



广东森领通信科技有限公司

GUANGDONG SLEING COMM-TECH CO., LTD

承 认 书

SPECIFICATION APPROVAL SHEET

客 户 :

CUSTOMER

客 户 料 号 :

CUS PART NO

版次:

REV

X1

品 名 / 规格 :

SPECIFICATION

2.4-2.5GHz

BT Antenna L=50mm(Ø1.13+MHF)

单重:

weight

供 方 料 号 :

SUP PART NO

SLEingB256820050

日 期 :

DATE

2026.01.19

厂 商 核 准 :

SUP APPROVED

核准 APPROVED	结构审核 Structure audit	RF审核 RF CHECKED	品保审核 QA CHECKED	承办 DESIGNED
13/1/2026	13/1/2026	13/1/2026	13/1/2026	13/1/2026

客 户 核 准 :

CUS APPROVED

核准 APPROVED	审核 CHECKED	品保审核 QA CHECKED	承办 DESIGNED

广东森领通信科技有限公司

GUANGDONG SLEING COMM-TECH CO., LTD

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正本由承办单位保存



广东森领通信科技有限公司

GUANGDONG SLEING COMM-TECH CO., LTD

变更记录

MODIFICATION RECORD SHEET

版本 (REV.)	更改日期 (Modification date)	更改内容描述 (Summary of modification content)	拟制 (Signature)	批准 (Approval)
X1	2026.01.19	初版发行 (First Issue)	胡赵海 (Jerry)	朱正锐 (Jongrei)



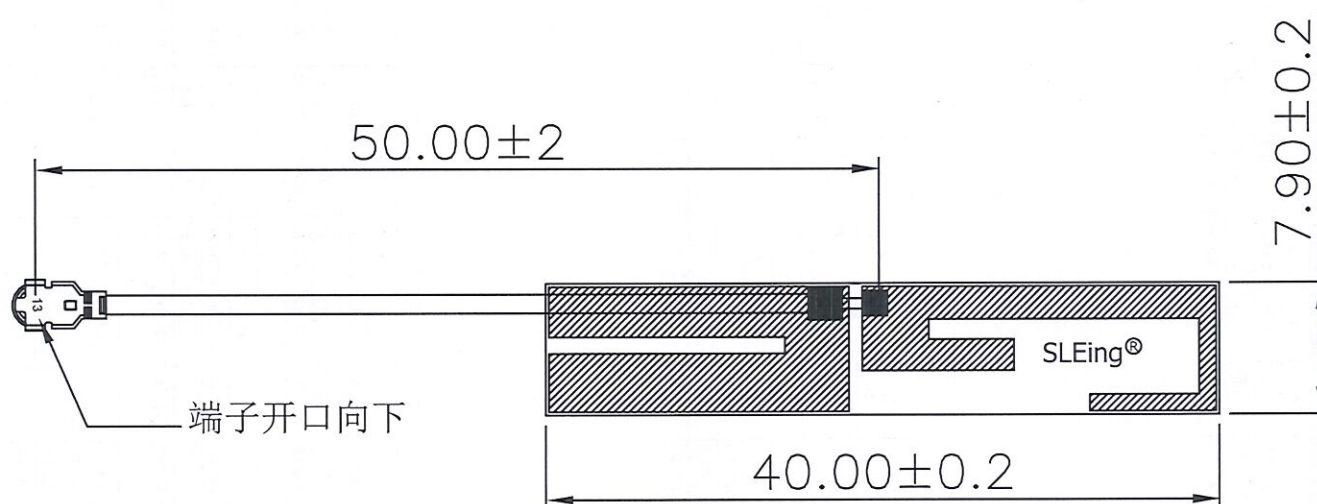
承认书项目表 (Spec Item)

序号 (NO.)	项目 (Project)	备注 (Remark)	页码 (Page)
1	承认书封面 (Spec Cover)		1
2	变更记录 (MODIFICATION RECORD SHEET)		2
3	承认书项目表 (Spec Item)		3
4	工程成品图 (Drawing)		4
5	电性测试报告 (Test Reports)		5
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9	方向图 (Pattern)		9
10	产品包装规范 (Product packaging specification)		10
11	ROHS清单 (ROHS List)		11

