



SPECIFICATION FOR APPROVAL/产品承认书

Customer Name

客户名称:

NEW POS

Customer P/N.

客户料号:

200207011000091

Product Description

产品描述:

5010 WIFI FPC antenna -2.4G-5.8G-V01-SC200E -
without wire - BGS

BGS P/N

博格斯料号:

HZR-121C

Manufacturer

制造商:

Shenzhen Borges Communication Technology Co.,
Ltd.

Approve Date

承认日期:

July 7, 2025

BGS Sign and Seal/供应商签章	Customer Sign and Seal/客户签章
	方兆宇 2025/7/8

Change the content/变更内容	Version/版本	Date/日期
First edition	RA	2025/1/9
Change the appearance and route	RB	2025/1/14

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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）	2400-2500MHz;5150-5850MHz
Impedance/阻抗（Ω）	50
VSWR/驻波比	≤3.0
Directional/辐射方向	Omni directional
Polarization/极化方式	Linear
Peak Gain/峰值增益（dBi）	2400-2500MHz:0dbi
	5150-5850MHz: 1dbi
1.2: Mechanical Specification/机械指标	
Material/材质	FPC+PET
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 temp/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



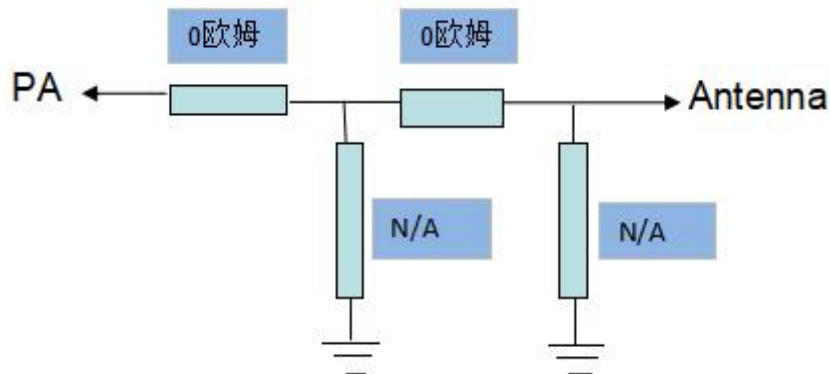
2.2: Installation Instructions/安装说明



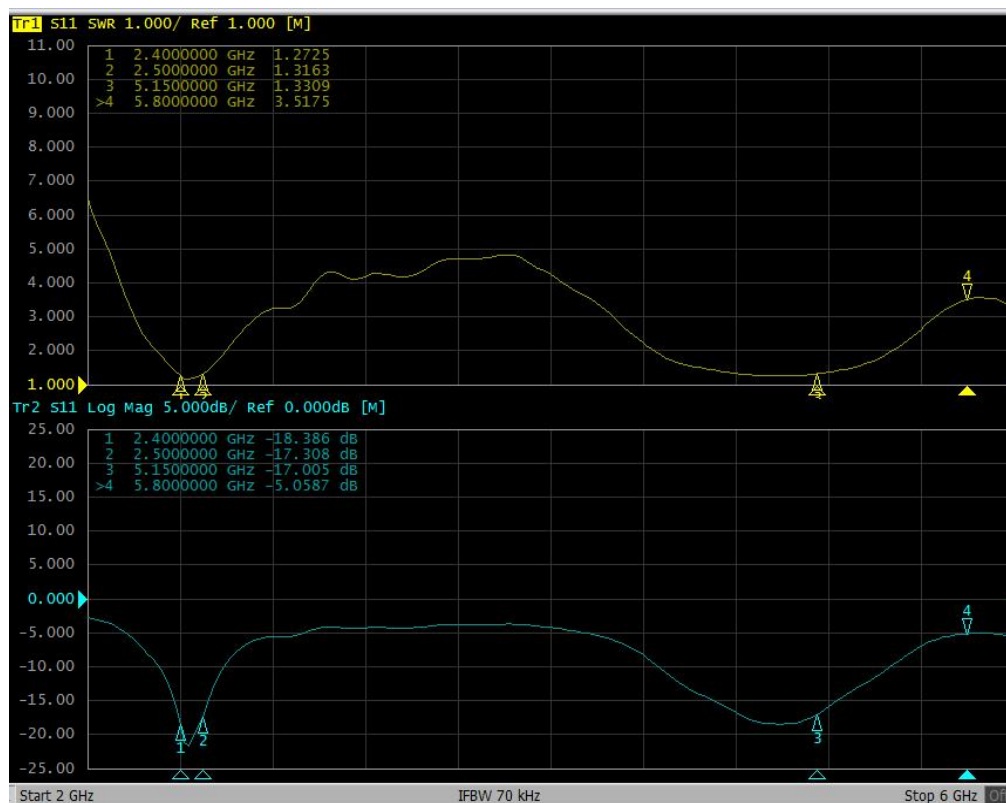


3. Test Report/测试报告

3.1: The matching circuits/匹配电路



3.2: Return loss/Smith chart/VSWR/回波损耗/史密斯图/驻波图



3.3: 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	31.88	-1.23	5100	31.68	-0.06	5520	36.57	-0.02
2410	35.25	-0.59	5120	30.99	-0.14	5540	35.69	-0.11
2420	34.85	-0.55	5140	31.98	0	5560	33.77	-0.38
2430	36.18	-0.22	5160	31.27	-0.09	5580	31.17	-0.76
