

The Main Antenna Sample Confirmation

Customer			
Project Name	SS131		Date2024-12-16
Project NO.	SN1251	Notes	coaxial line+ FPC
Frequency Range	WIFI		
Designed By	RF Engineer	Structural Engineer	
Checked By	Engineering Manager		
Client' s Approval			

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

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1. Specification description

This specification describes the status of the SS131 internal antenna with a frequency band of WIFI.

2. Antenna appearance



3. Electrical performance

3.1. Antenna band

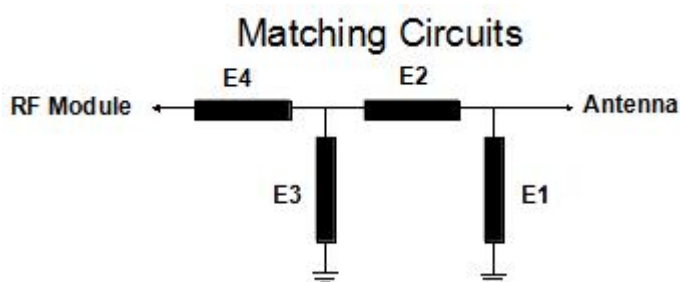
	WIFI
Transmitting band(MHz)	2400MHz-2500MHz

3.2. Matching Circuit

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

1. WIFI antenna matching。

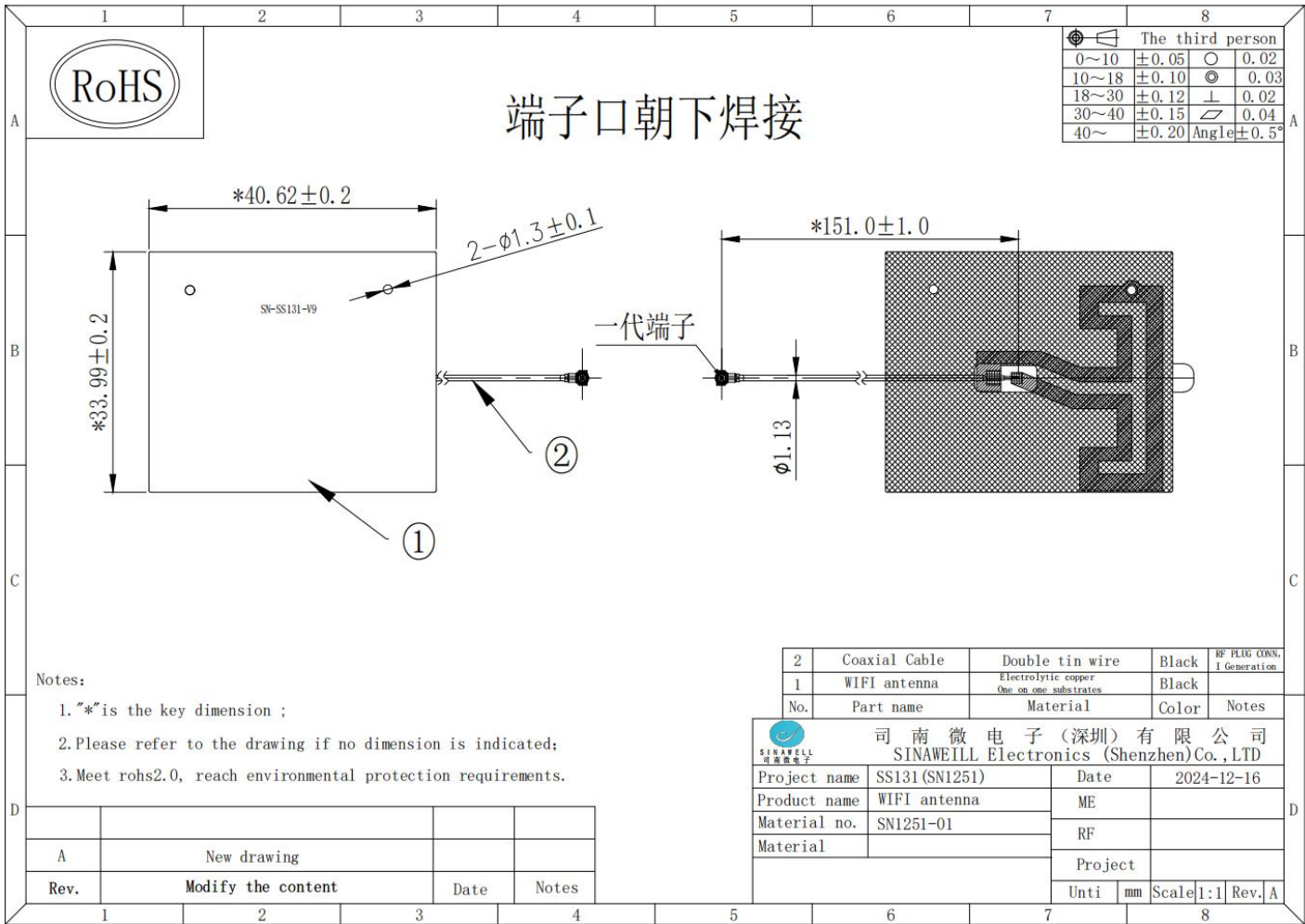
Element	Value
E1(0201)	NC
E2(0201)	0 Ω
E3(0201)	NC
E4	0 Ω



3.3. Return Loss



Appendix 1: Structural Drawing



Appendix 2:

WIFI antenna passive test data

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	50.96	-2.93	2.73
2410	52.51	-2.8	2.95
2420	50.28	-2.99	2.77
2430	50.17	-3	2.83
2440	50.48	-2.97	2.92
2450	51.26	-2.9	2.97
2460	50.47	-2.97	2.85
2470	49.83	-3.02	2.75
2480	49.15	-3.08	2.6
2490	48.35	-3.16	2.46
2500	47.39	-3.24	2.3

3D Test Report

WIFI antenna active test data

BAND	CHANNEL	TRP	TIS
11B	1	13.4	-84.52
	3	14	-84.58
	5	13.82	-84.53
	6	13.62	-85.05
	7	13.75	-85.09
	9	13.6	-84.96
	11	12.73	-84.81
	13	12.6	-84.74

Field intensity pattern

