

18x3.0x2.5mm WiFi/Bluetooth Ceramic Chip Antenna

Engineering Specification

1. Product Number



(1) Product Type	(2) Steel plate antenna
(3) Size Code	(4) 18x3.0x2.5mm
(5) Type Code	(6) H1
(7) Packing	(8) Paper &Reel
(9) Frequency	(10) 2.45GHz

Manufacture : Shenzhen Dezizi Technology Co., Ltd

Address : Building C6, Hengfeng Industrial City,
Baoan District,Shenzhen

Prepared by : **JIEXI**

Designed by : **Jason**

Checked by : **Jason**

Approved by: **MR.FANG**

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2. Features

- *Stable and reliable in performances
- *Low temperature coefficient of frequency
- *Low profile, compact size
- *RoHS compliance
- *SMT processes compatible

3. Applications

- *Bluetooth earphone systems
- *Hand-held devices when WiFi /Bluetooth functions are needed, e.g., Smart phone.
- *IEEE802.11 b/g/n
- *ZigBee
- *Wireless PCMCIA cards or USB dongle

4. Description

dezizai chip antenna series are specially designed for WiFi/Bluetooth applications. Based on dezizai proprietary design and processes, this chip antenna has excellent stability and sensitivity to consistently provide high signal reception efficiency.

5. Electrical Specifications

5-1. Electrical Table

Characteristics		Specifications	Unit
Outline Dimensions		18x3.0x2.5mm	mm
Working Frequency		2400~2500	MHz
VSWR		2 Max.	
Impedance		50	Ω
Polarization		Linear Polarization	
Gain	Peak	3.1 (typical)	dBi
	Efficiency	75 (typical)	%

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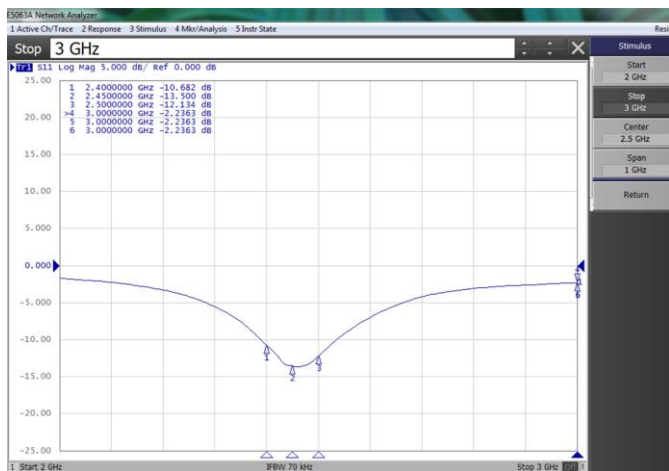
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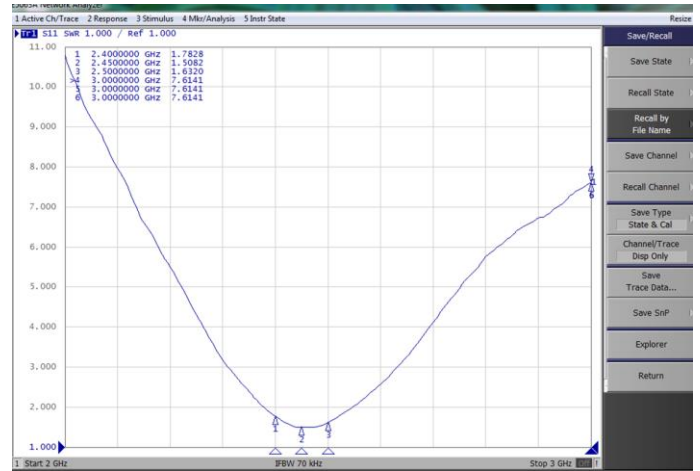
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5-2. Return Loss & VSWR

Return Loss (S_{11})

