

Specification

Product name: chip SMT antenna

Part no.: BAT-ANT2-T5020

Frequency: 2400-2500MHz

Polarization mode: linear
polarization

Radiation direction: All-around

VSWR: ≤ 2.0

Echo loss: $\leq -10\text{dB}$

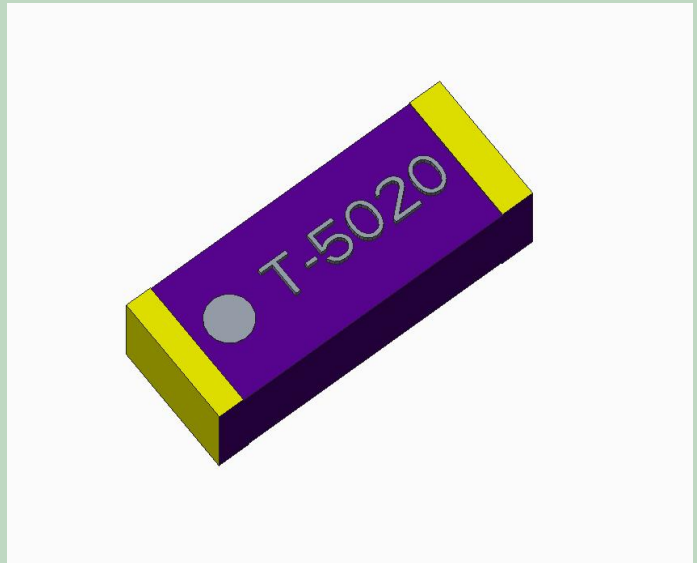
Antenna gain: 2dBi

Radiation efficiency: $\geq 60\%$

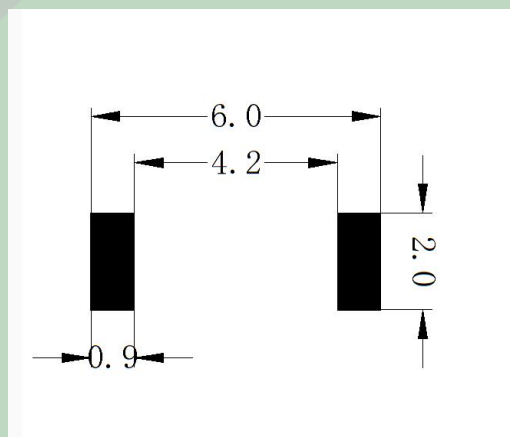
Power capacity: 4W

Working temperature: $-40\sim 80^{\circ}\text{C}$

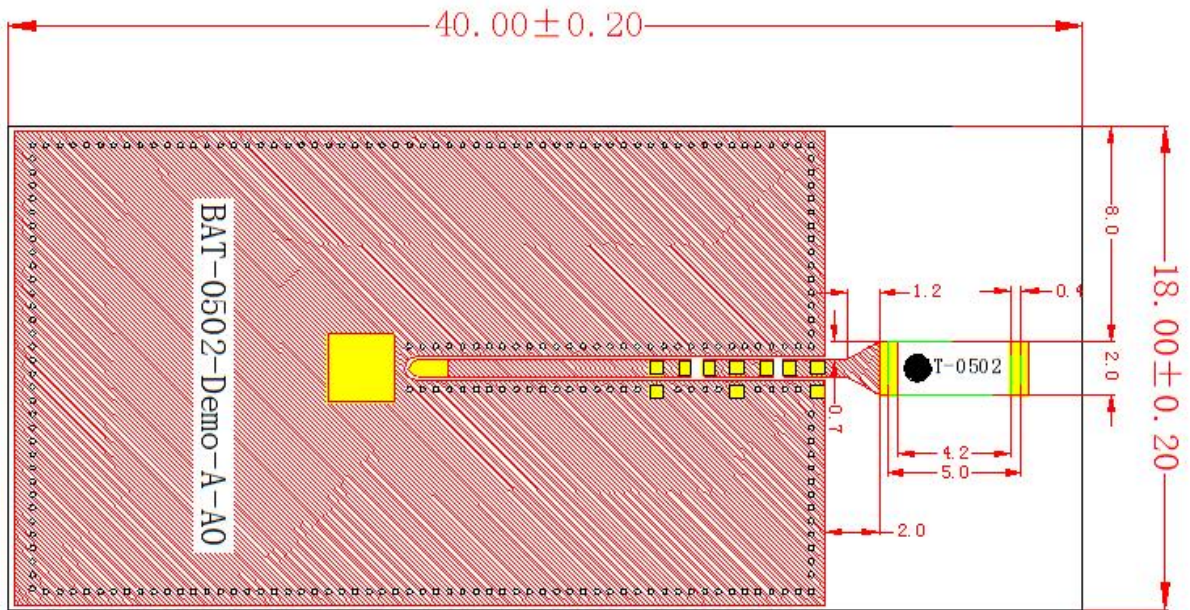
Antenna size: 5 (L) * 2 (W) * 1.6 (H) mm



