

The Main Antenna Sample Confirmation

Customer			
Project Name	KF531	Date	20260508
Project NO.	SN1603	Notes	FPC+Coaxial line welding
Frequency Range	2400MHz-2500MHz		
Designed By	RF Engineer	Structural Engineer	
Checked By	Engineering Manager		
Client' s Approval			

Designer: SINAWELL Electronics(Shenzhen) Co., Ltd.

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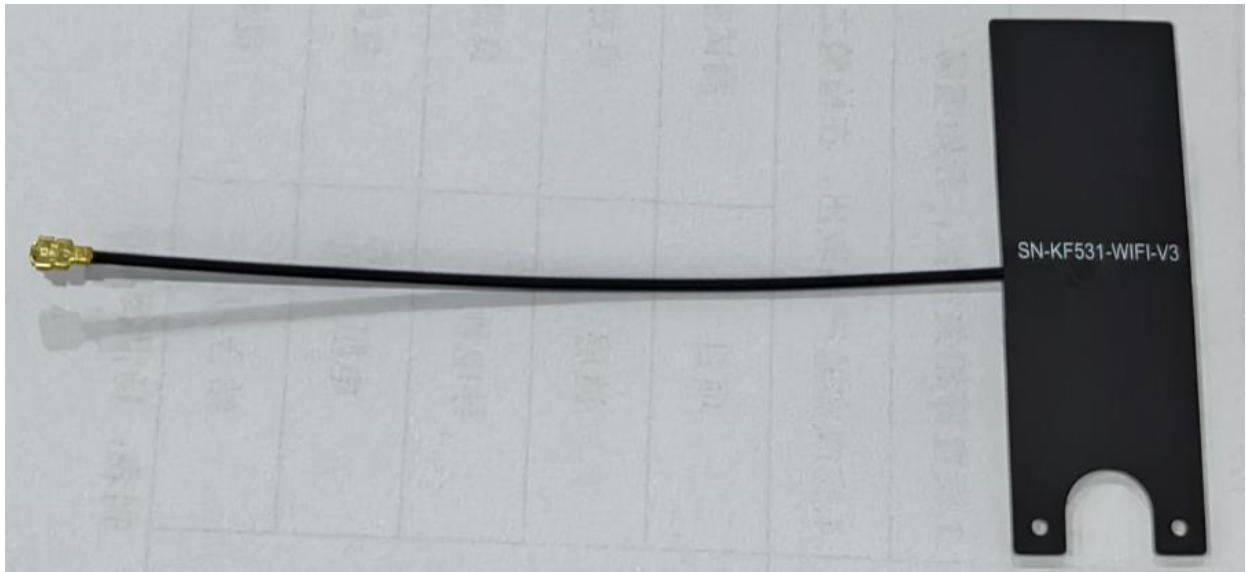
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1. Specification description

This specification describes the status of the **KF531** WIFI antenna with a frequency band of 2400MHz-2500MHz.

