

Antenna SPEC

Supplier Name: Sichuan Boantong Communication Technology Co., Ltd.

Supplier Material Name: Built-in Antenna - 2.4G - Gray 1.13 Tin Wire - 1st Generation
Terminal - L=350mm - FPC - 40.1×10.5mm

Supplier Specifications and Model: 74220703

CVTE Material Number: 004.032.0053114

Acknowledgment Edition: A0-0925

Drawing version number (not required if there is no drawing): A0

Supplier Acknowledgment Column		
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2025.09.25	2025.09.25	2025.09.25

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Document Revision History

[illegible]

Antenna SPEC

Customer name: Shi KunCustomer project: CF7&CF8Customer P/N: 004.032.0053114B&T P/N: 74220703Spec: Built-in Antenna - 2.4G - Gray 1.13 Tin Wire - 1st GenerationTerminal - L=350mm - FPC - 40.1×10.5mm

Sealed by corporation:

compilation	verify	approval
Xuzhangjin	Qinlinshu	Liulihua

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2nd

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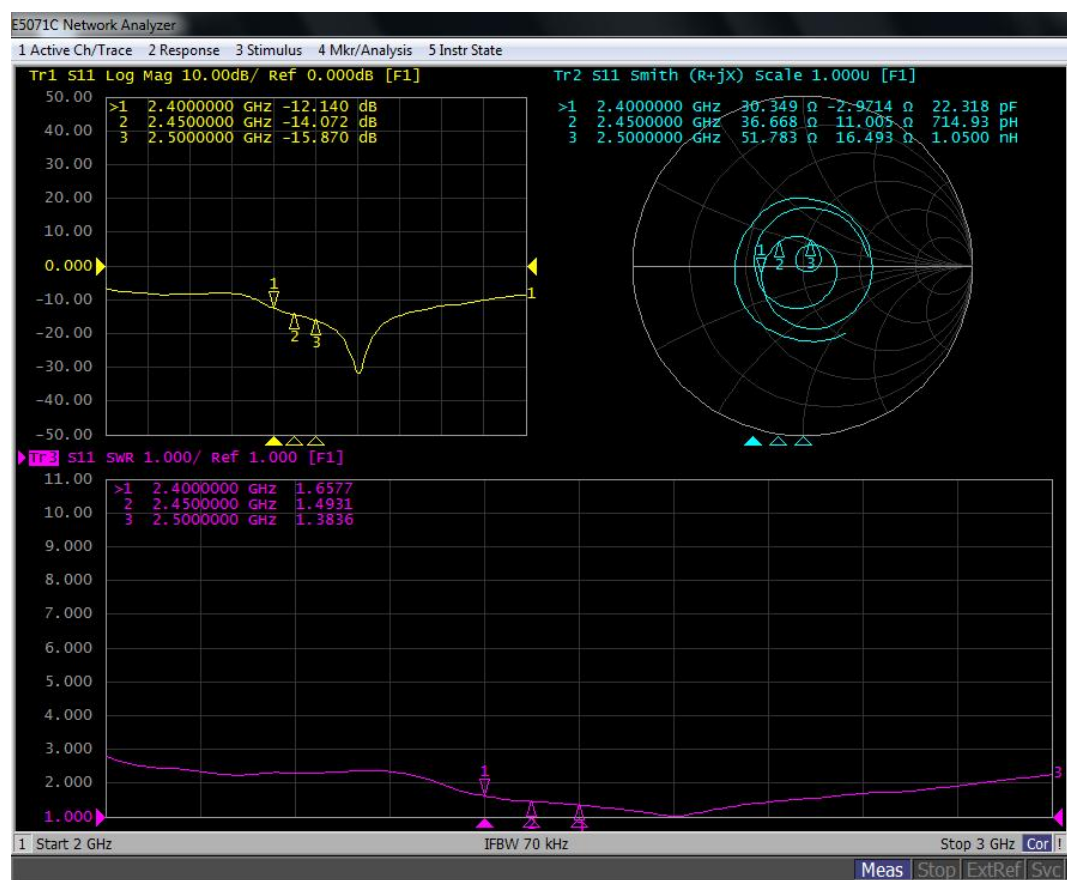
3、Product drawing