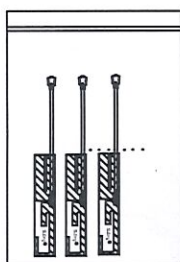
Give clear indication of:

1. The contents of the acknowledgement shall be arranged in order according to the items in the check sheet.
2. The number of copies of the acceptance letter shall be printed according to the customer's requirements, and the SGS report shall be stamped with the engineering seal.
3. All materials shall be confirmed by the customer. Any material/process/changes that may affect product quality and environmental quality must be re-sent to the customer for confirmation before import.
4. SGS report is valid for one year.
5. According to the contents attached to the actual acknowledgement, check the check form: "Yes" is provided, "no" is provided according to customer requirements.

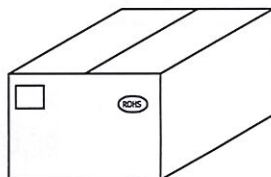
REV.	CONTENT	DATE
X1	First Sample	2026.01.19



Specification:
Frequency Rang:2.4~2.5GHz(带机测试)
Return Loss:-10 or less
VSWR:1.92 Max



Packing:100pcs/bag 外箱须贴ROHS标签与物料标签各1PCS



SLEing® 森领			CUSTOMER		
广东森领通信科技有限公司 GUANGDONG SLEING COMM-TECH CO., LTD			PART NO		
			TITLE		BT Antenna
			S/P NO		SLEingB256820050
		TOLERANCE UNLESS OTHERWISE SPECIFIED		SIZE	DRAWN
UNIT:mm	ANGLES $\pm 0.5^\circ$	X. ± 0.3			CHECKED
SHEET: 1/1	0.XX ± 0.05	XX. ± 0.5	A4	1/1	APPROVED
SCALE: 1/1		XXX. ± 2.0			



广东森领通信科技有限公司

GUANGDONG SLEING COMM-TECH CO., LTD

电性测试报告

Test Reports

Electrical Properties	
Frequency	2.4-2.5 GHz(整机测试)
Impedance	50 Ohm Nominal
V.S.W.R	≤ 1.92
Return Loss	-10dB Max
Radiation	Omni-directional
Gain(Peak)	4.06 dBi
Polarization	Linear, Vertical
Admitted Power	2 W
Connector	MHF
Physical Properties	
Antenna Material	FPC
Cable Type	$\Phi 1.13\text{mm}$ Black
Operating Temp	-40°C-85°C
Storage Temp.	-40°C-85°C

