

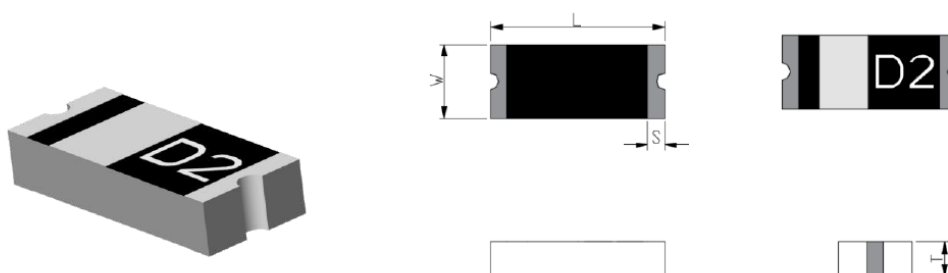
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ShenZhen FeiMin Technology CO., LTD.

Antenna specification

1. Project information

1.1 Appearance and Dimensions



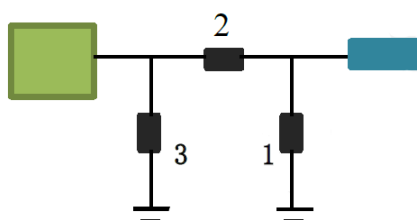
Symbol	Dimension(mm)
L	5.2 ± 0.2
W	2.2 ± 0.2
T	1.0 ± 0.2
S	0.5 ± 0.2

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1.2 Matching circuit

With the following recommended values of matching and tuning components the center frequencies will be about 2440MHz at our standard 30*40mm evaluation board. However,these are typical refenerce values. Which way need to be changed when circuit boards or part vendors are deffierent.



System matching circuit component		
Location	Description	Tolerance
1	NC	/
2	1.6nH	$\pm 0.2\text{nH}$
3	0.75pF	$\pm 0.1\text{ pF}$

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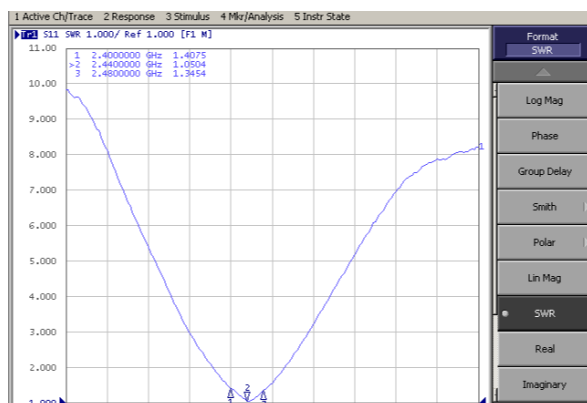
2. Electrical characteristics

2.1 Elecrtical table

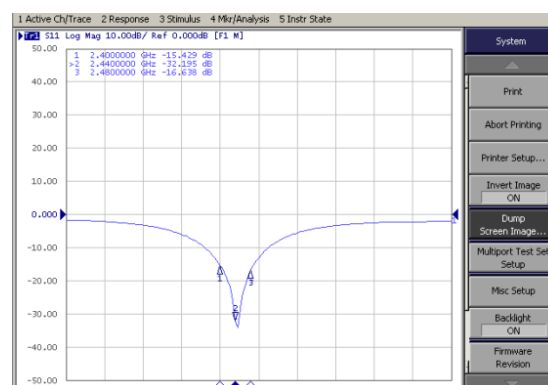
Characteristics		Specifications	Unit
Outline Dimensions		5.2*2.2*1.0	mm
Working frequency		2400-2500	MHz
VSWR		<2	/
Impdeance		50	ohm
polarization		Line	/
Gain	peak	2	dBi
	Efficiency	50	%

2.2 VSWR& Return loss

VSWR



Return loss



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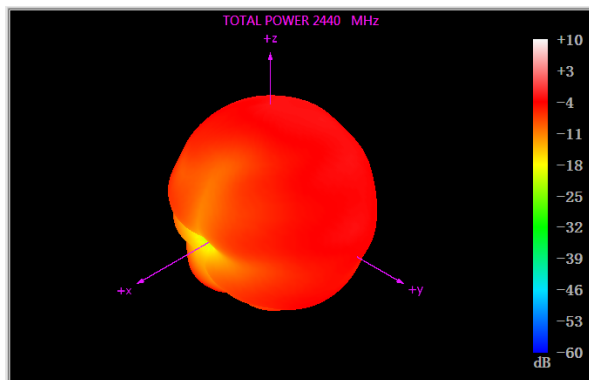
2.3 Gain and Efficiency

Frequency(MHz)	Gain(dBi)	Efficiency(%)
2400	1.34	45.88
2410	1.37	46.78
2420	1.09	47.67
2430	1.22	50.38
2440	1.45	50.78
2450	1.67	51.44
2460	1.87	51.34
2470	2.00	51.36
2480	1.75	51.24
2490	1.67	51.36
2500	1.89	51.24

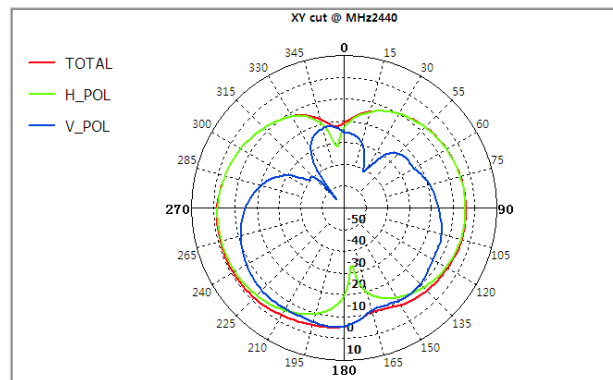
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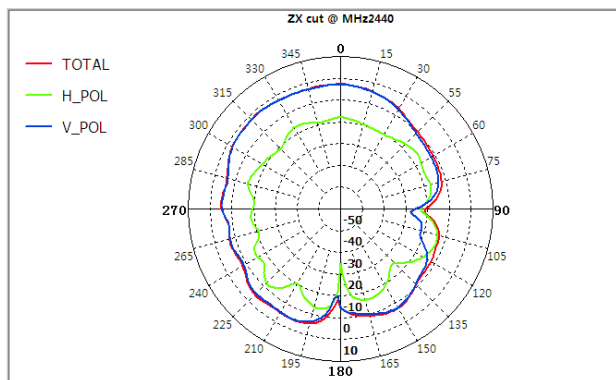
2.4 Antenna radiation pattern



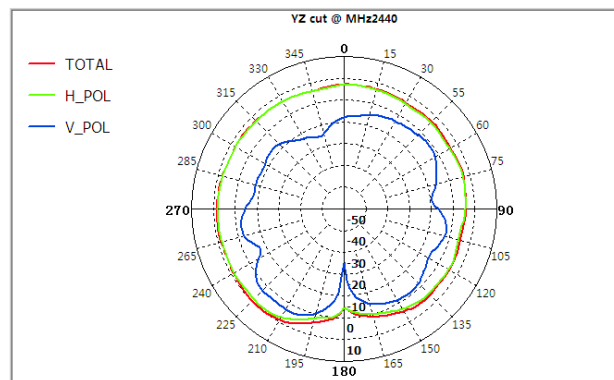
3D Plane @2440MHz



2D Plane XOY @2440MHz



2D Plane XOZ @2440MHz



2D Plane YOZ @2440MHz