

Rubber Antenna

Frequency 2.4 GHz, SMA connection

Electrical Specifications:

Frequency Range	2.4~2.485GHz
VSWR	≤ 2.0
Impedance	50 Ω ± 5 Ω
Gain	2dBi
Polarization	Vertical
Power Handling	10 Watt
Beam Width	H: 360°/ E: 41°

Mechanical Specifications:

Connector	SMA MALE
Operation Temp.	-30° ~ +60°
Material Radom:	PU
Dimension	78x8 mm
Weight	8g ± 1g
Color	Black

3D illustration



TESTING CONDITION

TEST SETUP

VSWR measurement (S11): Use Rhode & Schwarz ZV8 Network Analyzer with Harbour RG-142 coaxial cable: 1000mm length in free space.

VSWR

	VSWR Performance		
Freq(MHz)	2400	2450	2485
Free space	1.3	1.1	1.5

GAIN MEASUREMENT

TEST SETUP

The gain of the antenna was measured by non-reflective chamber. The chamber provides less than -30 dB reflectivity from 800 MHz through 6 GHz and a 60cm diameter spherical quiet zone. The measurement results are calibrated using both SCHWARZBECK horn standards. A decoupling sleeve is used to reduce feed line radiation.

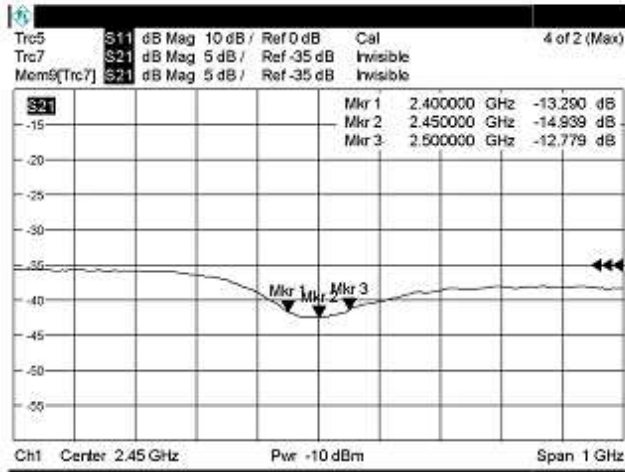
TEST RESULT

The peak gain is picked up as table list from Network analyzer in Chamber room, the completely gain plots also be shown below.

	Peak Gain(H)
Freq	2450 MHz
Peak Gain	2.83 dBi

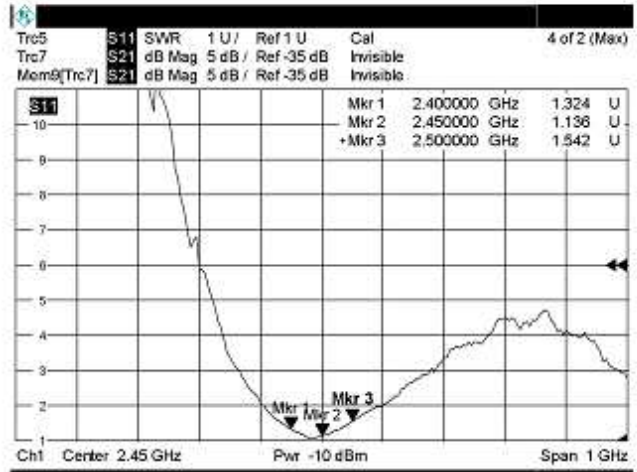
	Peak Gain(E)
Freq	2450 MHz
Peak Gain	3.14 dBi

Return loss



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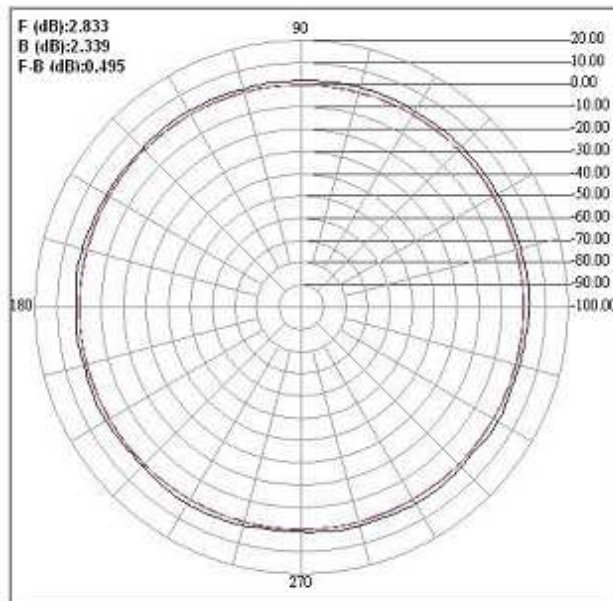
SWR



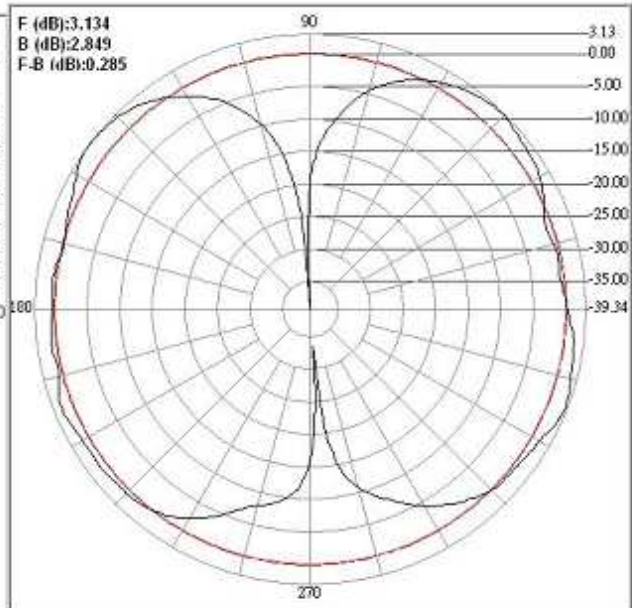
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Radiation pattern

H-plane



E-plane



Center freq.(MHz):2450	Plane :E Plane	
Max gain(dBi) :3.13	Min gain(dBi) :-39	
-3dB1 :164 deg	-3dB2 :123 deg	HPB :40 deg
Front (dB) :3.13	Back (dB) :2.89	F B Ratio (dB) :0.2