



SPECIFICATION FOR APPROVAL/产品承认书

Customer Name

客户名称:

深圳市广和通无线股份有限公司

Customer P/N.

客户料号:

Product Description

产品描述:

APM665-GL-00-50 LORA 868 线长70mm

BGS P/N

博格斯料号:

GHT-068E (ver.RA)

Manufacturer

制造商:

深圳市博格斯通信技术有限公司

Approve Date

承认日期:

2025年5月23日

BGS Sign and Seal/供应商签章	Customer Sign and Seal/客户签章

Change the content/变更内容	Version/版本	Date/日期
First Release/初版	RA	2025/5/23

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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）	863~928MHz
Impedance/阻抗（Ω）	50
VSWR/驻波比	≤2
Directional/辐射方向	Omni directional
Polarization/极化方式	Linear
Peak Gain/峰值增益（dBi）	1.71

1.2: Mechanical Specification/机械指标

Material/材质	FPC
RF Cable Type/射频线型号	RF1.13
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℃
storage temperature/储存温度	-40℃~+85℃



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

2.1: Antenna Picture/天线图片



2.2: Installation Instructions/安装说明



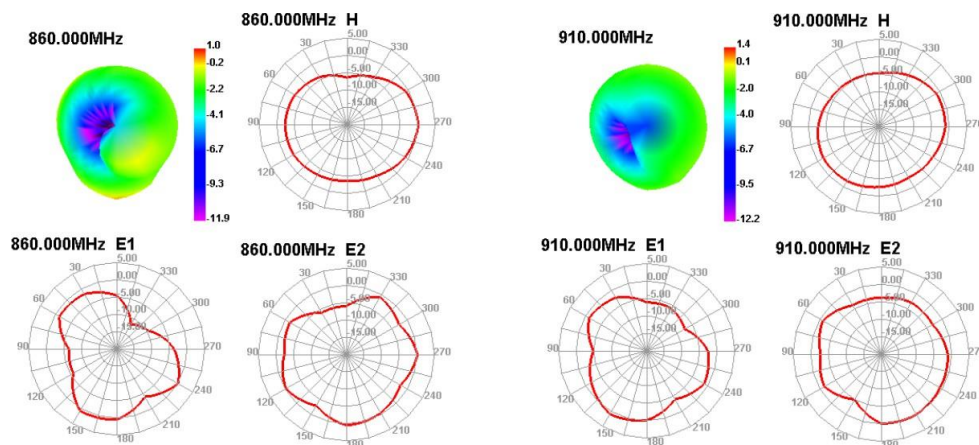


3. Test Report/测试报告

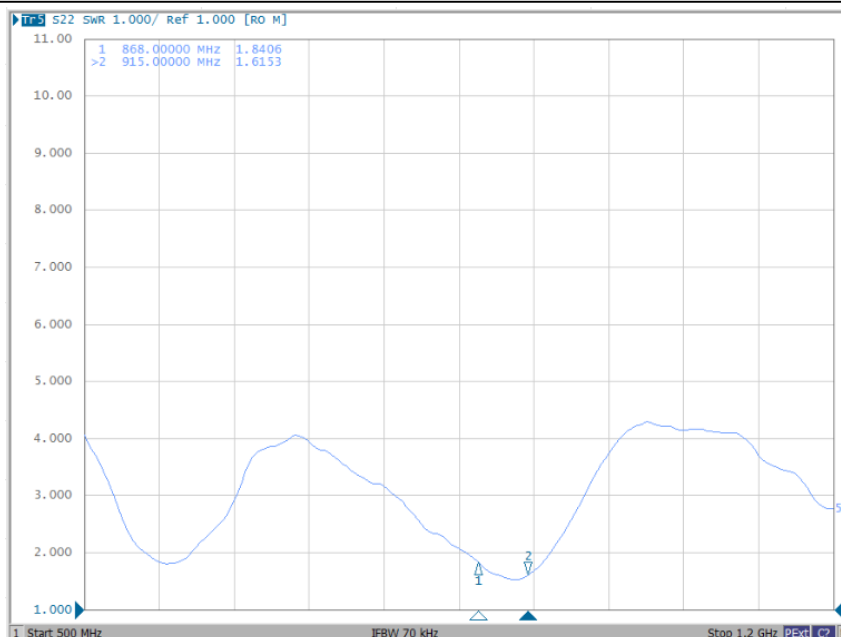
3.1: Antenna efficiency and gain/天线效率与增益

