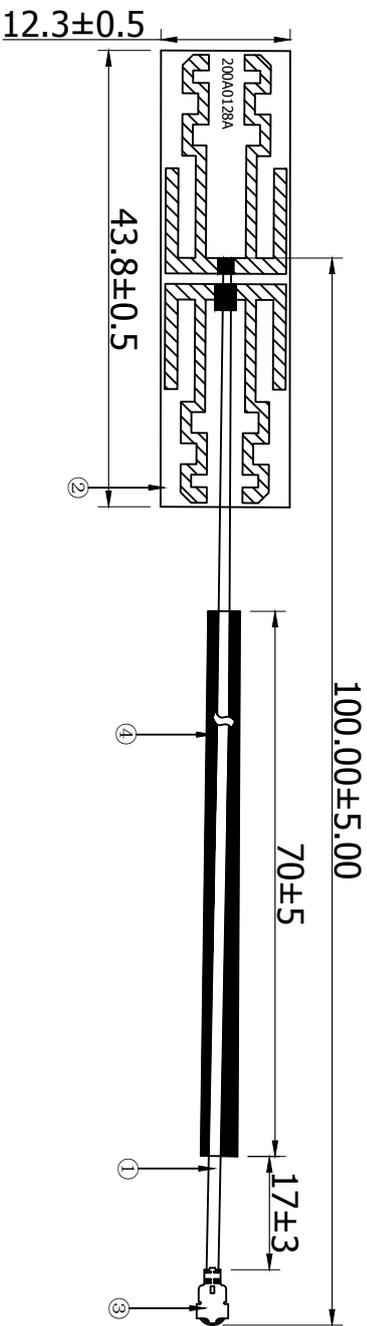
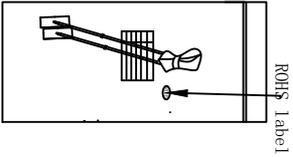


成品图

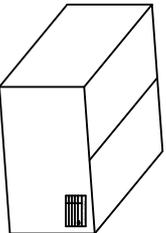
REV	DATE	DESCRIPTION
A	2025.02.19	NEW ISSUE
B	2025.04.11	的间距与IPEX端距离变更 Change of distance between anti-vibration foam and IPEX end



Specification:
 Frequency Range :2.4~2.5GHz
 Return loss: -9.2dB or less
 VSWR: 1.92:1max
 Gain(Peak): 4.09dBi



Pack full: 200pcs/PE Bag



1. 纸箱需贴上1pcs/ROHS环保标签至成品标签上;
2. 纸箱须贴上1pcs外箱标签至纸箱右上角。

1. The carton needs to be affixed with 1pcs/ROHS environmental label to the finished product label.
 2. The carton needs to be affixed with 1 pcs/outer box label on the upper right corner of the carton.

XXX	±5.0	APPROVED
XX	±3.0	CHECKED
X	±1.0	CHECKED
X	±0.5	CHECKED
XX	±0.1	DRAWING

COSTOMER:		PART NO. : D5100	
PARTNAME :		BT-2.4G antenna	
R.F P/NO. :			
REV	UNIT	SCALE	SIZE
A	mm	1:1	A4
SHEET		10F1	

NO	DESCRIPTION	QTY	REMARK
4	Foam	70*14*2.0EVA	1
3	Connector	IPEX 4pin antenna terminal	1
2	RPC	43.8*12.3*0.2mm OSP	1
1	Cable	RG-113 RF Cable 50Ω Color:Black	1



东莞市启元电子科技有限公司
 Dongguan Shi Qiyuan Electric Technology Co., Ltd.



环境与可靠性试验(Environmental and reliability testing):

Environmental test

High and low temperature humidity test report						
Experimental project	High temperature, low temperature and constant humidity test					
Test sample Name plate	FPC Antenna	Test date	2025.02.20			
Quimente	Constant temperature and humidity test chamber network analyzer		Quantity	5PCS		
Inspection standard	1. The metal surface coating has no peeling, cracking, wrinkling and other defects;The non-metal part should not be discolored, broken, deformed, degummed and other defects. 2. Electrical test meets the design requirements; The voltage standing wave ratio test is qualified.					
Test name	experimental project	require	experiment al method	Actual test data	result	
					sample	decide
High temperature test	Temperature (°C)	+85±3	In accordance withGB2423.1-89 9 chapter To be carried out in the prescribed manner	+85	1	qualified
	Temperature stabilization time of test sample (h)	12		1.2	2	qualified
	Duration of test (h)	1		2.3	3	qualified
	Recovery time (h)	1		1	4	qualified
					5	qualified
Low temperature test	Temperature (°C)	-40±3	n accordance withGB2423.1-89 Section 8 chapter Regulation of the methods	-40	1	qualified
	Temperature stabilization time of test sample (h)	1		1.2	2	qualified
	Duration of test (h)	2		2.4	3	qualified
	Recovery time (h)	1		1.1	4	qualified
					5	qualified



