



Shenzhen Shuodian Electronic Technology Co.,Ltd

Specification

for

EFS107-KEY 2.4G Antenna

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1. Specifications

NO .	ITEMS	DETAILS
1	model	EFS107-KEY
2	Frequency band	2400-2500MHz
3	VSWR	≤2.0
4	GAIN	0.42 dBi
5	Impedance	50 Ω
6	Antenna type	unipolar
7	Antenna implementation form	coaxial cable

3.Product electrical performance test data

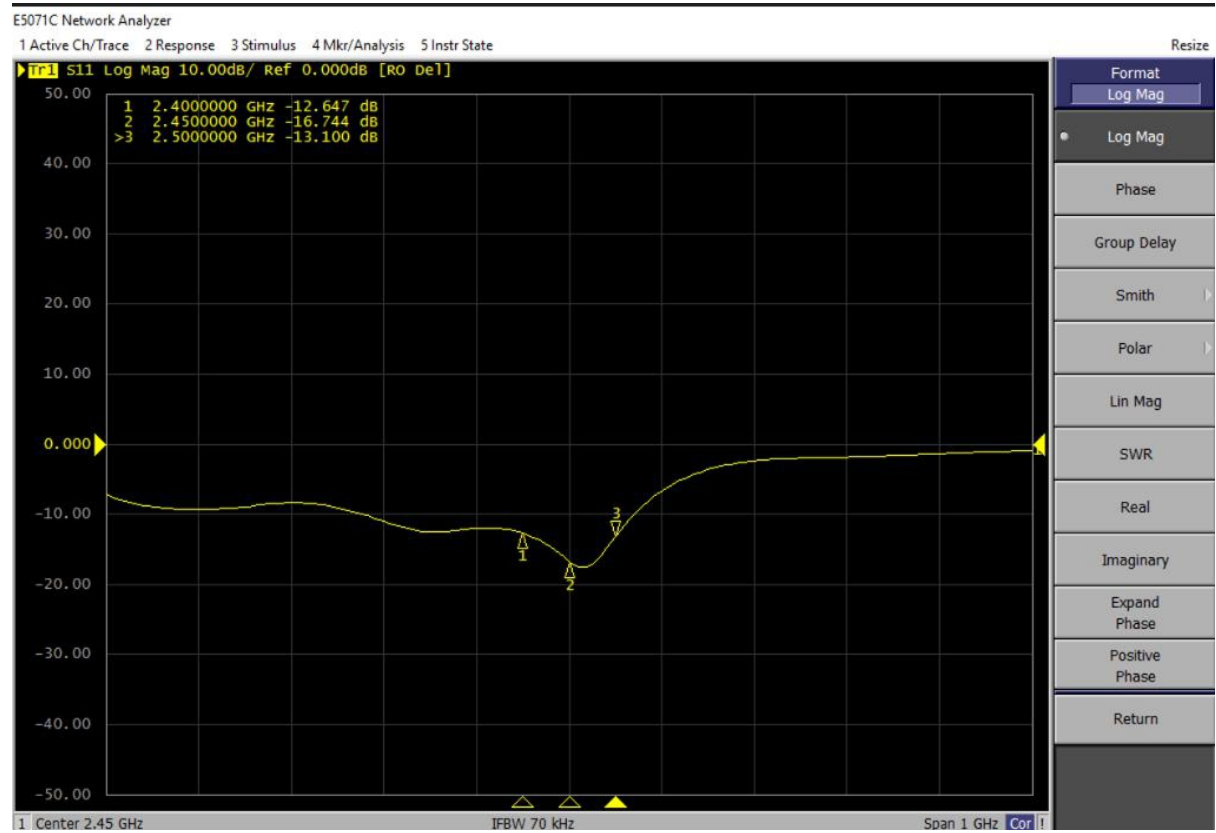
3.1 Testing environment and instrument equipment

testing environment:	Test equipment:
temperature: 10℃——+30℃	Network analyzer
humidity: ≤80% (+40℃)	Agilent E8358A
atmospheric pressure: 750mmkg±30mmkg	ETS anechoic chamber