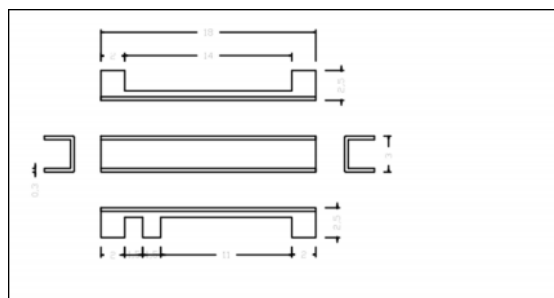


VSWR(S_{11})



6. Antenna Dimensions & Test Board (unit: mm)

a. Antenna Dimensions



Size : 18*3*2.5mm
Thickness : 0.3mm

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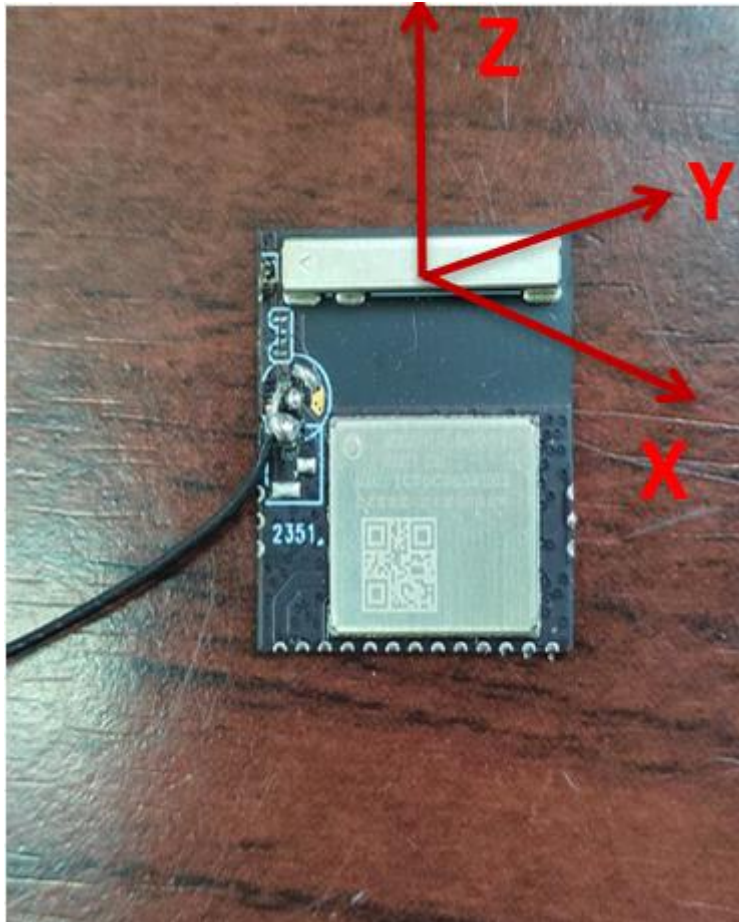
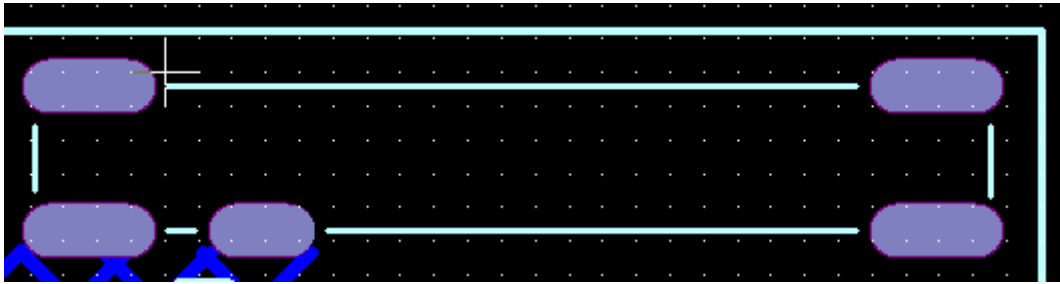
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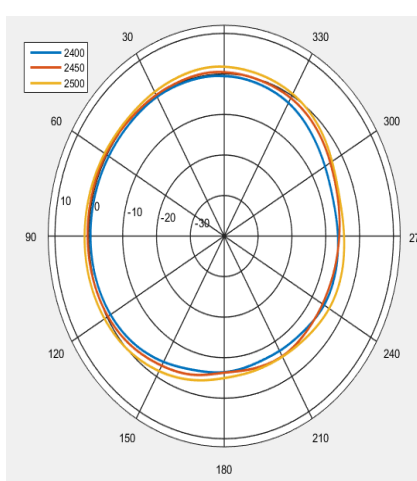
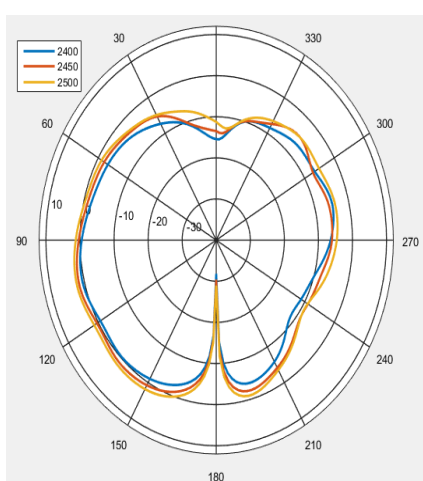
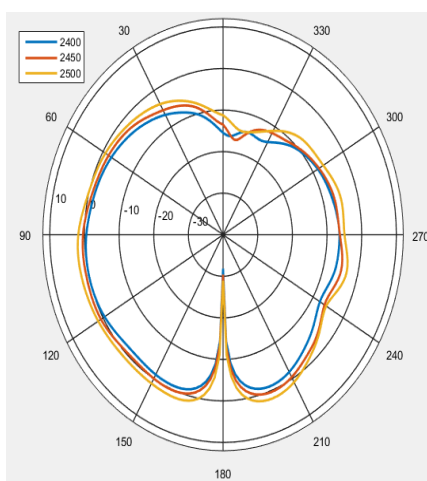
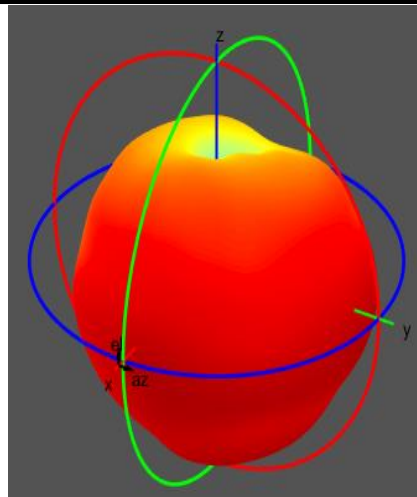
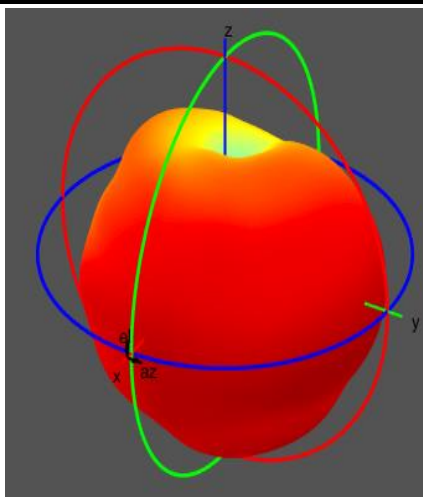
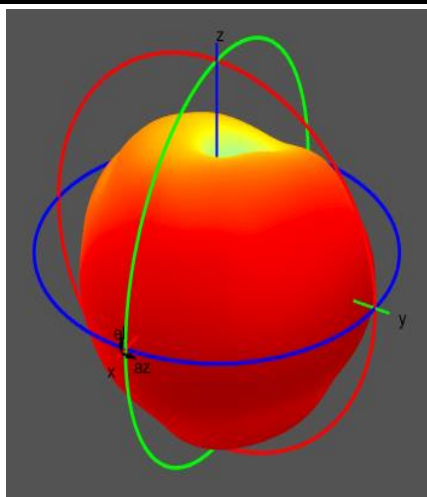
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b. Test Board with Antenna



7. Radiation Pattern

7-1. 3D Pattern @ 2400、2450、2500MHz



7-2. Gain and efficiency

Frequency(MHz)	2400	2410	2420	2430	2442	2450	2460	2470	2480	2490	2500
Efficiency (%)	43.7	46.8	48.8	50.8	53.4	56.5	61.7	65.0	69.4	71.2	72.2
Gain (dBi)	0.8	1.1	1.3	1.5	1.7	1.8	2.1	2.4	3.1	2.9	3.1

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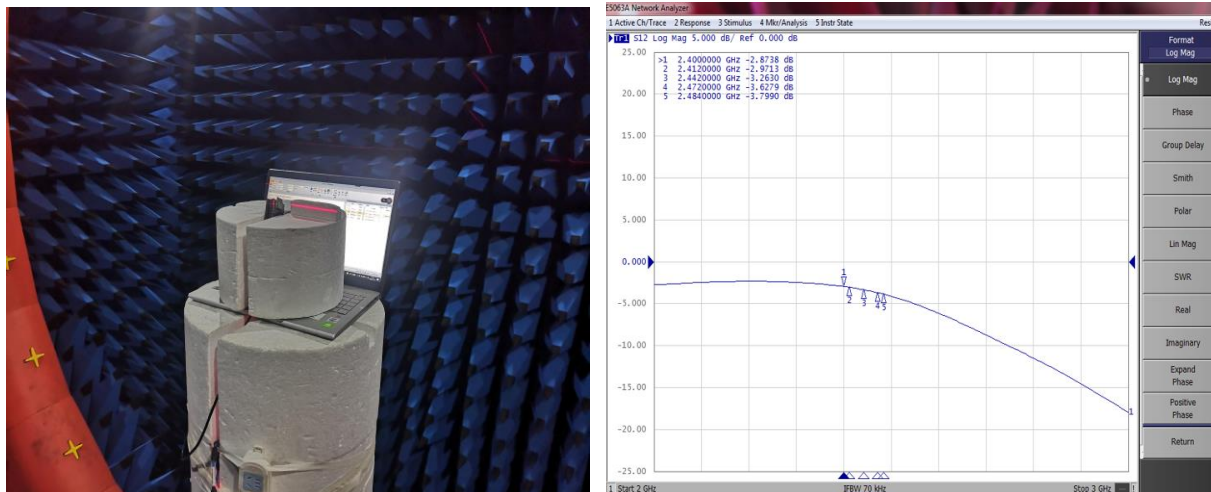
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8. OTA

8-1 Test board environment with antenna



8-2. TRP and TIS

	#1		#2	
	TRP	TIS	TRP	TIS
11b/11M 11M (20M)				
CH1	16.69	-84.86	16.8	-85.14
CH7	16.46	-84.29	16.97	-85.83
CH13	16.65	-84.62	16.86	-85.76
11g/6M 54M (20M)				
CH1	14.83	-66.65	15.11	-68.09
CH7	14.24	-65.24	15.28	-67.47
CH13	14.42	-66.89	15.15	-68.55
11n/6.5M 65M (20M)				
CH1	14.85	-63.14	15.05	-64.95
CH7	14.29	-62.89	15.28	-64.1
CH13	14.36	-62.04	15.02	-63.17

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