salt spray test; salt fog test

Salt spray test report				
Experimental project	salt spray test; salt fog test			
Test sample Name plate	FPC Antenna	Test date	2025. 02. 20	
Quimente	salt spray corrosion test chamber	Quantity	5PCS	
Inspection standard	Put the test sample into the prepared salt solution test chamber and salt spray corrosion chamber for continuous spray test			
Salt solution concentration	52g/L	The pH of the salt solution: 6.5-7.2	test cycle: 24h	
Actual test data	55g/L	The pH of the salt solution: 6.8	test cycle: 26h	
Test standard; test criteria	According to GB/T10125 "artificial atmosphere corrosion test, salt spray test" test; Results according to the GB/T6461-2002 "Metal and other inorganic coating on metal substrate after corrosion test is the grade of samples and test pieces" rating.			
test results				
NO.	Corrosion rating	Actual test data	Evaluation of the results	备注
1	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	qualified	
2	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	qualified	
3	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	qualified	
4	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	qualified	
5	Rp/Ra=10/10vsB	Rp/Ra=10/10vsB	qualified	



测试设备(Test equipment)



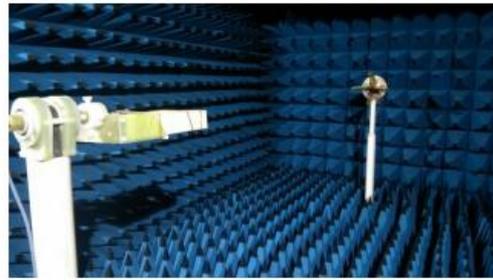
Agilent 5071C Network Analyzer
安捷伦 E5071C 网络分析仪



HP8594E Spectrum analyzer
HP 8594E 频谱分析仪



CMW-500



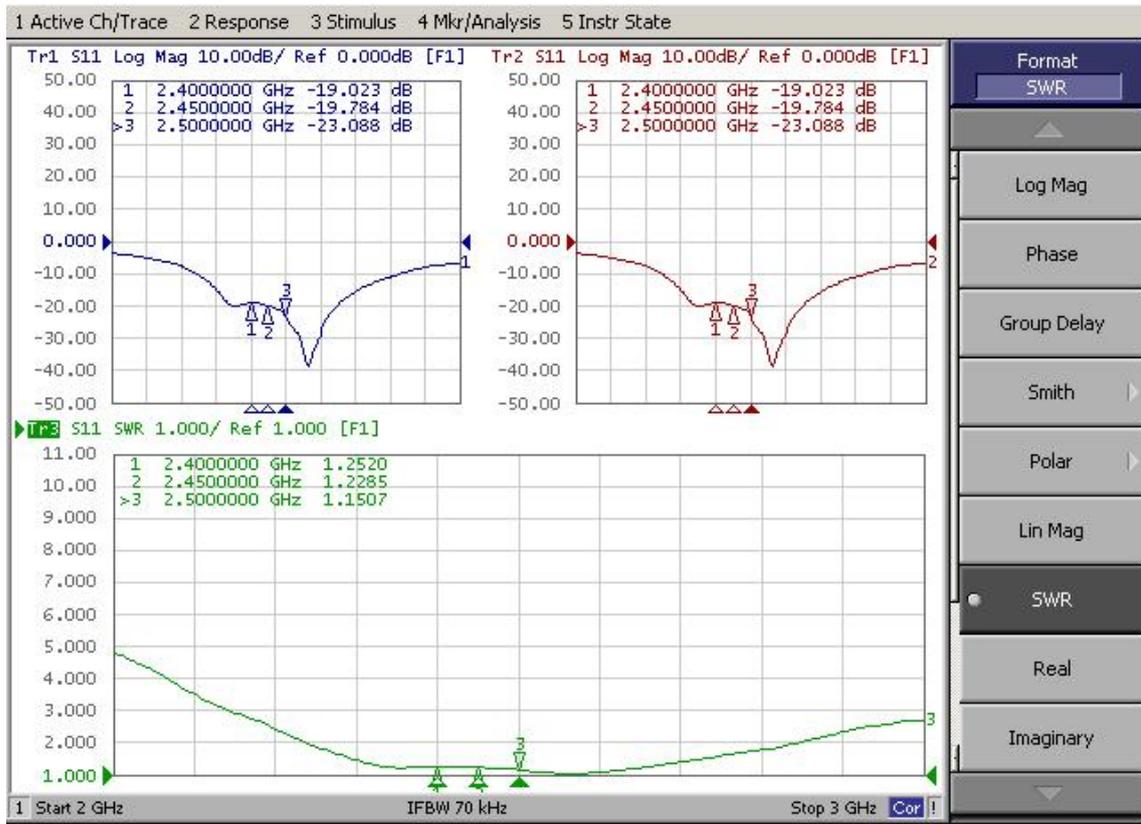
微波暗室

Anechoic chamber



测试参数(Measuring parameter)

V.S.W.R&Return Loss



增益&效率(Gain&Efficiency)

FEITUKEJI											
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-2.64	-2.81	-2.97	-2.74	-2.65	-2.59	-2.85	-2.64	-2.09	-2.15	-2.31
Gain (dBi)	3.77	3.83	3.85	3.72	3.63	3.59	3.54	3.99	4.03	4.09	4.13
Efficiency (%)	58.98	57.18	57.27	58.51	59.97	60.68	60.20	59.14	60.23	59.17	58.46

2D、3D Radiation Patter

