

Admission

SPECIFICATION FOR APPROVAL

Customer name: _____

Customer data: _____

Product name specification: Bluetooth antenna

Vertex material number: 1097BT

Version: V1.0

Customer signature: _____ Date: _____ Year _____ Month _____ Day _____

Purchasing Department	Works Department	Approved

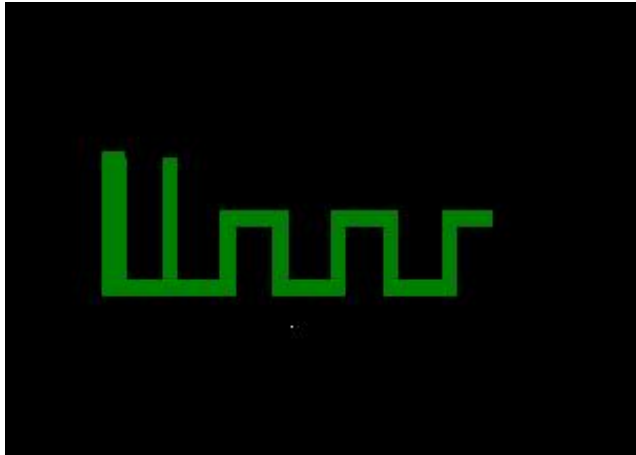
Peak Technology: _____ Date: _____ Year _____ Month _____ Day _____

Works Department	Sales Department	Approved
Cao Jianjun		Liu Tongjing

Please return one specification or one copy of it with your chop and signature of approval and retain the others for your record. In the event of an order being placed for this part number before the chop and signed with specification (or copy) is returned and without special explanation, it will be assumed that full approval have been given.

Revision of records		
Version number	Change the content	Effective date
V1.0	The initial version	2026-05-29

Product image



Product parameters

Name	Bluetooth antenna
Model Type	1097BT
FrenquencyRange	2400MHz-2500MHz
Impedance	50 Ω
VSWR	≤ 2.5
Gain	≥ 2.5 dBi
Polarization	Linear polarization
Radiation	omnidirectional
Working Temperature	-45°C--+85°C
Limit Temperature	-45°C--+85°C

Antenna test environment



Test system: SY-16M antenna measurement system SY-24M antenna measurement

system test environment: temperature $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$, humidity $50\% \pm 15\%$