2440	35.98	-0.13	5180	33.57	0.2	5600	36.81	-0.1
2450	34.56	-0.18	5200	34.78	0.13	5620	33.31	-0.32
2460	33.22	-0.3	5220	35.74	0.02	5640	34.7	0.07
2470	32.21	-0.35	5240	35.52	-0.21	5660	37.05	0.28
2480	33.15	-0.08	5260	37.04	0.04	5680	32.66	-0.4
2490	33.11	0.08	5280	36.18	-0.12	5700	32.16	-0.23
2500	32.09	-0.12	5300	37.76	0.01	5720	32.79	-0.06
			5320	40.76	0.39	5740	30.31	-0.52
			5340	41.1	0.54	5760	32.23	-0.51
			5360	44.03	0.87	5780	35.25	-0.1
			5380	43.96	1	5800	30.62	-0.6
			5400	40.79	0.76	5820	32.26	-0.41
			5420	42.59	0.98	5840	33.14	-0.17
			5440	38.9	0.58	5860	27.04	-0.88
			5460	39.03	0.47	5880	29.1	-0.5
			5480	40.91	0.63	5900	28.49	-0.59
			5500	38.27	0.25			

3.4: Active test data/有源测试数据

Band	Channel	TRP	TIS
		11g/6M	11g/54M
2.4G	Low	10.18	-60.23
	Mid	10.09	-65.5
	High	10.12	-63.3
		11a/6M	11a/54M
5G	Low	10.06	-67.6
	Mid	10.12	-68.19
	High	10.36	-68.6



6. ROHS Report/ROHS报告

Product Description 产品描述		WIFI Antenna	BGS P/N 博格斯料号	HZR-121C			Declaration Date 宣告日期		2025/7/4	
No. 序号	Part name 部件名称	Homogeneous Material Name 均质材料名称	cThe 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	FPC	Electrolytic flexible copper-clad foil substrate 有胶柔性覆铜板	ND	ND	ND	ND	ND	ND	SHAEC24028809006	2024/12/20
2		Solder resist ink/阻焊油墨	ND	ND	ND	ND	ND	ND	ETR25501383	2025/3/20
3		3M glue/3M胶	ND	ND	ND	ND	ND	ND	SHAEC24027480901	2024/12/6
4		Gold/镀金	ND	ND	ND	ND	ND	ND	A2250164855101001E	2025/3/18

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