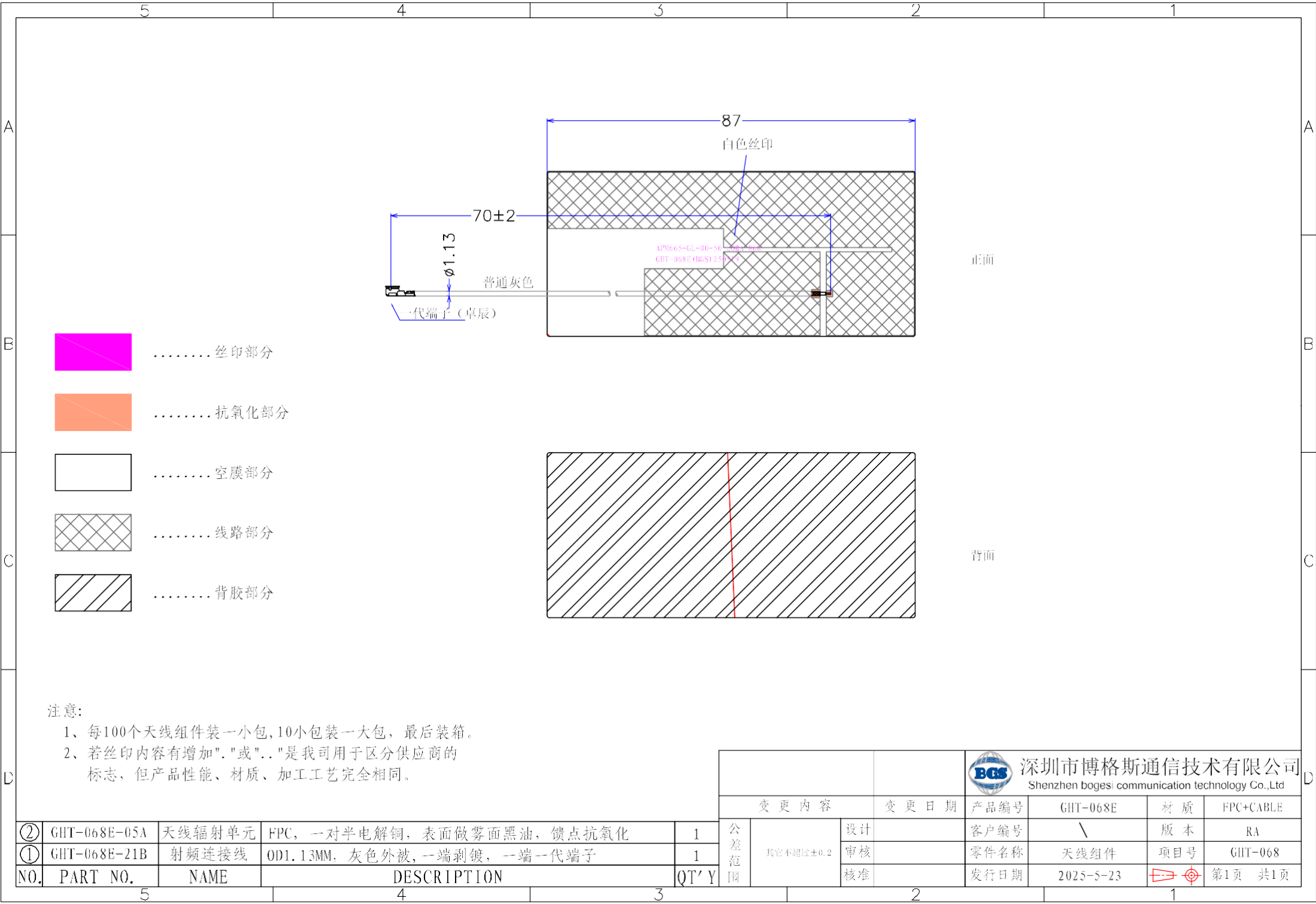
Freq (MHz)	Effi (%)	Gain (dBi)
840	53.23	0.69
850	56.47	1.04
860	58.08	1.05
870	60.97	1.02
880	63.52	1.04
890	64.61	1.2
900	63.98	1.48
910	59.13	1.44
920	59.07	1.71
930	53.76	1.2
940	51.28	1.03
950	50.51	0.63

