



SPECIFICATION FOR APPROVAL/产品承认书

Customer Name

客户名称: 惠州豪成科技有限公司

Customer P/N.

客户料号: HS331B

Product Description

产品名称: WiFi_Ant

BGS P/N

博格斯料号: HQK-002

Manufacturer

制造商: Shenzhen bogesi communication technology co., ltd

Address

地址: 3 / F, Block B, sibiono Gene Therapy Park, No.19, Sci-Tech 1st Road,

Approve Date

承认日期: 2025.11.28

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 edition/初版	RA	2025.11.28

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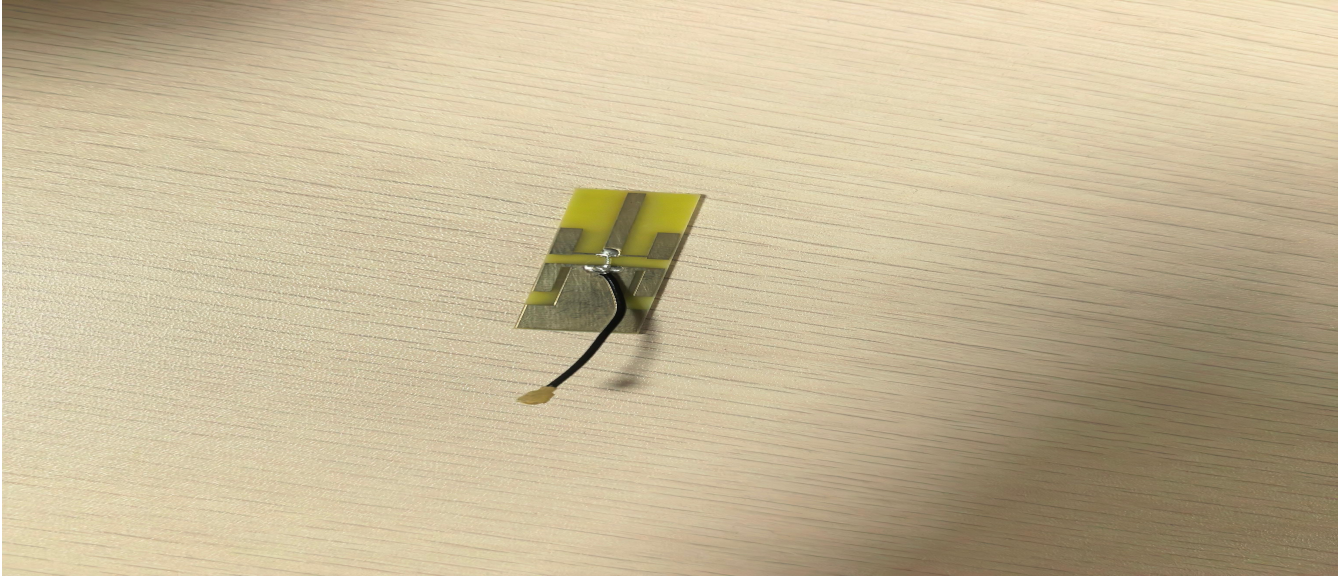
1.Antenna Specification/天线技术参数

1.1: Electrical Specification/电气特性	
Freq.Range/频段范围（MHz）	2400-5900
Impedance/阻抗（Ω）	
VSWR/驻波比	<3
Directional/辐射方向	全向
Polarization/极化方式	线极化
Gain/增益（dBi）	7.5
1.2: Mechanical Specification/机械指标	
Material/材质	PCB
RF Cable Type/射频线型号	N/A
Connector Type/连接器类型	N/A
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（下图天线仅作参考）