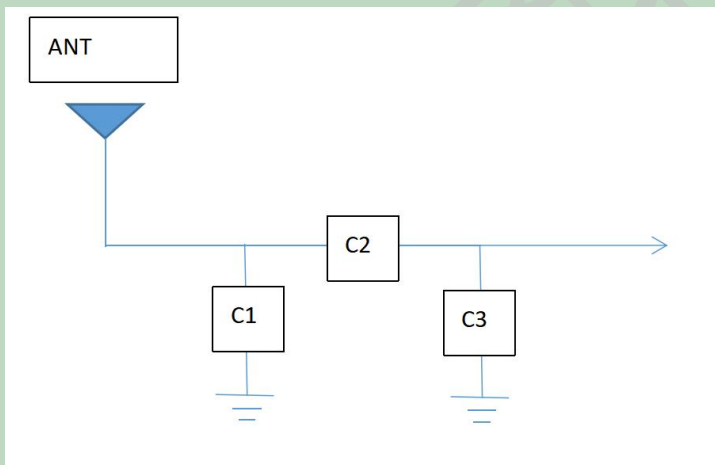
Antenna design package dimensions (mm)



Hardware design guidance



Impedance matching network diagram

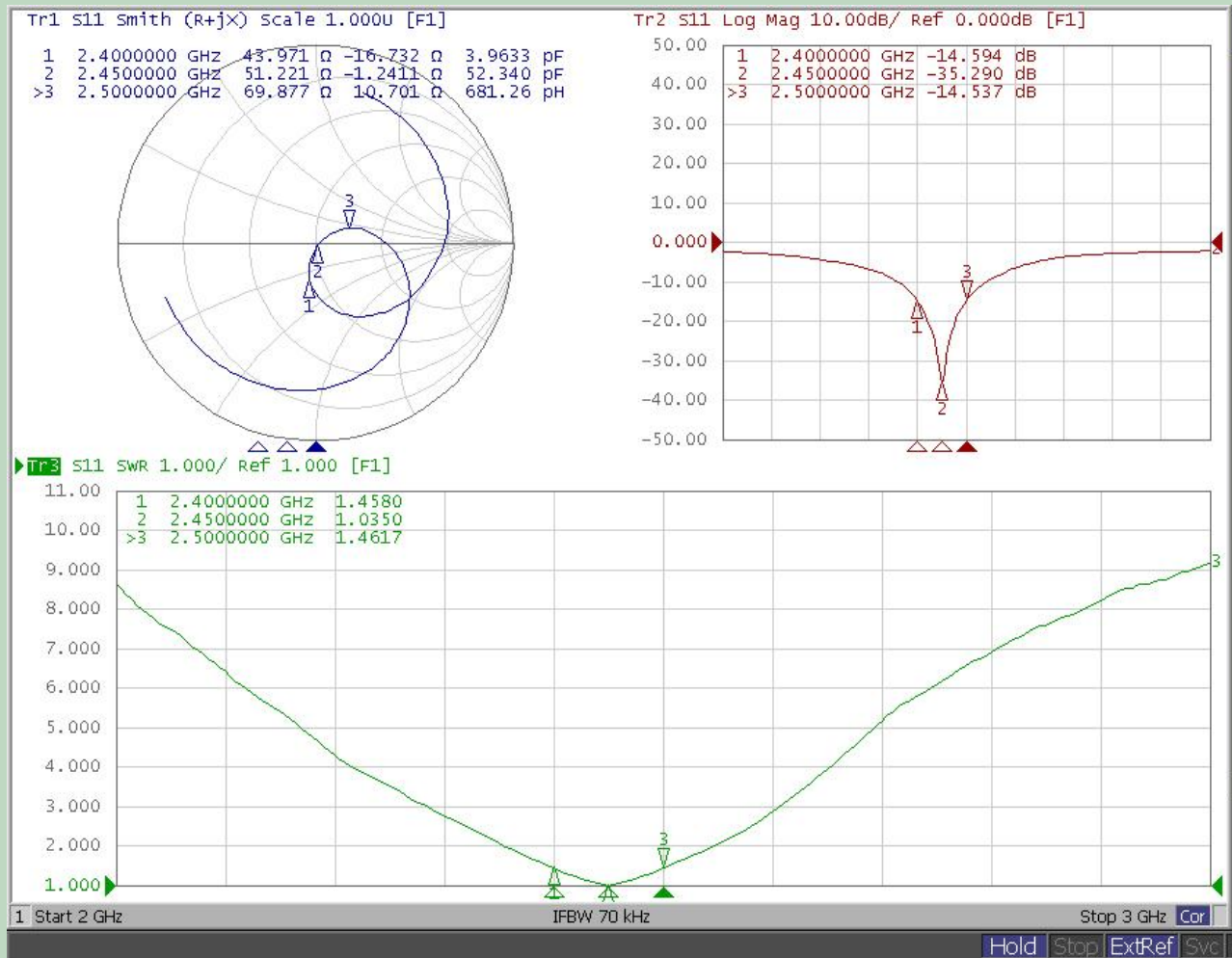


Matching instructions:

- ① Use inductance and capacitance to debug impedance;
- ② Usually L-shape can match, inductance value range 1~5.6nH, capacitance value range: 0.5 ~ 3 PF;

③ If adjust with layout, it can play better performance;

S11 measure data



Gain & Radiation efficiency

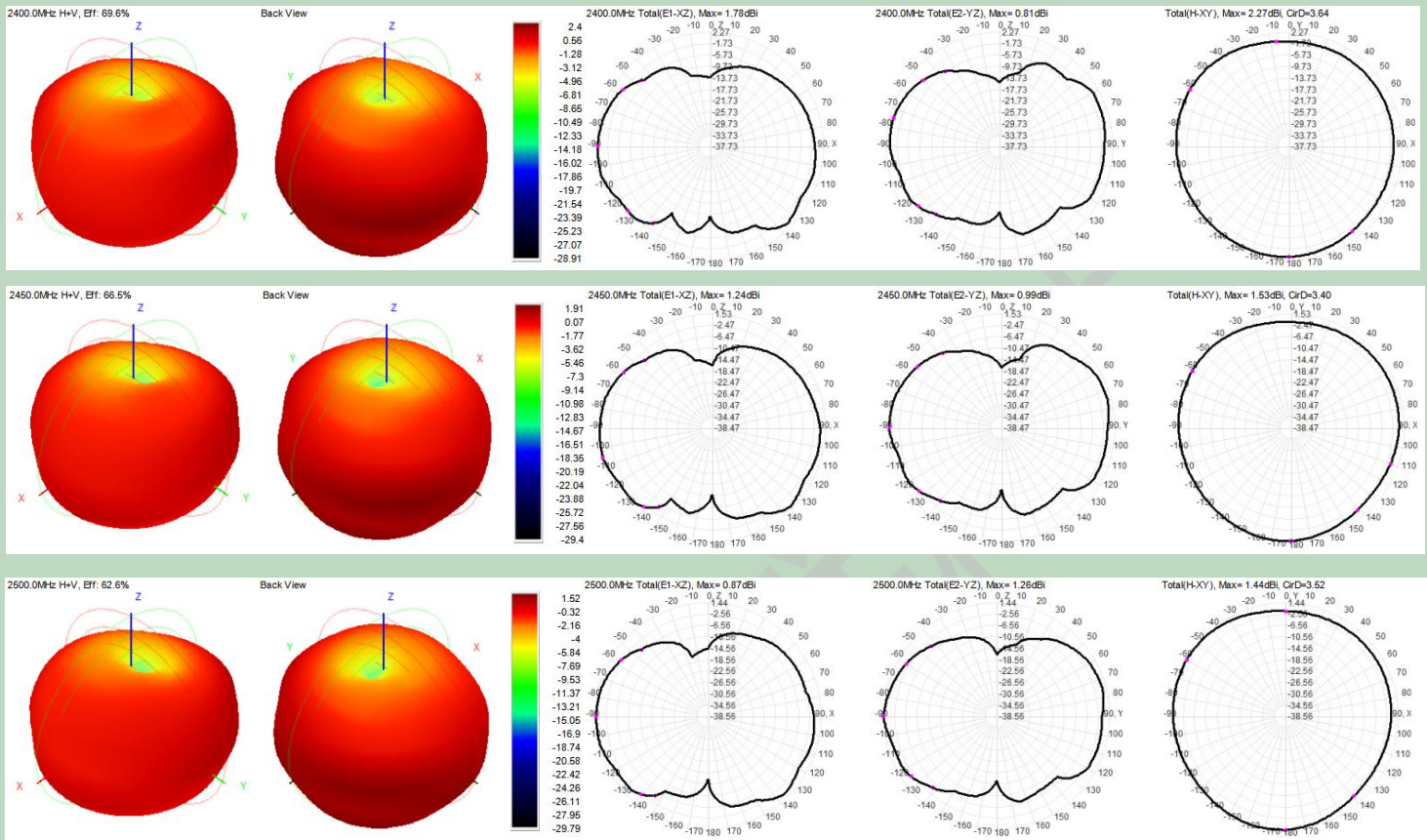
Frequency (MHz)	BAT-ANT2-T5020	
	Gain (dBi)	Efficiency (%)
2400	1.70	63.62
2410	1.77	64.02
2420	1.78	64.53
2430	1.87	65.00
2440	1.90	65.76
2450	1.91	66.47
2460	1.94	66.96
2470	1.86	66.74
2480	1.86	65.98
2490	1.86	65.34

2500

1.82

65.56

Radiation pattern



Reflow soldering temperature working curve