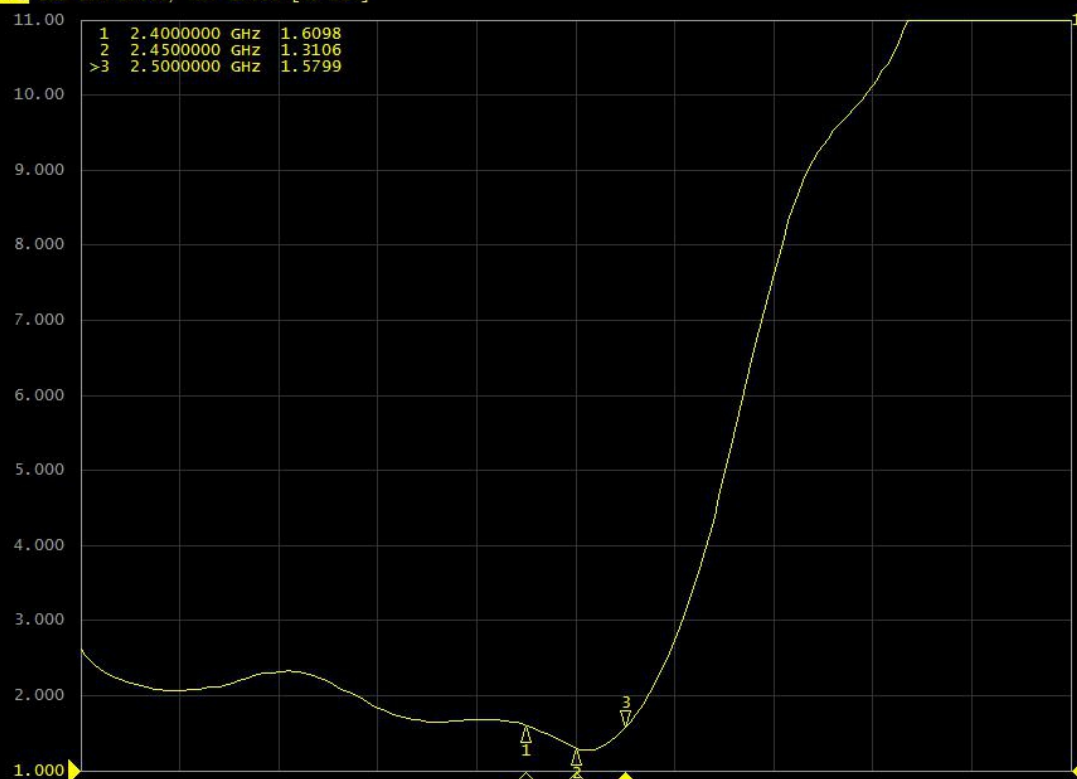
3.2 Product electrical performance test data:

S11 picture:

Marker	2400MHz	2450MHz	2500MHz
Returnloss	-12.64	-16.74	-13.10
VSWR	1.60	1.31	1.57



▶ Tr1 S11 SWR 1.000/ Ref 1.000 [RO De1]



1 Center 2.45 GHz

IFBW 70 kHz

Span 1 GHz Cor

Format

SWR

Log Mag

Phase

Group Delay

Smith

Polar

Lin Mag

SWR

Real

Imaginary

Expand

Phase

Positive

Phase

Return

3.3 Gain efficiency and directional pattern of antenna:

频率（MHz）	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain（dBi）	0.42	0.39	0.26	-0.05	-0.10	-0.18	-0.16	-0.09	-0.19	-0.36	-0.52
Efficiency（%）	40.9	39.8	38.9	37.4	36.9	35.8	34.1	32.5	30.7	29.7	29.2

2450MHz Direction diagram:

