

承 认 书

APPROVAL SHEET

客 户 名 称

CUSTOMER NAME:

产 品 名 称

PRODUCT NAME: 2.4G ceramic Antenna

客 户 料 号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB06000800A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Eddy 	
APPROVED BY:	Changxing. Liu	
DATE:	2024/5/31	

Modification History

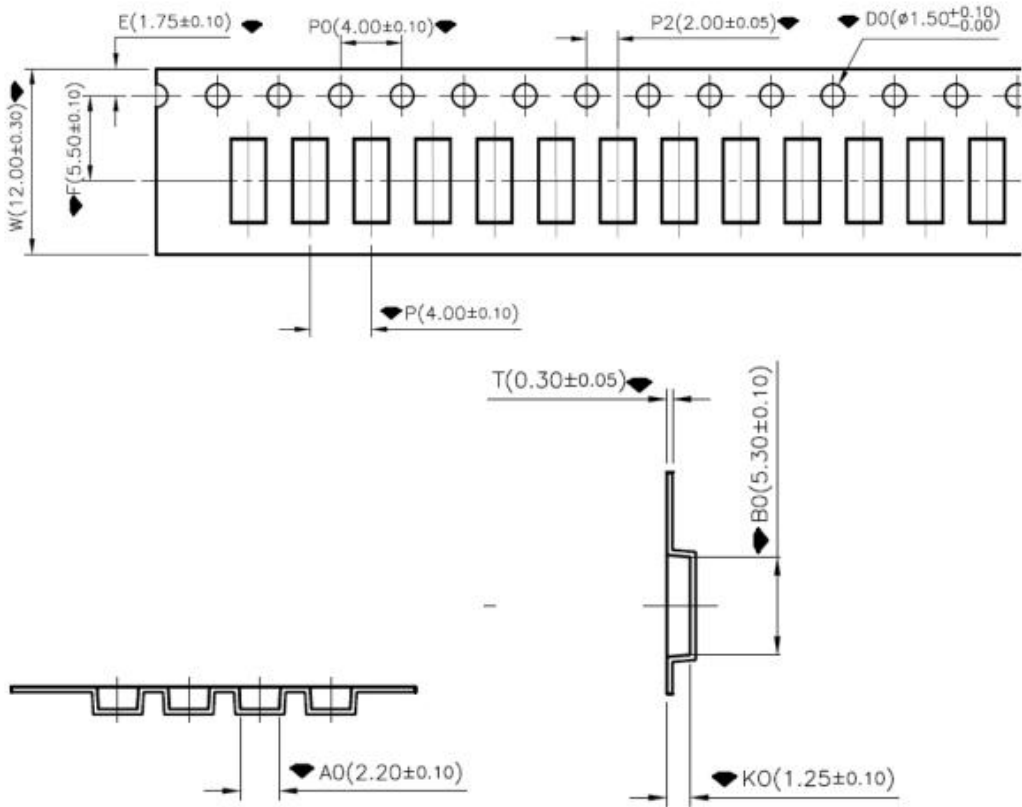
Version	Content Revision	Issued by	Date
A	Original version	Eddy	2024-5-31

Content

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1.Mechanical Specification

Structure chart	Symbol	Size(mm)
	L	5.0±0.1
	w	2.0±0.1
	H	1.0±0.1
	a	0.5±0.1

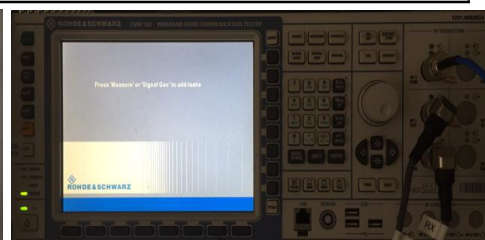
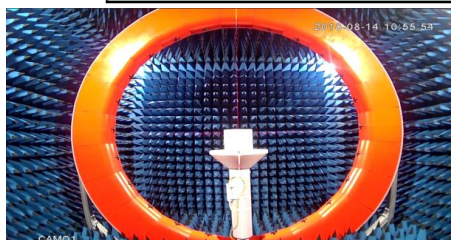