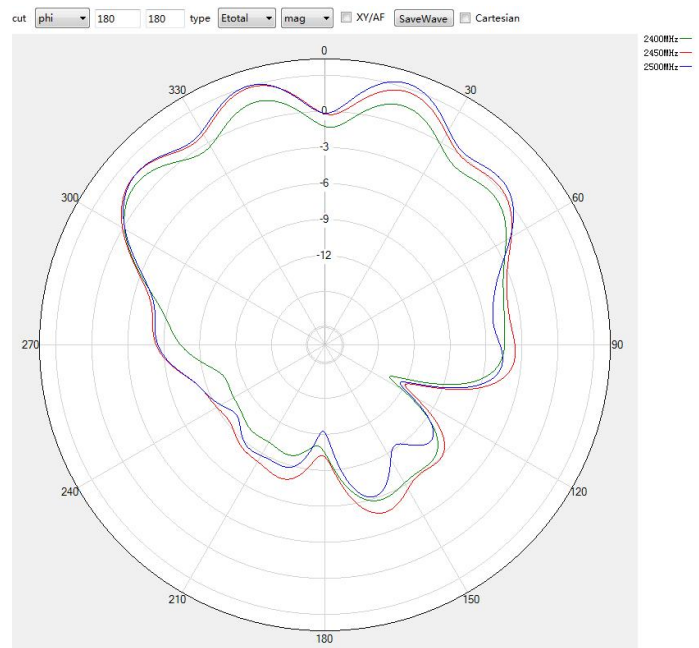
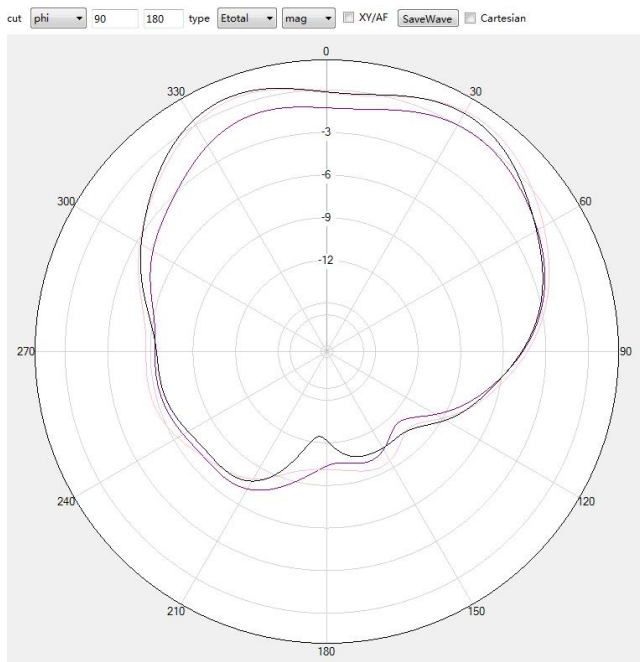
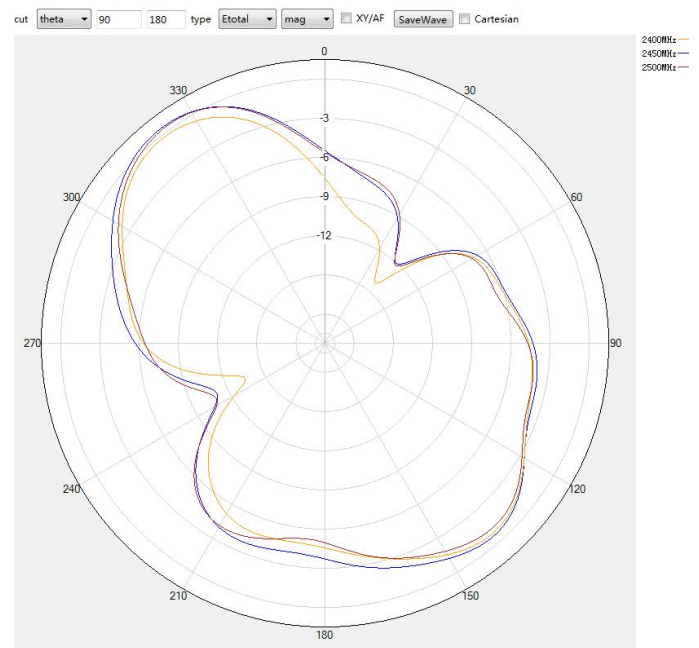
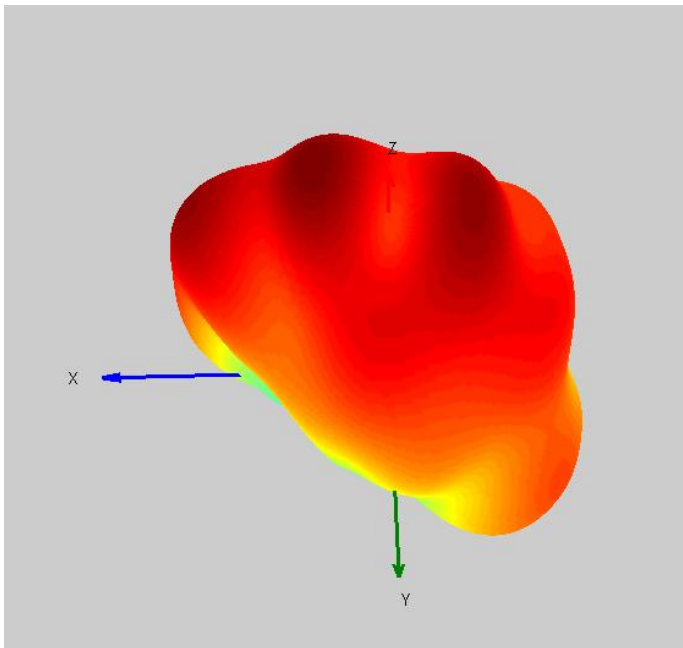
test equipment: Agilent 5071C Network analyzer, Agilent 8960 integrated measuring instrument, CMW5004G integrated measuring instrument