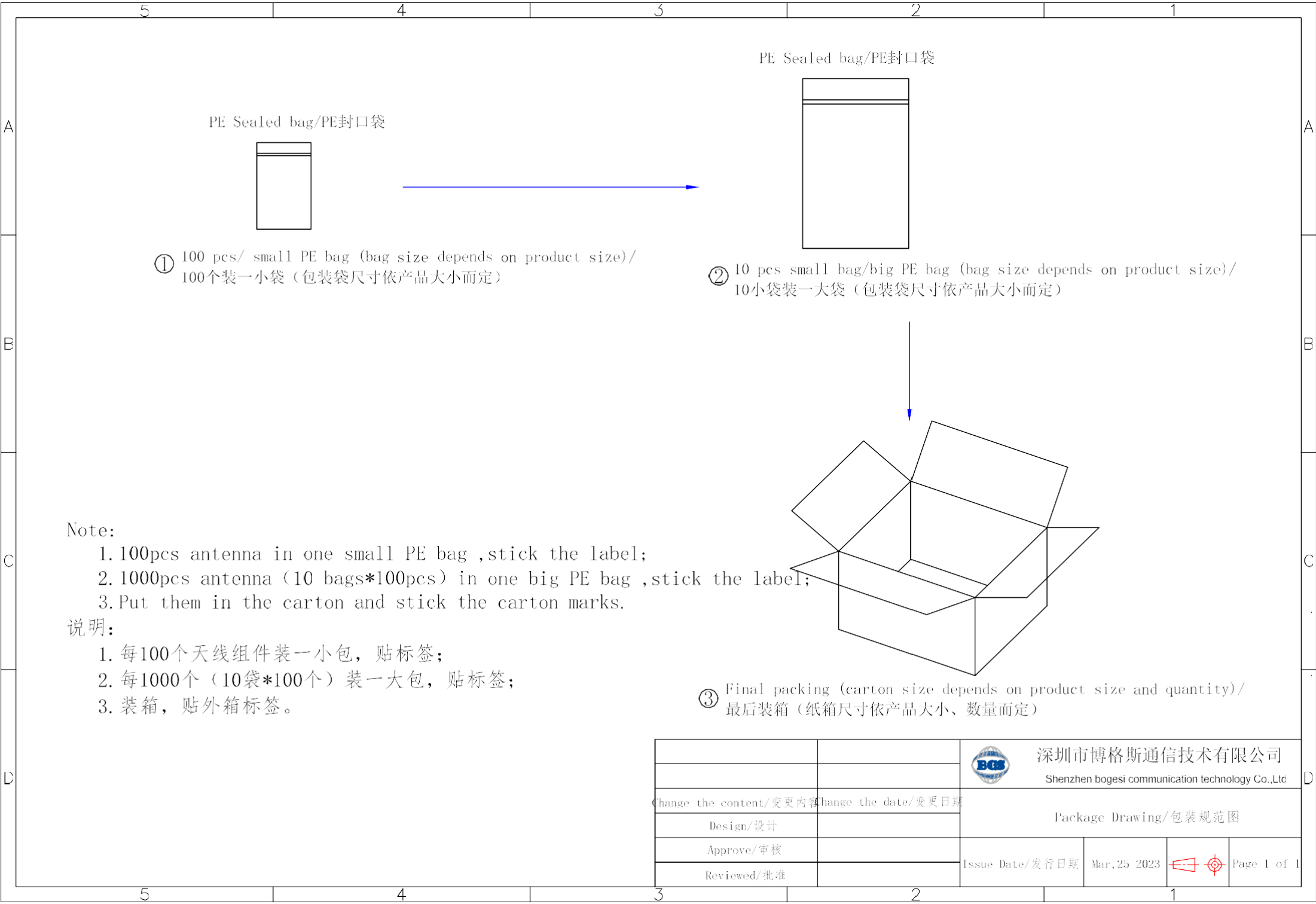
3.2: Directional diagram/方向图



3.2: VSWR/ 驻波图

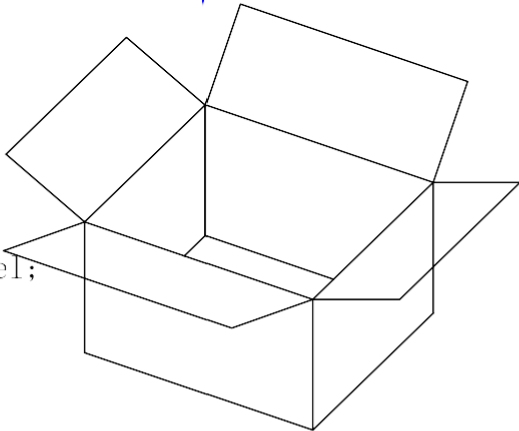






① 100 pcs/ small PE bag (bag size depends on product size)/
100个装一小袋（包装袋尺寸依产品大小而定）

② 10 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）



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）

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。

				深圳市博格斯通信技术有限公司	
				Shenzhen bogesi communication technology Co.,Ltd	
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



5.ROHS Report/ROHS报告

Product Description 产品描述		APM665-GL-00-50 LORA 868 线长 70mm	BGS P/N 博格斯料号	GHT-068E			Declaration Date 宣告日期		2025/5/23	
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	Electrolytic flexible copper-clad foil substrate	ND	ND	ND	ND	ND	ND	SHAEC24028809006	2024/12/20
2		Solder resist ink/阻焊油墨	ND	ND	ND	ND	ND	ND	ETR24600712	2024/6/13
3		3M glue/3M胶	ND	ND	ND	ND	ND	ND	SHAEC24027480901	2024/12/6
4	Wire 线材	RF coaxial cable/RF同轴电缆	ND	ND	ND	ND	ND	ND	SZXEC24002490604	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	ND	ND	ND	ND	ND	A2250134628103007E	2025/3/12
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