2. Electrical Specification

Characteristics	Specifications	Unit
Outline Dimensions	5.0x2.0x1.0x0.5	mm
Frequency	2400-2500	MHz
Impedance	50	Ω
VSWR	≤ 2	
Polarization	Linear Polarization	
Gain	3.19	dBi
Efficiency	> 35	%
Connector Type	/	
Operating temperature	-20℃~+85℃	
Storage Temp	-20℃~+50℃	

3. Test Items and Equipment

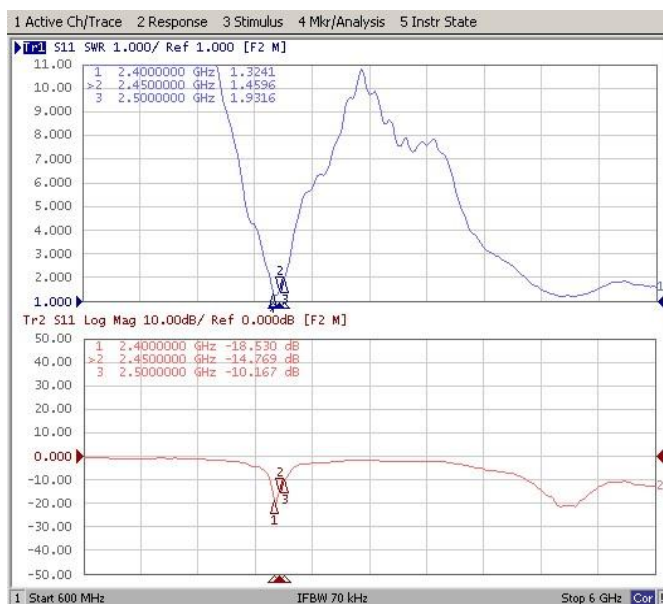
	Test items	Test equipment
S Parameter	1.Return Loss 2.VSWR	Network analyzer (Agilent E5071B)
The whole machine of Passive parameters	1.Frequency 2.Gain 3.Radiation Pattern	1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B)
The whole machine of Active parameters	1.TRP 2.TIS	1.3D microwave darkroom (5m*5m*5m) 2.Comprehensive test instrument (CMW500)



4. S Parameter

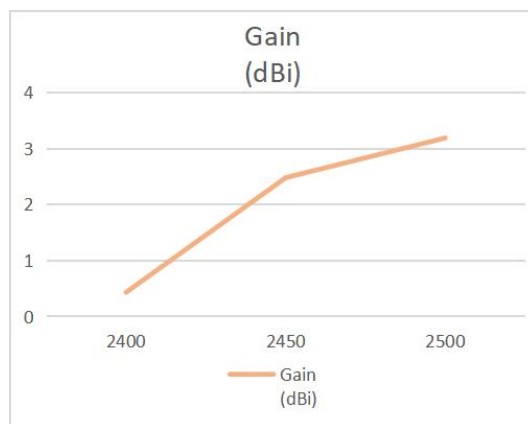
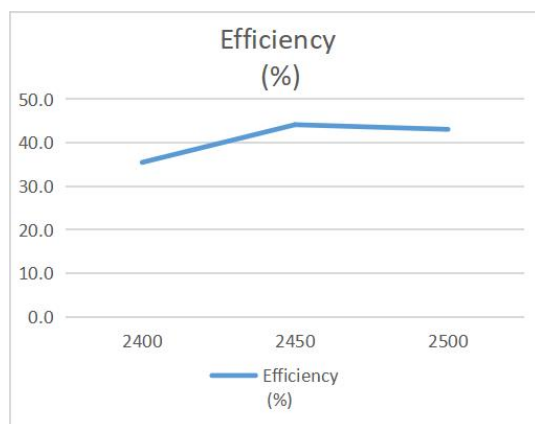
Frequency (MHz)	Return Loss (dB)	VSWR
2400	-18.53	1.32
2450	-14.76	1.45
2500	-10.16	1.93

* Voltage Standing Wave Ratio(VSWR)
Return Loss(RL)
 $RL = 20 * \log_{10}[(VSWR + 1) / (VSWR - 1)]$