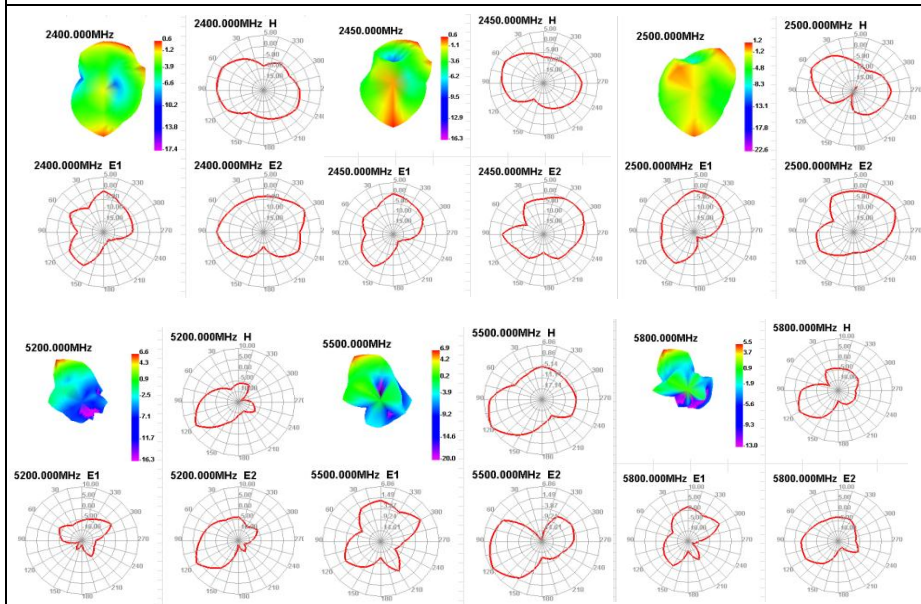


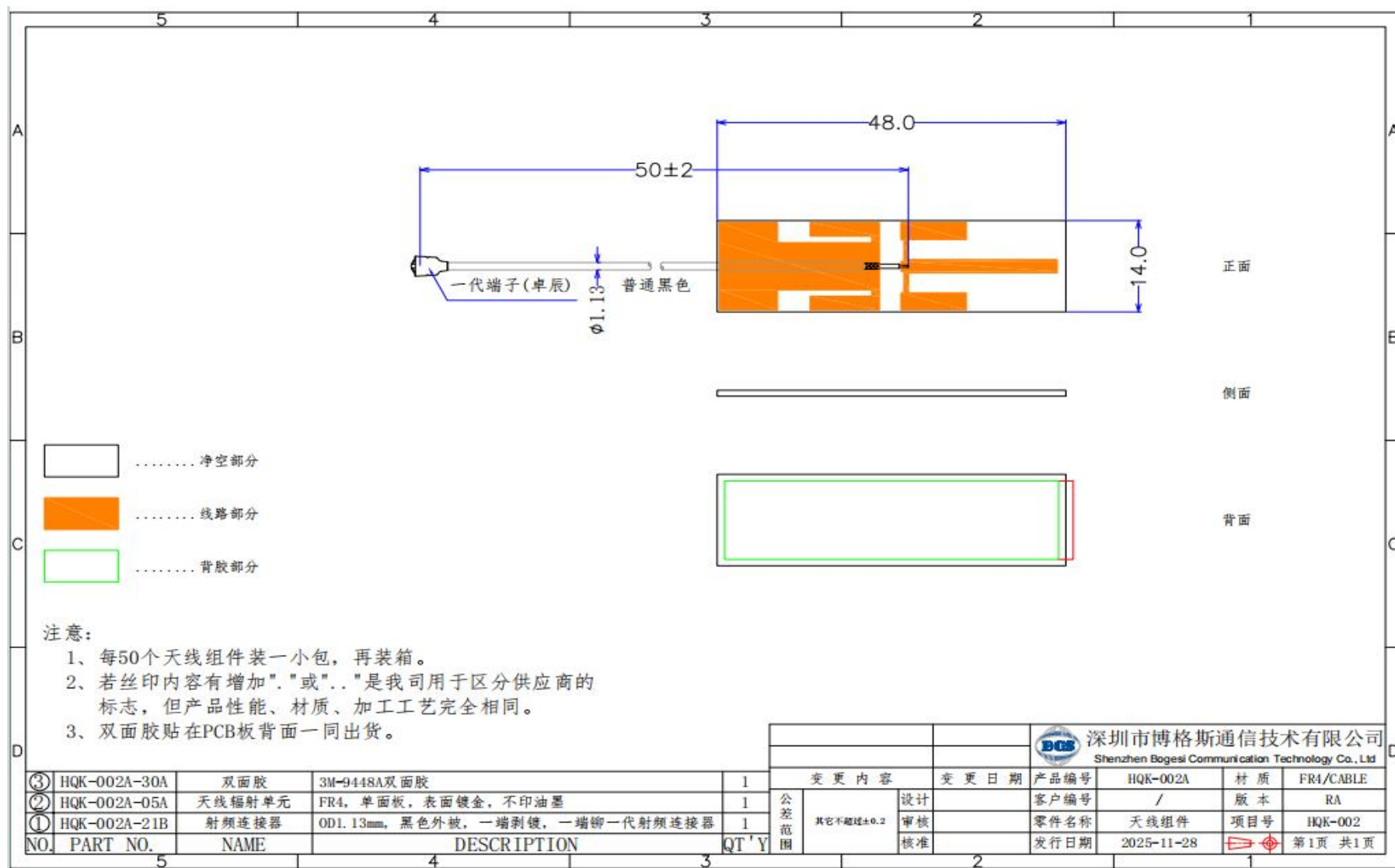
3.Test Report/测试报告

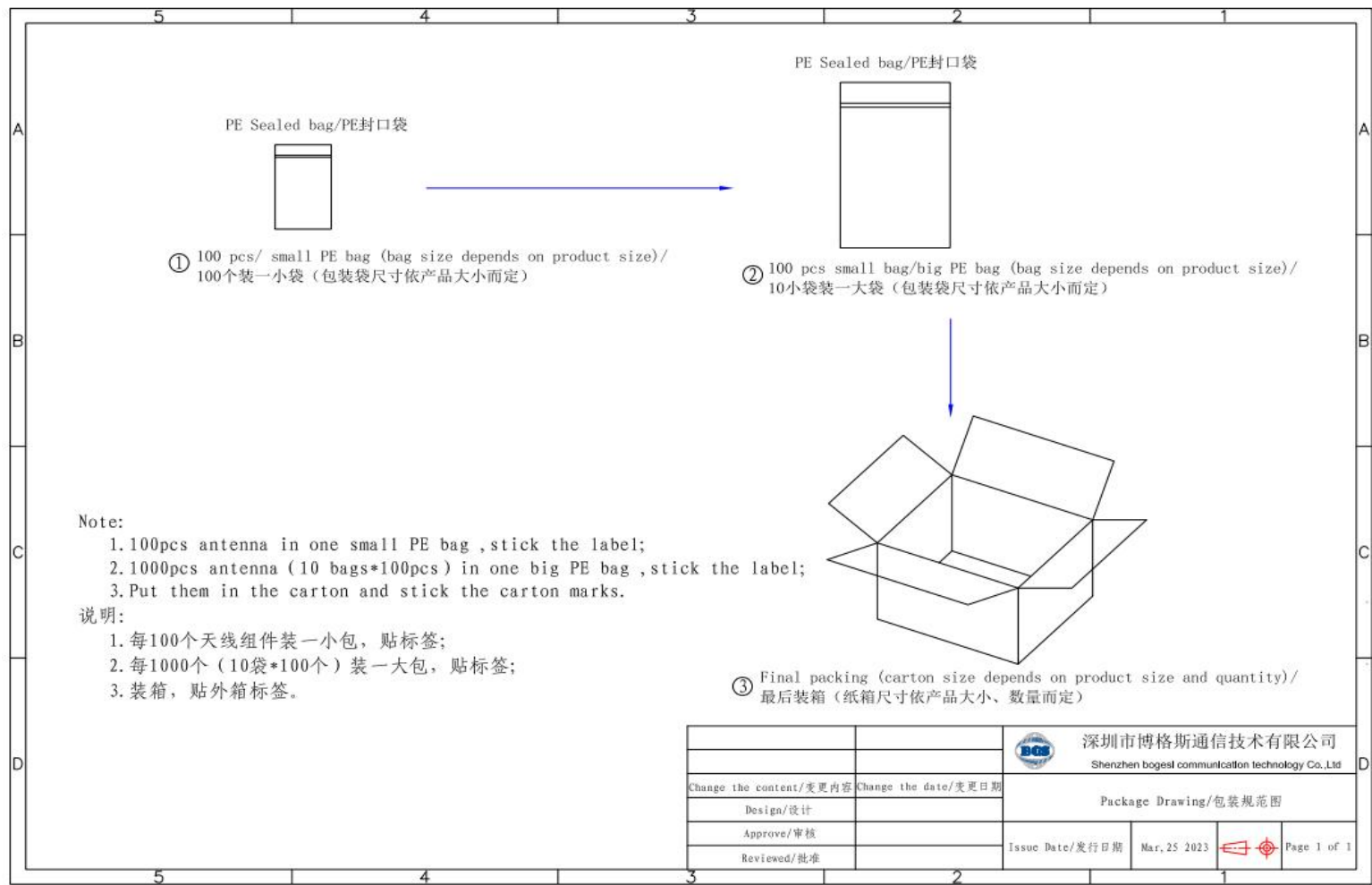
3.1:无源数据

Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
2400	41.46	0.58	5100	48.4	7.28	5520	52.99	6.64
2410	42.98	0.76	5120	48.9	7.22	5540	53.46	6.88
2420	43.52	0.72	5140	47.46	7	5560	52.09	6.69
2430	44.26	0.94	5160	50.3	7.03	5580	50.27	6.49
2440	45.11	0.96	5180	46.15	6.49	5600	53.55	6.63
2450	41.48	0.56	5200	45.7	6.62	5620	48.33	6.15
2460	40.83	0.38	5220	49.09	7	5640	52.5	6.4
2470	40.32	0.22	5240	46.66	6.82	5660	56.4	6.53
2480	40.86	0.88	5260	50.43	7.16	5680	50.92	6.04
2490	41.1	1.22	5280	52.24	7.32	5700	51.1	6.15
2500	40.81	1.15	5300	53.53	7.32	5720	49.75	5.86
5500	52.84	6.86	5320	53.15	7.44	5740	47.54	5.49
			5340	53.82	7.39	5760	48.58	5.44
			5360	53.59	7.5	5780	46.2	5.19
			5380	52.19	7.24	5800	50.27	5.53
			5400	48.05	6.54	5820	49.57	5.43
			5420	50.15	6.6	5840	49.25	5.39
			5440	49.66	6.56	5860	51.47	5.37
			5460	50.51	6.58	5880	51.95	5.21
			5480	51.23	6.78	5900	51.75	4.99

3.2: 方向图









6.ROHS Report/ROHS报告

Product Description 产品描述		WIFI天线	BGS P/N 博格斯料号		HQQ-002			Declaration Date 宣告日期		2025.11.28	
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	ND	ND	ND	ND	ND	CANEC23007800423	2024/10/18	
2		阻焊油墨	ND	ND	ND	ND	ND	ND	C230217057002-1	2024/5/20	
3		阻焊油墨	ND	ND	ND	ND	ND	ND	C230217057001-1	2024/11/12	

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