

Project: Y202205180724

Date.: 2024.07.18

Ver.: A1

Antenna SPEC

Customer name: 玥芯通

Customer project: X98Q

Customer P/N: _____

B&T P/N: 79300006

Spec. : Built-in antenna-2.4/5G-shrapnel-L26.7 × W4 × H10.2 ×
T0.4mm

Sealed by corporation:

compilation	verify	approval
Qiucui ping	Huchong	Liulihua

Sealed by customer:

check	verify	approval

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表单编号 Form number: B&T-QR-EN-002 版本 version: B3

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3、Product drawing

A	Version	Date of modification	revise content	8	7	6	5	4	3	2	1
A0	A0	22-06-30									
A1	A1	24-7-17	Update and modify the size of 2 pins								
B											
C											
D											
E	name	Built-in antenna	2.4/5G - spring - L26.7 × W4 × H10.2 × T0.4mm	Project number	Y202205180724	Part number	79300006				
F	Design	Xie Meiquan									
F	to examine										
	approval										
	1 > X	±0.05	1:1	mm							
	1~9.99	±0.10	Page 1	1 in total							
	10~19.99	±0.15									
	20~39.99	±0.20									
	40~	±0.30									

Technical requirements:

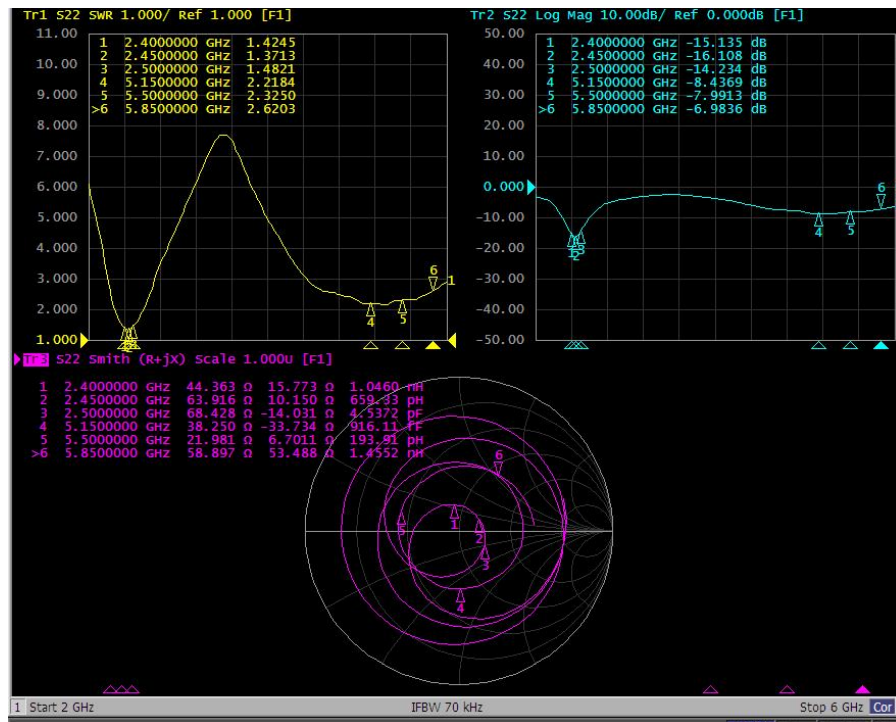
1. Material: SUS 304 (3/4H, >370HV), material thickness 0.4mm;
2. Part surface electroplating (nickel plating), coating thickness: 30um~60um; Good weldability. Pass 24-hour salt spray test.
3. Important dimensions are marked with "*" (control is required for mold making, and mold acceptance must be measured).
4. The surface of the product is free of burrs, scratches, oil stains, residues, and other undesirable phenomena.
5. The maximum burr cannot exceed 0.05mm, and the knife mark does not exceed 0.10mm.
6. The depth of the printed logo does not exceed 0.05mm, and the height is 1.0-2.0mm.
7. During packaging and transportation, the product cannot be hit, scratched, or damaged.
8. The packaging and quality standards refer to the Boantong Packaging Specifications and B&T Quality Standards respectively.
9. Your company uses blister tray packaging, which needs to be compatible with our carton (Carton specifications: 35×24×29cm/inner size)
9. The product must meet the requirements of RoHS2.0.

4、Properties &parameter

Electrical parameter	
Freq Range	2400~2500MHz
Characteristic Impedance	50 Ω
VSWR	Check the engineering seal
The Max input power	<10w
Polarization mode	Linear polarization
Radiation direction	omnidirectional
Mechanical parameter	
total length	26.7 $\pm$ 0.2mm
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

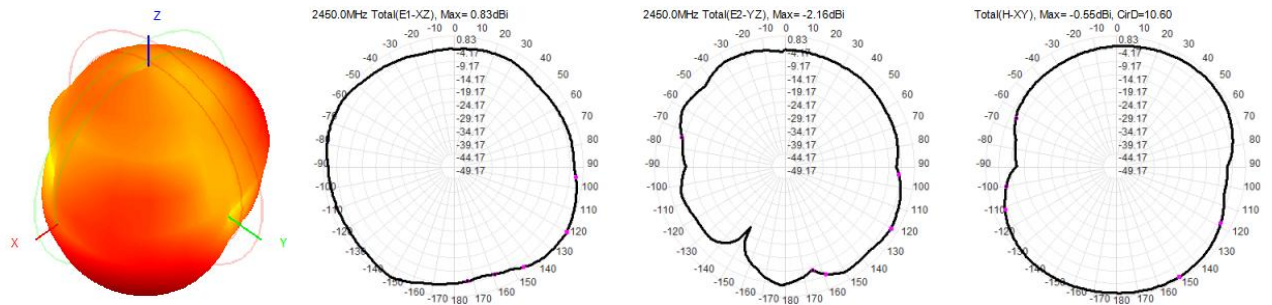
Freq/MHz	2400	2450	2500			
VSWR	1.42	1.37	1.48			

Antenna darkroom test data

Frequency (MHz)	WiFi	
	Gain (dBi)	Efficiency (%)
2400	2.39	53.40
2410	2.28	52.55
2420	2.29	52.96
2430	2.02	52.95
2440	1.99	52.47
2450	2.14	56.07
2460	2.39	58.29
2470	2.58	60.46
2480	2.63	61.57
2490	2.44	59.68
2500	2.28	59.15
5150	1.93	49.31
5250	1.80	56.33
5350	2.30	52.78
5450	2.75	52.63
5550	2.88	54.98
5650	2.25	53.17
5750	3.49	52.36
5850	2.68	50.02

➤ Antenna direction diagram

2450MHz



6、List of Material Composition and Hazardous Substances

Item	Specific ation	Texture of material	ROHS Test Results (PPM)						ICP test number	Test time
			Cd	Pb	Hg	Cr+6	PBB	PBDE		
1	Leaf spring	SUS304	ND	ND	ND	ND	ND	ND	SZXEC23003114209	2023/12/15
		Nickel plating	ND	43	ND	ND	ND	ND	SZXEC23001959703	2023/8/23

PACKING CRITERION

P/N: 79300006

Spec: Built-in antenna-2.4G

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.)

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

buyer	*****		
vender	Zhongshan B&T Communication Technology Co., Ltd Sichuan B&T Technology Co., Ltd.		
urchase No	*****		
Material No.	*****		
Name specification	*****	QC	**
Q' ty/Unit	*****	Manufacture date	****.*.*
Trace code	*****	Serial number	**

二、Packing requirement

Operating description:

1. inner packing:

Blister tray packaging

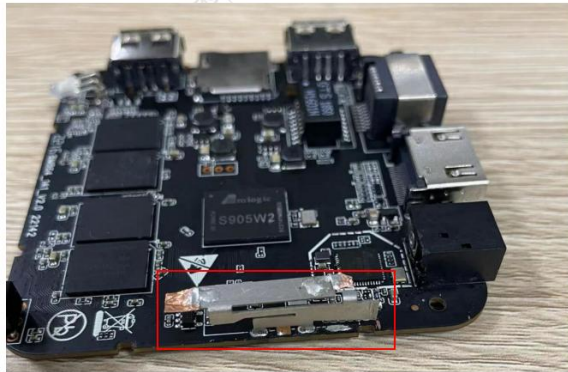
2. outer packing:

Quantity according to actual packing/carton

Notice:

- Whether to add partitions, pearl cotton;
- Labeling, such as ROHS;

8、Antenna installation position Diagram



9、Reliability test requirements

No.	Reliability Test Name	Test Conditions	Evaluation Criteria
1	Constant Temperature and Humidity Test	High temperature: 70° C, Humidity: 80%RH for 24 hours; Low temperature: -40° C for 24 hours; Total duration 48 hours;	Before and after the test, the appearance requirements: The metal surface plating should have no peeling, cracks, wrinkling, separation, etc. Non-metal parts should not change color, have cracks, deformation, glue detachment, and other defects; Electrical performance tests should meet the standard requirements;
2	High and Low Temperature Shock Test	70° C for 2 hours, -40° C for 2 hours, 6 cycles, total 24 hours;	Before and after the test, the appearance requirements: The metal surface plating should have no peeling, cracks, wrinkling, separation, etc. Non-metal parts should not change color, have cracks, deformation, glue detachment, and other defects; Electrical performance tests should meet the standard requirements;
3	Salt Spray Test	Prepare a 5±1% NaCl solution, ensure the pH value of the salt solution is neutral (6.5~7.2); Pressure pot temperature 47±1° C, spray pressure maintained at 1.00±0.1kgf/cm ² , spray rate 1.0~2.0ml;/80cm ² /h; Test duration 24 hours;	The exposed area of the product surface should not have oxidation or rusting; Other areas after the salt spray test, the oxidation/rust area should be less than 1.0%;