1、VSWR、smith、log

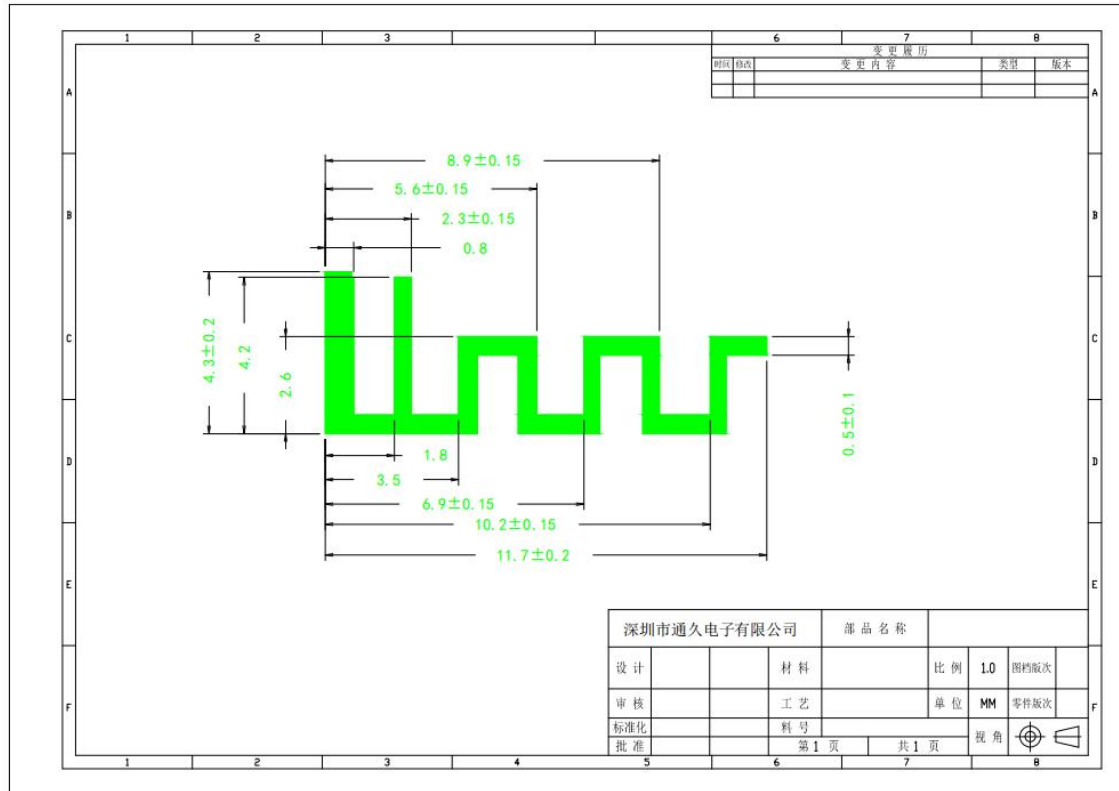


2、gain、efficiency、

frequency 频率(MHz)	gain 增益(dBi)	efficiency 效率(%)
2400	2.59	52.13
2410	2.61	53.70
2420	2.61	53.99
2430	2.69	53.41
2440	2.87	53.79
2450	3.13	56.81
2460	3.16	55.98
2470	3.16	55.78
2480	2.99	53.06
2490	3.04	55.18
2500	3.39	55.54



Product Structure Diagram



High and low temperature humidity test report

test project	High temperature, low temperature and constant humidity test					
Test sample Board name	2.4G BT antenna			date of observation		2026.5.29
Experiment / detection equipment	Humidity Chamber network analyzer			Test quantity		5 PCS
test standard	1. Metal surface coating without falling off, cracks, wrinkles and other bad, non-metallic parts can not have color change, cracking, deformation, degumming and other bad. 2. The electric test meets the design requirements and the voltage standing wave ratio test is qualified.					
test Name	Test item	Requirem ent	test method	Actual test data	Result	
					sample	determi ne
According to the method in Gb/t 2423.2-2001, the antenna shall be stored for 96 hours at the upper temperature of the storage document, and the electrical test shall be carried out at room temperature for 2 hours after the test						
High temperature test	Temperature (℃)	+85±3	In accordance with the method specified in GB/t 2423.2-2001	+87	1	qualifi ed
	Temperature stabilization time of test sample (H)				2	qualifi ed
	Test duration (H)				3	qualifi ed
	Recovery time (H)				4	qualifi ed
					5	qualifi ed
According to the method in Gb/t 2423.1-2001, the antenna should be stored for 96 hours in the lower limit of storage temperature, and then the electric test should be carried out at room temperature for 2 hours after the test						
Low temperature test	Temperature (℃)	-45±3	In accordance with the method specified in GB/t 2423.1-2001	-46	1	qualifi ed
	Temperature stabilization time of test sample (H)				2	qualifi ed
	Test duration (H)				3	qualifi ed
	Recovery time (H)				4	qualifi ed

					5	qualified
Constant humidity Thermal test	Temperature (°C)	+40±2 90-95 21 1	In accordance with Chapter 5 of GB2423.3- 93	+42 92 22 1.1	1	qualified
	Temperature stabilization time of test sample (H)				2	qualified
	Test duration (H)				3	qualified
	Recovery time (H)				4	qualified
					5	qualified