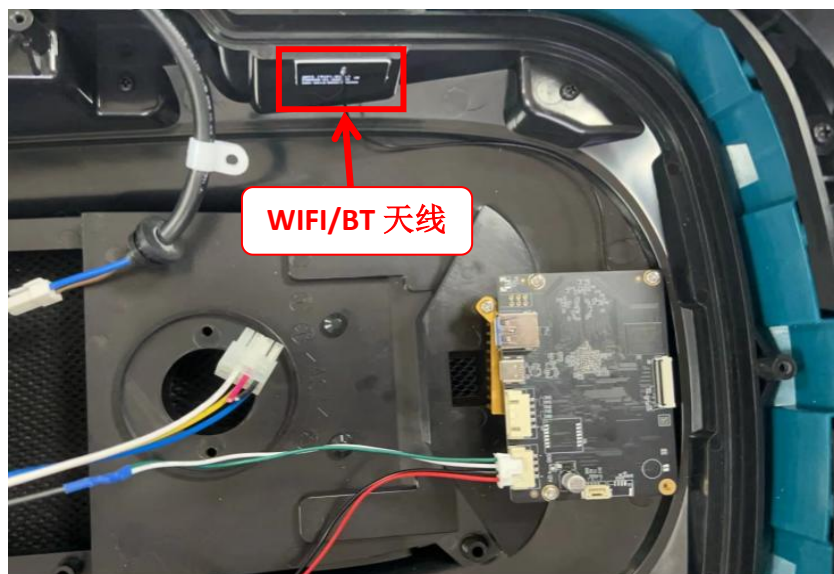
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1. Antenna Specification/天线技术参数

1.1: Electrical Specification/电气特性	
Freq.Range/频段范围（MHz）	2400-2500： 5150-5850
Impedance/阻抗（Ω）	50
VSWR/驻波比	≤3
Directional/辐射方向	Omni directional
Polarization/极化方式	Linear
Gain/增益（dBi）	见测试数据
1.2: Mechanical Specification/机械指标	
Material/材质	PCB
RF Cable Type/射频线型号	RF113
Connector Type/连接器类型	一代端子
1.3: Environmental Specification/环境指标	
Operation temp/工作温度	-40℃～+85℃
Long-term storage temperature/长期储存温度	+19℃～+23℃

2. Antenna Picture and Installation Instructions/天线图片及安装说明

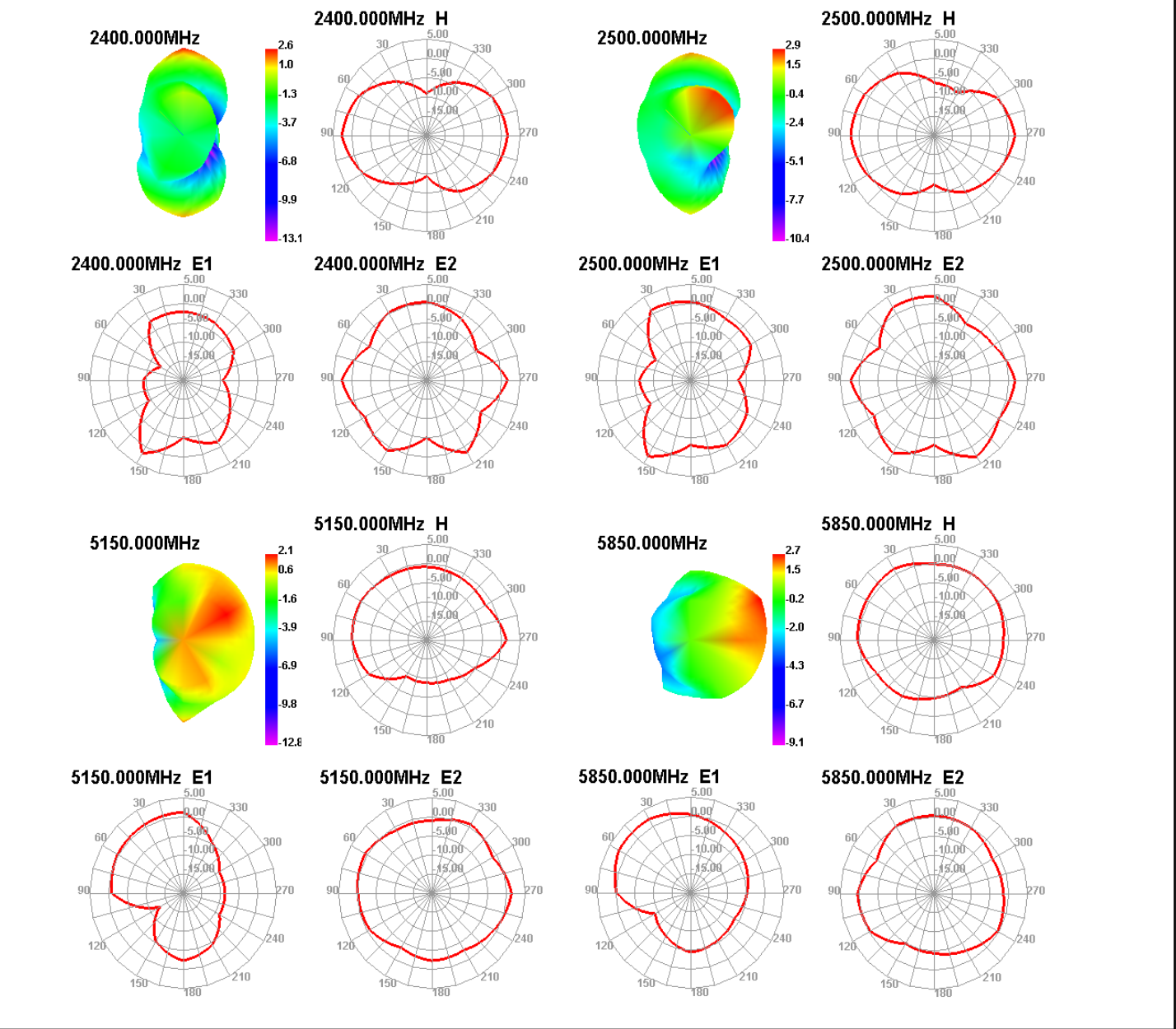


3.Test Report/测试报告

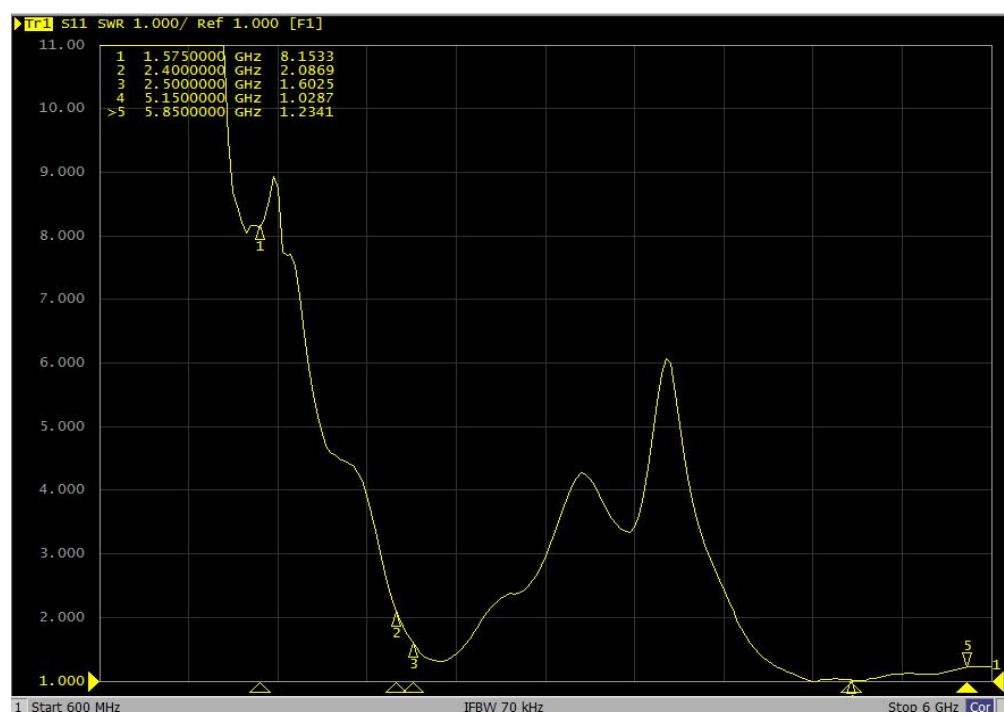
3.1: Antenna efficiency and gain/天线效率与增益

Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
2400	61.79	2.6	5150	64.16	2.08	5500	60.39	2.64
2410	61.59	2.98	5160	63.31	1.99	5510	59.31	2.37
2420	62.13	2.9	5170	62.85	1.92	5520	64.72	2.68
2430	62.16	2.9	5180	63.42	1.96	5530	63.07	2.55
2440	65.39	2.98	5190	63.15	1.85	5540	63.11	2.64
2450	64.11	2.98	5200	64.27	1.87	5550	63.6	2.62
2460	63.56	2.88	5210	65.15	1.79	5560	63.07	2.54
2470	63.27	2.82	5220	65.67	1.77	5570	62.77	2.4
2480	64.94	2.82	5230	66.67	1.74	5580	61.15	2.35
2490	66.4	2.79	5240	63.04	1.53	5590	60.99	2.67
2500	65.65	2.87	5250	66.13	1.87	5600	59.63	2.36
			5260	64.62	1.79	5610	59.75	2.31
			5270	64.04	1.71	5620	59.05	2.27
			5280	63.86	1.73	5630	59.91	2.34
			5290	64.48	1.84	5640	61.65	2.46
			5300	62.61	2.12	5650	62.1	2.46
			5310	64.2	2.2	5660	63.67	2.63
			5320	67.73	2.41	5670	63.05	2.42
			5330	64.46	2.16	5680	64.62	2.51
			5340	64.24	2.43	5690	64.7	2.51
			5350	63.03	2.32	5700	66.45	2.58
			5360	64.19	2.68	5710	63.3	2.47
			5370	63.03	2.74	5720	64.27	2.46
			5380	64.07	2.84	5730	65.28	2.65
			5390	66.28	2.93	5740	64.38	2.68
			5400	62.01	2.77	5750	63.73	2.7
			5410	62.37	2.92	5760	63.12	2.66
			5420	61.39	2.81	5770	64.01	2.76
			5430	63.85	2.99	5780	61.53	2.56
			5440	61.74	2.53	5790	64.52	2.68
			5450	62.59	2.63	5800	64.94	2.69
			5460	63.44	2.69	5810	65.7	2.75
			5470	62.27	2.87	5820	65.67	2.82
			5480	62.74	2.86	5830	62.98	2.7
			5490	61.16	2.67	5840	65	2.83
						5850	64.94	2.72

3.2: Directional diagram/方向图

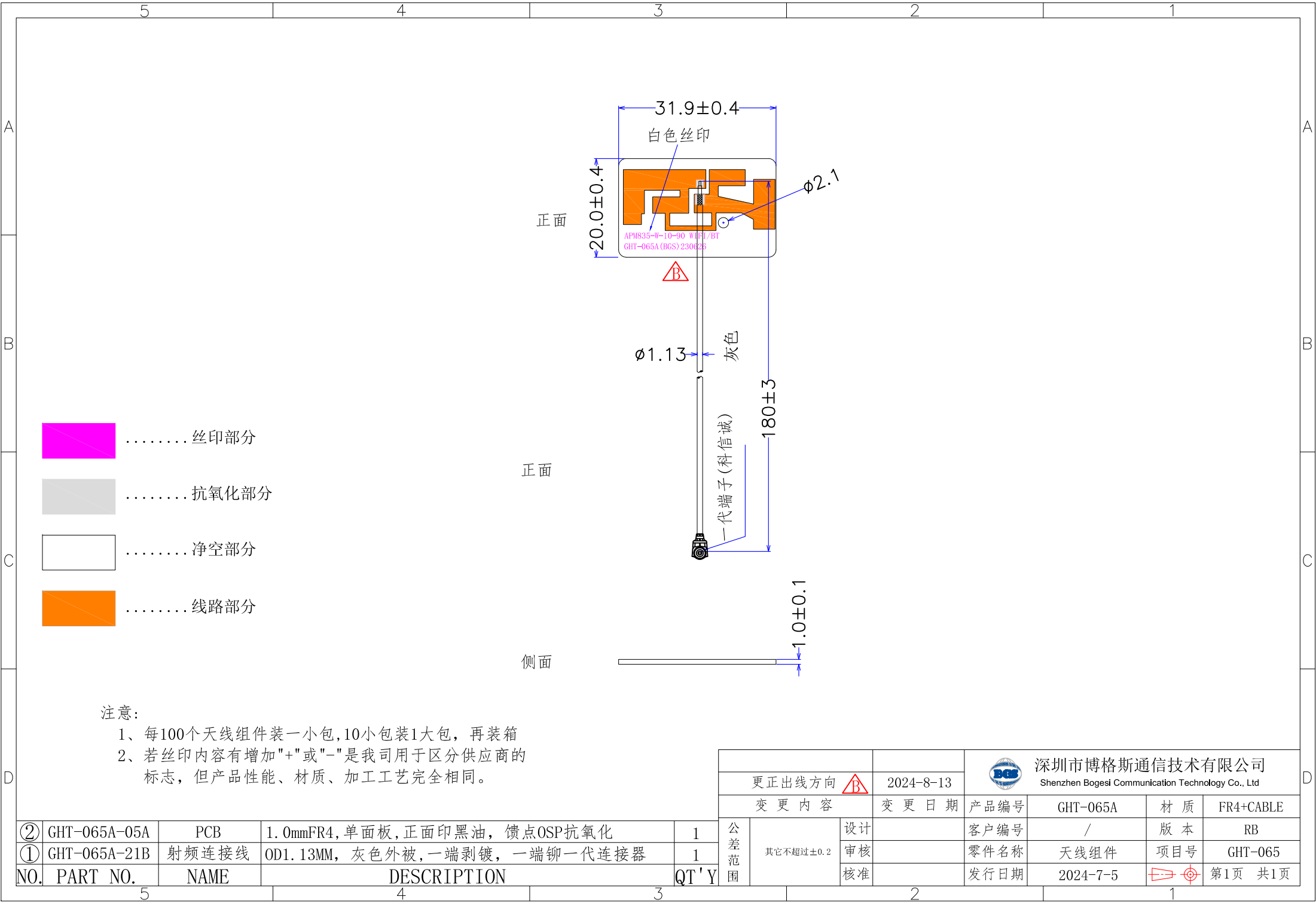


3.3: VSWR/驻波图



3.4: Active test data/有源测试数据

Band	Channel	TRP	TIS
		11G/6M	11G/54M
2.4G	Low	19.22	-70.8
	Mid	18.97	-71.5
	High	18.5	-70.8
		11A/6M	11A/54M
5G	Low	17.51	-71.9
	Mid	17.55	-72.3
	High	18.7	-73

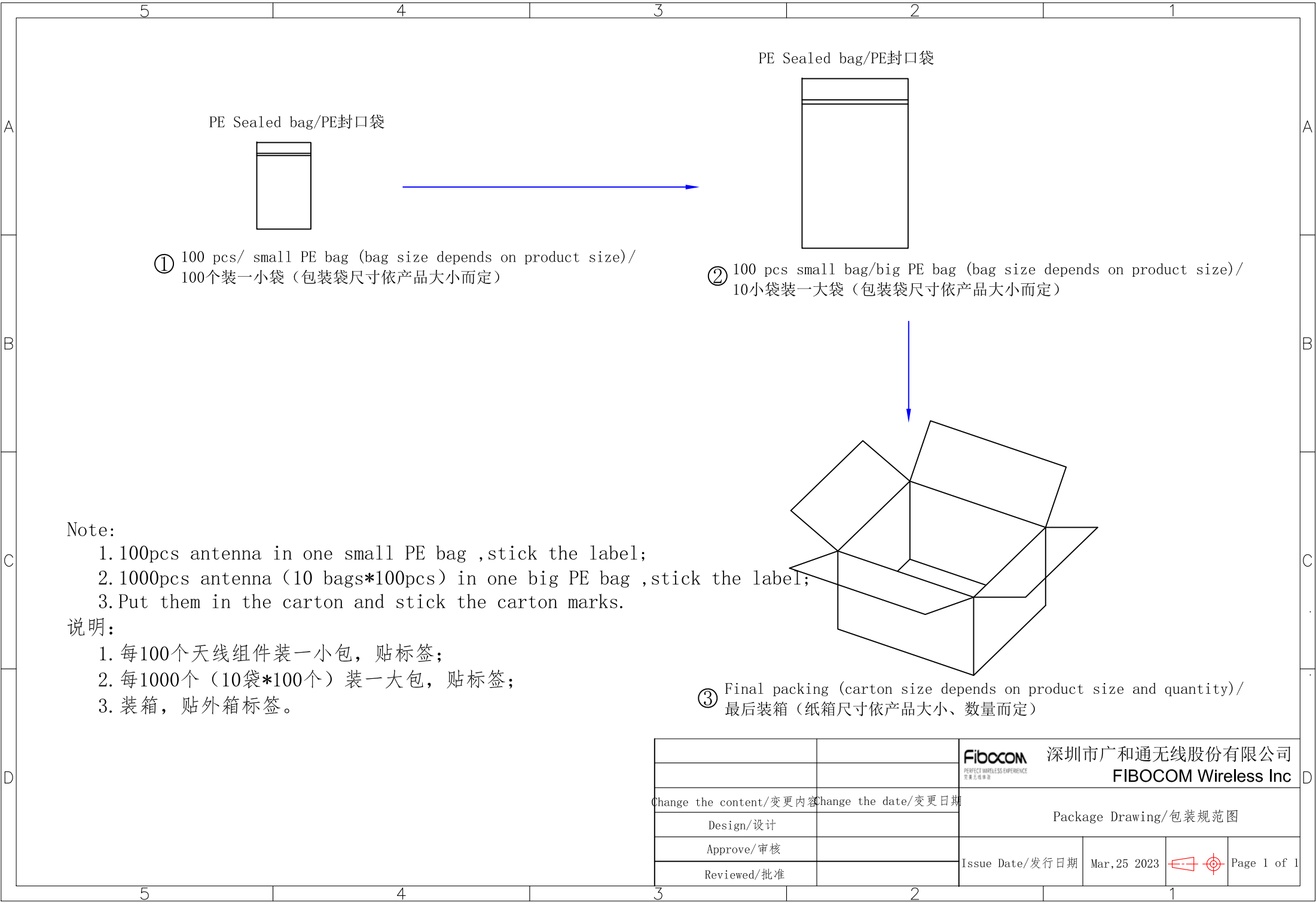


注意:

- 1、每100个天线组件装一小包,10小包装1大包,再装箱
- 2、若丝印内容有增加"+"或"-"是我司用于区分供应商的标志,但产品性能、材质、加工工艺完全相同。

②	GHT-065A-05A	PCB	1.0mmFR4,单面板,正面印黑油,馈点OSP抗氧化	1
①	GHT-065A-21B	射频连接线	OD1.13MM,灰色外被,一端剥镀,一端铆一代连接器	1
NO.	PART NO.	NAME	DESCRIPTION	QT'Y

更正出线方向		2024-8-13		深圳市博格斯通信技术有限公司 Shenzhen Bogesi Communication Technology Co., Ltd			
变更内容		变更日期	产品编号	GHT-065A	材质	FR4+CABLE	
其它不超过±0.2		设计	客户编号	/	版本	RB	
		审核	零件名称	天线组件	项目号	GHT-065	
		核准	发行日期	2024-7-5		第1页 共1页	



① 100 pcs/ small PE bag (bag size depends on product size)/
100个装一小袋（包装袋尺寸依产品大小而定）

② 1000 pcs small bag/big PE bag (bag size depends on product size)/
10小袋装一大袋（包装袋尺寸依产品大小而定）

Note:

- 1.100pcs antenna in one small PE bag ,stick the label;
- 2.1000pcs antenna (10 bags*100pcs) in one big PE bag ,stick the label;
- 3.Put them in the carton and stick the carton marks.

说明:

- 1. 每100个天线组件装一小包，贴标签；
- 2. 每1000个（10袋*100个）装一大包，贴标签；
- 3. 装箱，贴外箱标签。

③ Final packing (carton size depends on product size and quantity)/
最后装箱（纸箱尺寸依产品大小、数量而定）

		Fibocom 深圳市广和通无线股份有限公司 PERFECT WIRELESS EXPERIENCE FIBOCOM Wireless Inc 完美无线体验			
Change the content/变更内容	Change the date/变更日期	Package Drawing/包装规范图			
Design/设计					
Approve/审核					
Reviewed/批准		Issue Date/发行日期	Mar,25 2023		Page 1 of 1

6.ROHS Report/ROHS报告

Product Description 产品描述		APM835-W-10-90 WIFI/BT天线	FIBOCOM P/N 广和通料号		GHT-065A			Declaration Date 宣告日期		2024/11/20
No. 序号	Part name 部件名称	Homogeneous Material Name 均质材料名称	The homogeneous material contains the value of RoHS restricted substance (ppm) 均质物料内含有RoHS限制物质的量值 (ppm)						Certification number 检测报告编号	Test date 检测日期
			Cd	Pb	Hg	Cr+6	PBB	PBDE		
1	PCB	FR4	ND	17	ND	ND	ND	ND	CANEC23007800423	2023/8/15
2		Solder resist ink/阻焊油墨	ND	ND	ND	ND	ND	ND	C240226055001-1	2024/2/29
3		Text ink/文字油墨	ND	ND	ND	ND	ND	ND	C240226055002-1	2024/2/29
4	Wire 线材	RF coaxial cable/RF同轴电缆	ND	ND	ND	ND	ND	ND	SZXEC24002490603	2024/8/8
5	Terminals 端子	Gold plating/电镀金	ND	ND	ND	ND	ND	ND	A2240410234101001E	2024/7/11
6		PBT/胶芯	ND	2.55	ND	ND	ND	ND	A2240126395101003E	2024/3/13
7		Nickel plating/镍镀层	ND	ND	ND	ND	ND	ND	A2240410234101002E	2024/7/11

Notes:

Material analysis expansion table is similar to our company's machine type BOM, which describes the composition of each material provided by the supplier, and then conducts RoHS control on each component (or the supplier shall conduct RoHS compliance management on his supplier, and provide tripartite inspection certificate).

A complete material analysis expansion table that includes:

- 1. Material expansion table: component composition decomposition
- 2. Third-party verification report of each component

说明:

材质分析展开表类似于我们公司的机种BOM，就供应商提供的每个物料进行组成说明，然后就每一种组成进行ROHS控制（或者说供应商要对他的供应商进行ROHS符合性管理，提供每三方检测证明）。

一份完整的材质分析展开表，它包括:

- 1 材质展开表:零件组成分解
- 2 各组成的第三方验证报告