2. Antenna appearance



3. Electrical performance

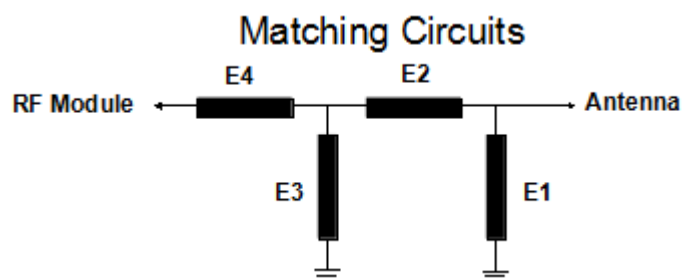
3.1. Antenna band

WIFI	
Transmitting band(MHz)	2400MHz-2500MHz

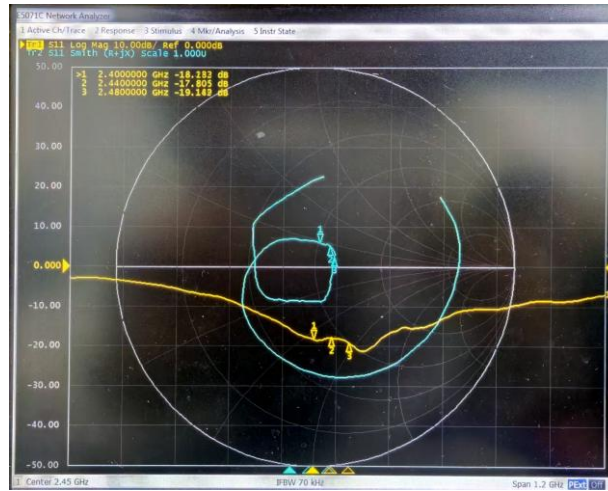
3.2. Matching Circuit

After the test point is at the antenna connector (RF test port), see the figure below.

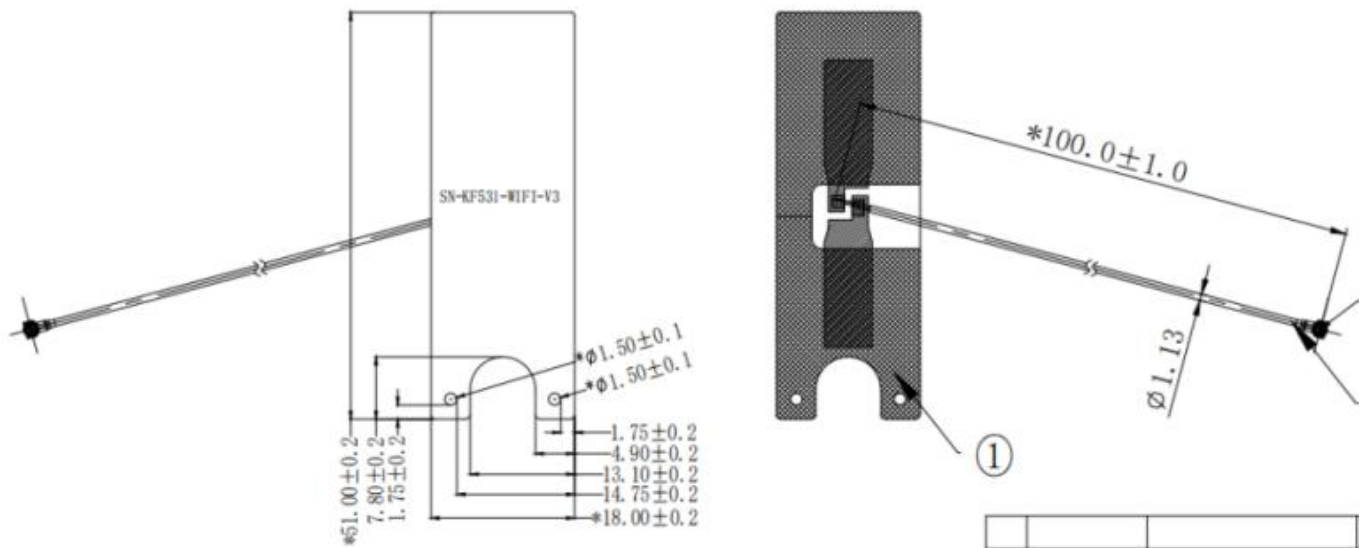
Element	Value
E1(0201)	NC
E2(0201)	0 Ω
E3(0201)	NC
E4	0 Ω



3.3. Return Loss



Appendix 1: Structural Drawing



4. WIFI antenna passive test data

Freq (MHz)	Gain (dBi)	Effi (dB)	Effi (%)
2400	-1.78	2.02	66.37
2410	-1.82	2.03	65.77
2420	-1.88	2.01	64.86
2430	-1.87	2.06	65.01
2440	-1.87	2.1	65.01
2450	-1.85	2.16	65.31
2460	-1.97	2.1	63.53
2470	-1.91	2.21	64.42
2480	-1.9	2.29	64.57
2490	-1.91	2.36	64.42
2500	-1.98	2.32	63.39

Field intensity pattern