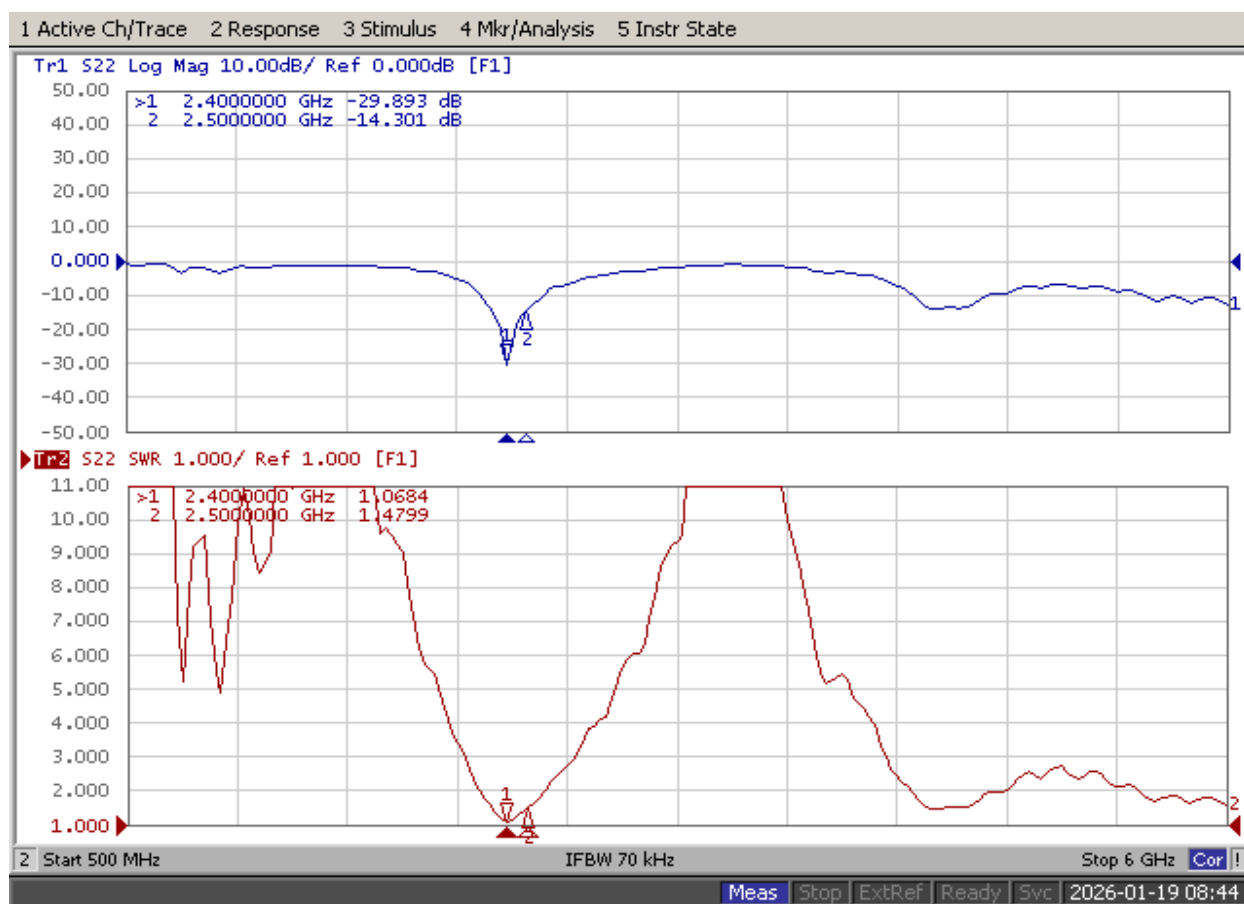
S参数测试

S Parameter Test

Agilent E5071C Network Analyzer