4、Properties ¶meter

Electrical parameter	
Freq Range	2400~2500MHz
Characteristic Impedance	50 Ω
VSWR	<2
Gain	3.31dBi
The Max input power	<10w
Polarization mode	Linear polarization
Radiation direction	omnidirectional
Joint type	Terminal
Mechanical parameter	
Length	350 $\pm$ 3mm
Terminal holding force	$\geq$ 0.8kgf
Coaxial cable	Gray 1.13 Tin Wire
Salt spray test	24H
Environment parameter	
Operating Temp	-30 $^{\circ}$ C~65 $^{\circ}$ C

5、Electrical test report (Whole machine testing)

Antenna S11 parameter diagram



Standing wave ratio data

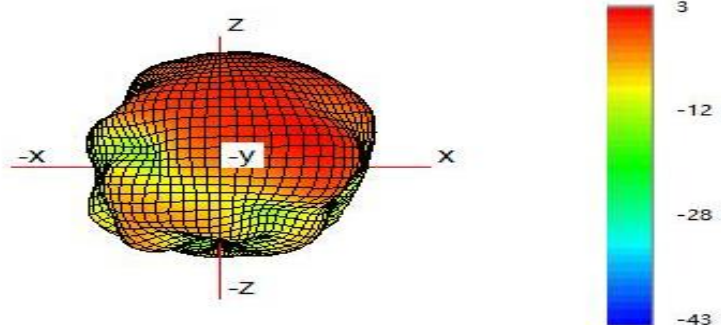
Freq/MHz	2400	2450	2500
BT 天线	1.66	1.49	1.38

Antenna darkroom test data

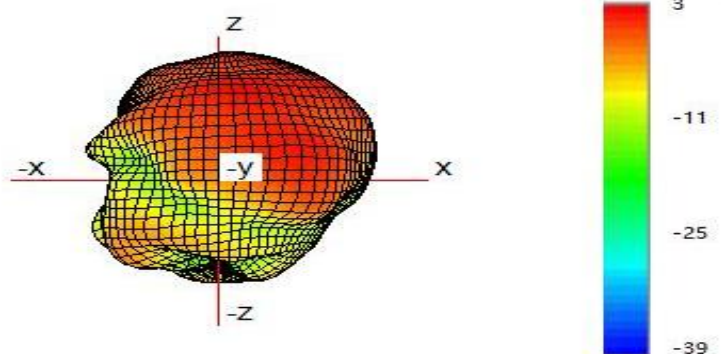
Freq(MHz)	Gain(dBi)	Efficiency(%)
2400	2.76	44.10
2410	2.63	44.33
2420	2.56	44.62
2430	2.39	44.96
2440	2.54	45.75
2450	2.85	47.39
2460	3.08	48.18
2470	3.20	48.69
2480	3.14	48.15
2490	3.21	47.75
2500	3.31	47.39

Antenna direction diagram

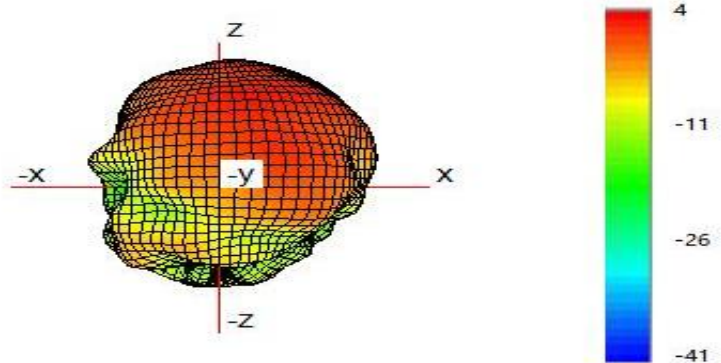
2400MHz



2450MHz



2500MHz



➤ Active OTA test data

BT OTA (已关闭WiFi)									
DUT	设备	Brust type	Brust type	BR Packet type	Pattern type	Channel	Test Item	标准 (B级)	测试值 (dBm)
CF7&CF8	CMW270	Basic rate	Basic rate	DH1	PRBS9	0	TRP	≥ 0	5.51
						39			5.69
						78			5.24
						0	TIS	≤ -80	-81.42
						39			-84.11
						78			-82.23

6、List of Material Composition and Hazardous Substances

GYMGEST

(Certification of Restricted Substance)

We hereby certify that all the Material fully conform to the requirements of the YuanKong's Declaration of Conformity that had been signed, and the maximum concentration value of restricted substance in Materials comply with the latest 《Regulations on the management of hazardous substances.》



Raw Material Test List																	
Customer P/N:				Part Name				Vendor: Sichuan B&T Technology Co., Ltd.						Vendor P/N:			
No	Raw Material Name	Raw Material Model	Raw Material Supply	Banned Substance Content/ppm										Test Lab	Test Report Number	Test Date	Attachment of third-party test report
				Pb	Cd	Hg	Cr+6	PBBs	PBDEs	(DEHP)	(DBP)	(BBP)	(DEHP)				
1	wire	FEP	TH	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	SGS	WGRPC20000015815	2026/1/19	
		Tinned wire	TH	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	CTI	A2250416468101001	2025/6/20	
2	Terminal	Phosphor Bronze	CH	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	SGS	CAJEC25027363005	2025/11/13	
		PBT	CH	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	CTI	ETK25703519	2025/7/27	
3	FPC	PI	BYK	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	SGS	SNJEC25031840901	2025/12/8	
		Tape	BYK	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	SGS	SZJEC25003068036	2025/8/26	

1. If the homogeneous material is nonmetallic, three questions need to be answered: 1. Does it contain halogen? ☒ YES ☐ NO? 2. Does it contain red phosphorus? ☐ YES ☒ NO? 3. Does it contain antimony trioxide? ☐ YES ☒ NO?

2. If the above materials or materials belong to paint, ink, adhesive or cleaning agent, please fill in the VOC test report number in the corresponding remarks column, and attach this report to the raw material test list.

PACKING CRITERION

P/N: 74220703

Spec: Built-in Antenna - 2.4G - Gray 1.13 Tin Wire - 1st Generation Terminal - L=350mm - FPC - 40.1×10.5mm

一、contents of label(according to the customer's name, refer to the corresponding finished product label production requirements. If there is no requirement, it will follow the ordinary label requirements.)

内外标签 长10cm 宽6cm 左右

The inner and outer labels are about 10cm long and 6cm wide

需方 buyer	*****		
供方 vender	四川博安通通信技术有限公司 Sichuan B&T Technology Co., Ltd.		
物料编码 Purchase No	*****		
生产单号 Material No.	*****		
品名规格 Name specification	*****	检验员 QC	**
数量/单位 Q'ty/Unit	*****	日期 Manufacture date	****.***
追溯码 Trace code	*****	流水号 Serial number	**

二、Packing requirement

Operating description:

1. inner packing:

50PCS per small bag

200PCS per large bag

2. outer packing:

Quantity according to actual packing/carton

Notice:

1. Whether to add partitions, pearl cotton;

2. Labeling, such as ROHS;

9、 Antenna installation position Diagram

10、 Reliability test requirements

Serial Number	Reliability Test Name	Experimental conditions	Judgment criteria
1	Constant temperature and humidity test	High temperature: 70 °C, humidity: 80% RH for 24 hours; Low temperature -40 °C for 24 hours; continuous for 48 hours in total;	Appearance requirements before and after the experiment: The metal surface coating should be free of peeling, cracks, wrinkles, separation, etc. Non metallic parts should not discolor, crack, deform, or peel off; The electrical performance test meets the standard requirements;
2	High and low temperature thermal shock test	70 °C for 2 hours, -40 °C for 2 hours, 6 cycles, for a total of 24 hours;	Appearance requirements before and after the experiment: The metal surface coating should be free of peeling, cracks, wrinkles, separation, etc. Non metallic parts should not discolor, crack, deform, or peel off; The electrical performance test meets the standard

			requirements;
3	Salt spray test	Prepare a $(5 \pm 1)\%$ NaCl solution to ensure that the pH value of the salt solution is neutral (6.5-7.2); The pressure barrel temperature is 47 ± 1 °C, the spray pressure is kept at 1.00 ± 0.1 kgf/cm², and the spray volume is 1.0~2.0ml/80cm²/h; The experiment lasted for 24 hours;	The exposed area of the product surface must not have oxidation or rust; Oxidation/rusting area after salt spray test in other areas < 1.0%
4	Terminal holding force test	Normal temperature and humidity; Test maintenance force requirement: ≥ 0.8 kgf;	The terminals and cables are not loose or detached; The electrical performance test after testing meets the standard requirements;
5	Terminal insertion and extraction force test	Normal temperature and humidity; The terminal and seat are connected normally, with an insertion force of 0.8~3kgf/extraction force of ≥ 0.8kgf;	The insertion/extraction force of the terminal meets the requirements, and the terminal has no defects such as detachment or damage;