

Antenna Specification

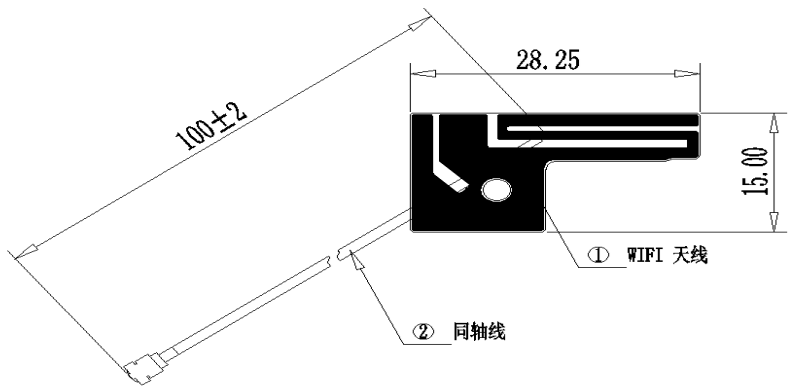
Antenna Model:
Antenna Type:PIFA antenna
Manufacture:SAGE ELECTRONICS TECHNOLOGY LIMITED

1. The design target

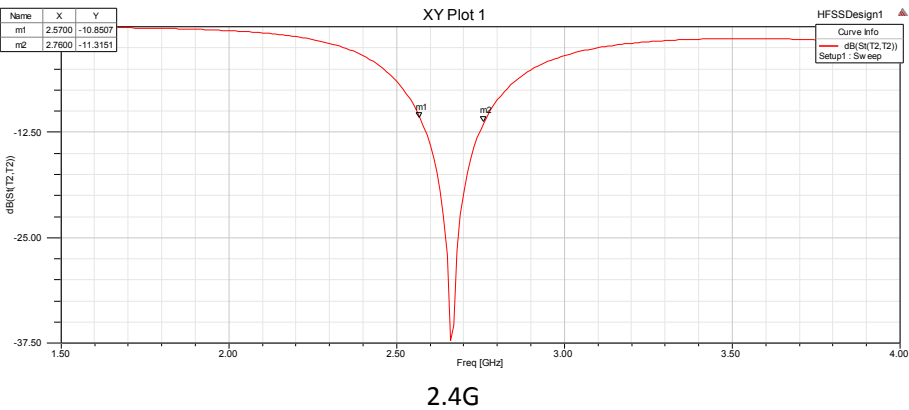
Frequency	2.412~2.482GHz 5~5.8GHz
The antenna radiation efficiency	>60%
Antenna Gain	1dBi
isolation	<-10dB(5G <-6dB)

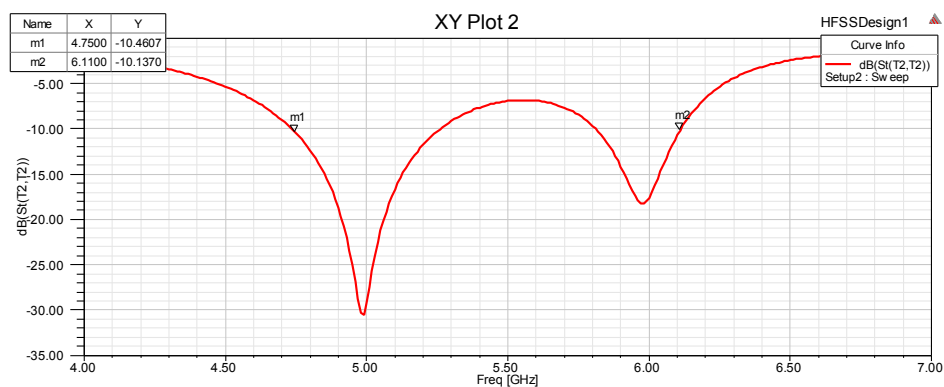
2.Antenna design

1. Design specifications



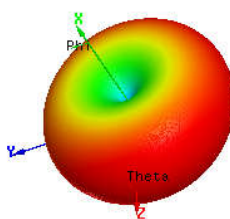
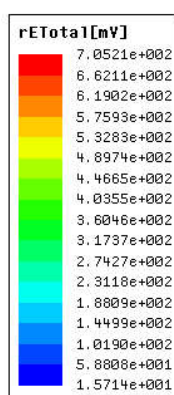
2. S parameter



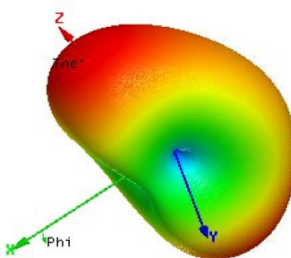
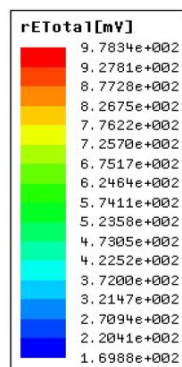


5G

3. Radiation pattern

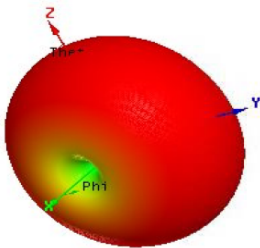
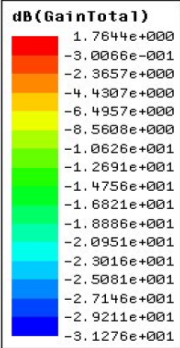


2.4G

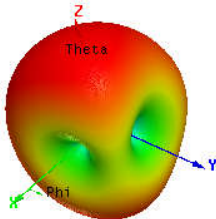
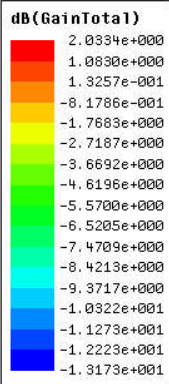


5G

4. Radiation parameters



2.4G



5G

Antenna Parameters:

	Quantity	Freq	Value	
	Max U	2.4GHz	0.00065957 W/sr	
	Peak Directivity		1.6417	
	Peak Gain		0	
	Peak Realized Gain		0.82886	
	Radiated Power		0.0050487 W	
	Accepted Power		0.0055214 W	
	Incident Power		0.01 W	
	Radiation Efficiency		0.91439	
	Front to Back Ratio		1.0304	
	Decay Factor		0	

Frequency(MHz)	Efficiency(%)	Gain(dBi)
2400	25.27	-1.15
2450	15.16	1
2500	21.19	0.19

2.4G

Antenna Parameters:

	Quantity	Freq	Value	
	Max U	5GHz	0.0012694 W/sr	
	Peak Directivity		1.7361	
	Peak Gain		0	
	Peak Realized Gain		1.5952	
	Radiated Power		0.0091889 W	
	Accepted Power		0.0099881 W	
	Incident Power		0.01 W	
	Radiation Efficiency		0.91998	
	Front to Back Ratio		1.1703	
	Decay Factor		0	

Frequency (MHz)	Efficiency (%)	Gain (dBi)
5100	33.44	0.58
5150	33.47	0.71
5250	32.82	0.61
5300	32.30	0.57
5350	31.62	0.21
5400	37.97	1.00
5450	34.20	0.86
5500	29.71	-0.48
5550	22.45	-0.08
5600	22.13	-1.10
5650	27.08	-0.39
5700	23.42	-1.19
5750	20.85	-0.38
5800	26.01	-1.56
5850	36.38	0.94
5900	15.56	-2.96

3. The sample test