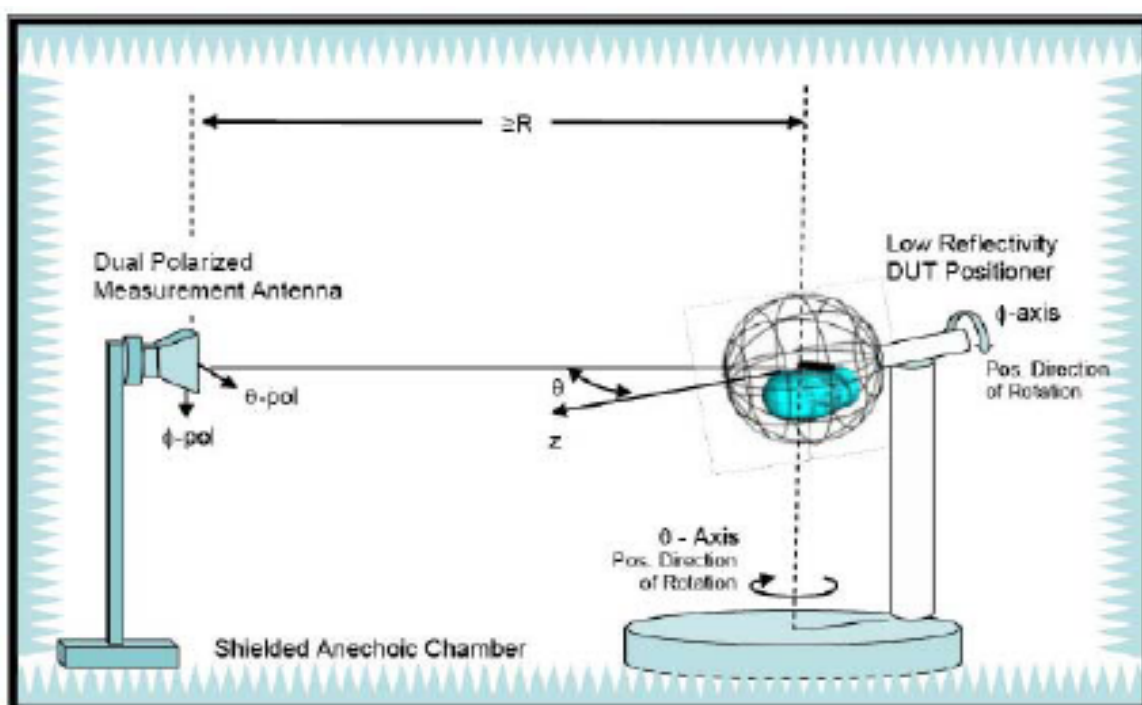
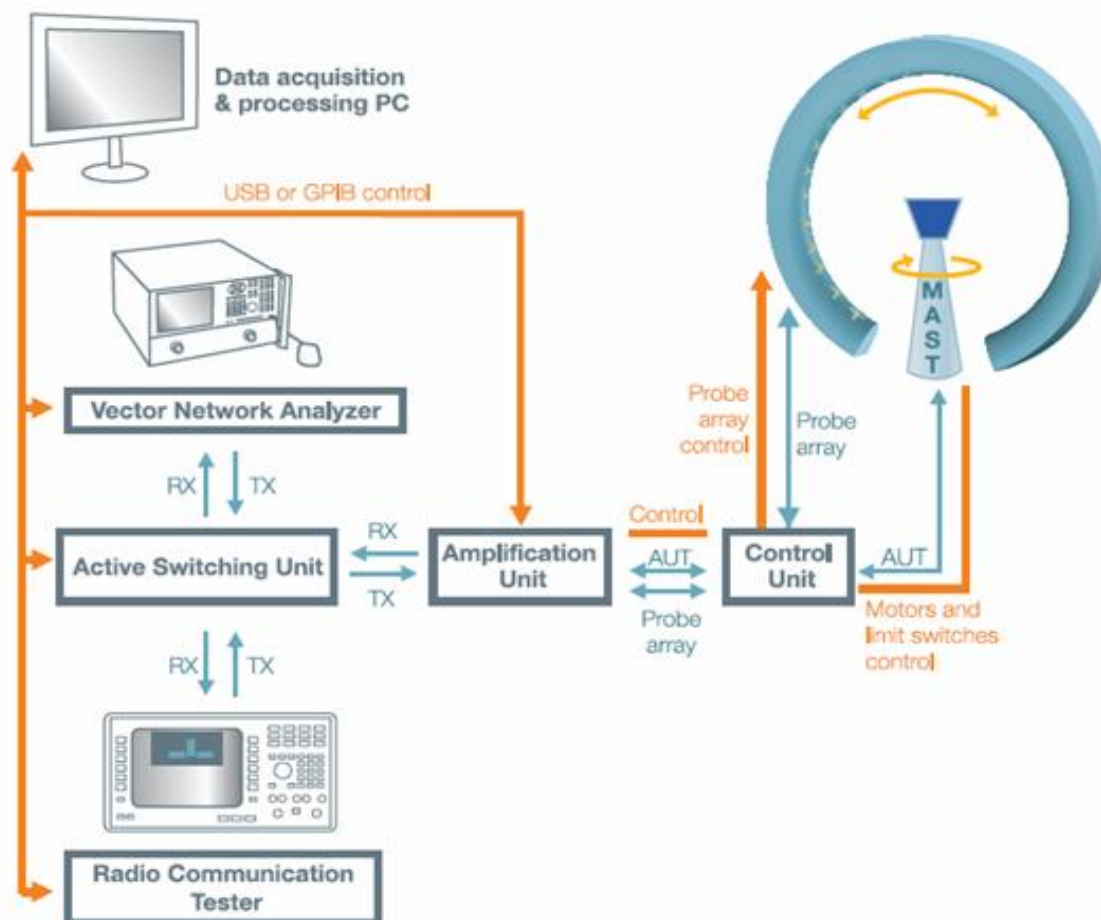


RF Antenna (Return Loss)





测试设备 Test Setup

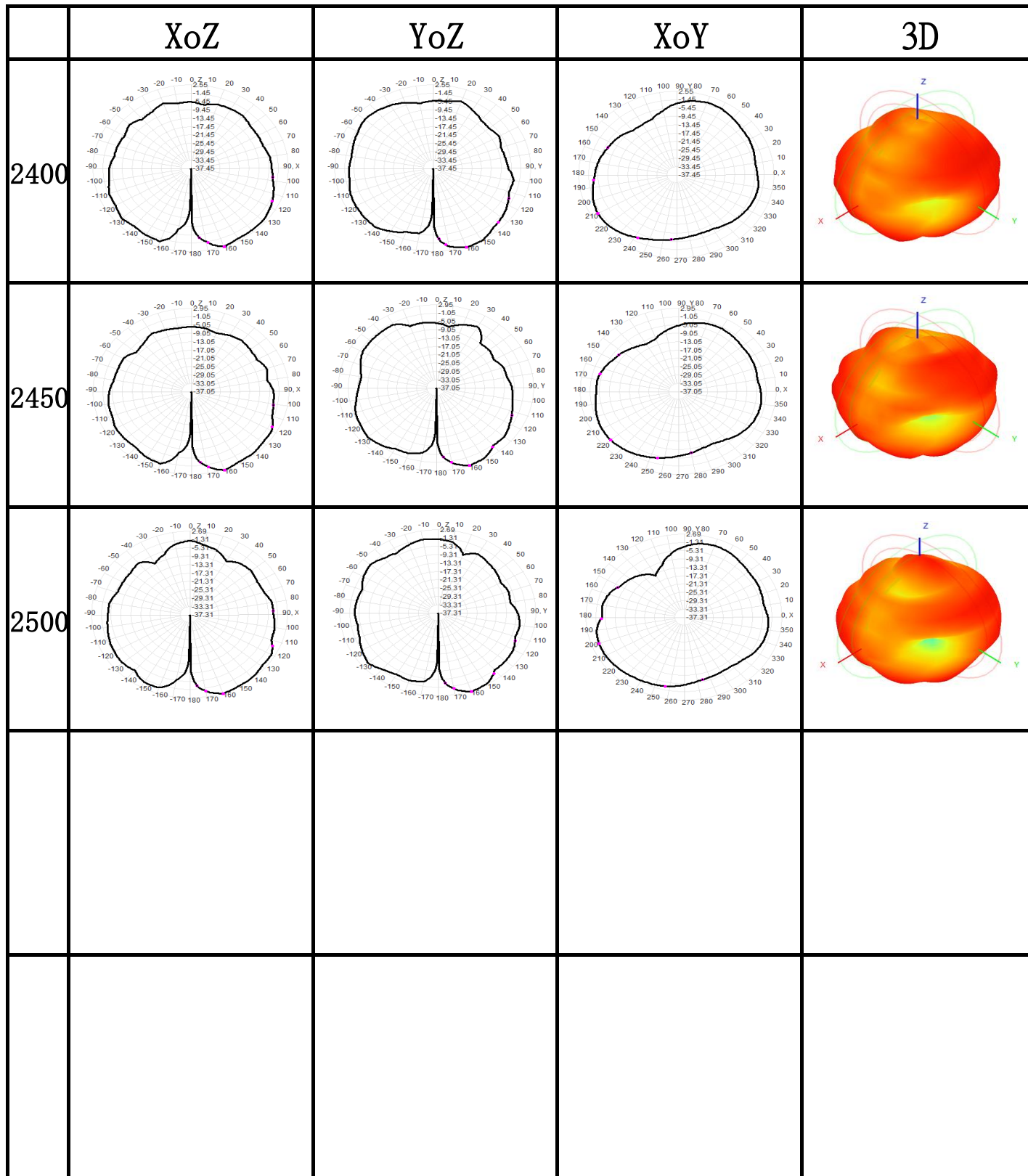




测试效率 Test Efficiency

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	3.61	3.68	3.61	3.41	3.46	3.62	3.82	3.92	3.89	4.04	4.06
Efficiency (%)	55.11	55.74	55.12	53.80	54.27	54.37	54.66	55.01	54.35	55.84	56.16

方向图 Pattern



产品包装规范

Product packaging specification

日期/Date: 2026.01.19

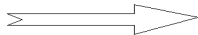
page:

1 of 1

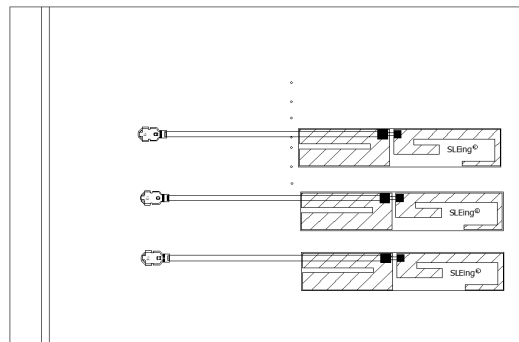
成品名称 Name of finished product	BT Antenna	客户 customer	
成品料号 Finished product number	SLEingB256820050	版本 REV.	X1



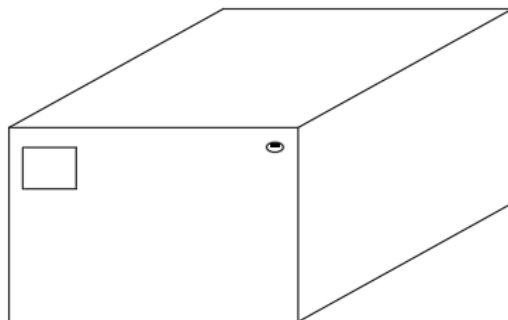
单PCS天线



(2) 100PCS装一PE袋，PE袋上需标贴产品标签，以标示产品名称、规格、数量、日期并热封处理。



(3) 装箱：装箱数量以实际数量为准



(4) 外箱均需贴产品标签，以标示产品名称、规格、数量、日期。

(5) 每批次产品均需附上“出厂检验报告”。

(6) 储存条件：温度：-5℃~+30℃，湿度：20%~70%，年限一年。

承办 DESIGNED	胡赵海 (Jreey)	审核 CHECKED	胡赵海 (Jreey)	核准 APPROVED	朱正锐 (Jongrei)
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产品各零部件ROHS清单(ROHS list of all parts of the product):

产品ROHS及REACH信息

产品信息				ROHS及REACH信息							
产品料号	部件名称	材质	供应商	ROHS报告编号	测试机构	报告日期	结果	REACH报告编号	测试机构	报告日期	结果
FPC	基材铜箔	慕仓格蒂	SHAEC24028809006	SGS	2024.12.20	符合	SHAEC24028809008	SGS	2024.12.20	符合	
	背胶	3M	SHAEC2407480901	SGS	2024.09.06	符合	SHAEC2407480903	SGS	2024.09.06	符合	
阻焊油墨	凯耀	CANECE24020739305	CTI	2024.09.29	符合	A2240795352101002E	CTI	2024.12.26	符合		
字符油墨	川裕	ETR24902229M01	SGS	2024.09.23	符合	ETR24102322M01	SGS	2024.09.16	符合		
OSP	永晟达	SZXEC24004044002	SGS	2024.12.26	符合	SZXEC24004044004	SGS	2024.12.26	符合		
补强	富邦电子	A2250072829101008E	CTI	2025.02.19	符合	A2250072829102001E	CTI	2025.02.21	符合		
CABLE	护套/绝缘	海联通	NGBPC24007471212	SGS	2024.12.23	符合	NGBPC24007471118	SGS	2024.12.23	符合	
											内外导体
锡线	锡	宝富	CANECE24002464606	SGS	2024.07.20	符合	CANECE24002464612	SGS	2024.07.20	符合	
端子	铜	紫金铜业	CANECE24000977301	SGS	2024.11.22	符合	CANECE24005791106	SGS	2024.11.22	符合	
	镀金	翔腾电子	A2240410234101001E	CTI	2024.07.18	符合	A2240409846101001E	CTI	2024.07.18	符合	
	塑胶 PBT	新光	SHAHL24019391801	SGS	2024.08.29	符合	SHAHL24019392201	SGS	2024.08.29	符合	