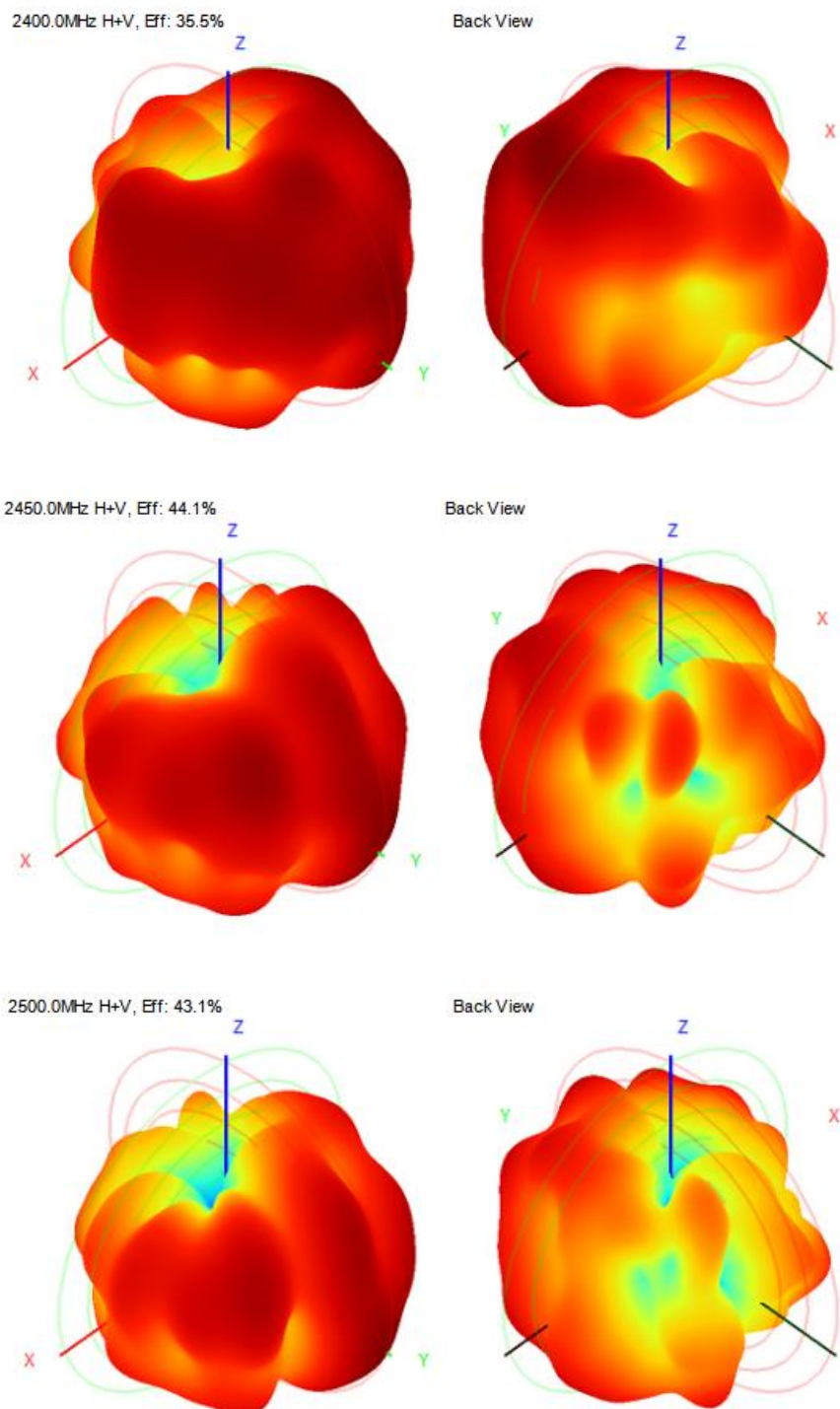
5. Efficiency and Gain

Frequency (MHz)	2400	2450	2500
Efficiency (%)	35.47	44.13	43.06
Gain (dBi)	0.43	2.48	3.19



6. Radiation Pattern

6-1 Antenna 3D Radiation Pattern



6-2 Antenna 2D Radiation Pattern

