



天线承认书

Parts Approval Sheet

Customer	Smatek	Project	S9
Band	WIFI	Color	Black
PN	X1812	Version	V0
Customer material number	126.30.0002		

DATE: 2023/05/09

R&D			QC
Issued by	Checked by	Confirmed by	Checked by
伍海沅	赵应军	项念	文孝群
Customer Confirm			

Environmental requirements: ☒ ROHS

☐ REACH

☐ 无

Contents

Contents	2
1.Summary	3
2.General Description	3
2.1Antenna Components/Part revisions	3
2.2Definitions	3
3.Electrical Performance	4
3.1 Matching Circuit Description	4
3.2 Gain&Efficiency	4
3.3 Antenna TRP&TIS test results	5
4. Antenna Engineer drawing	6
5.Reliability Testing Report	7

1.Summary

This report summarizes the electrical results of the our antenna to support the project S9. The test fixture is made for further testing, which is show below:



2.General Description

2.1Antenna Components/Part revisions

The antenna part number is T: A

2.2Definitions

VSWR: Voltage Standing Wave Rate

TRP: total radiated power

TIS: total isotropic sensitivity

3. Electrical Performance

3.1 Matching Circuit Description



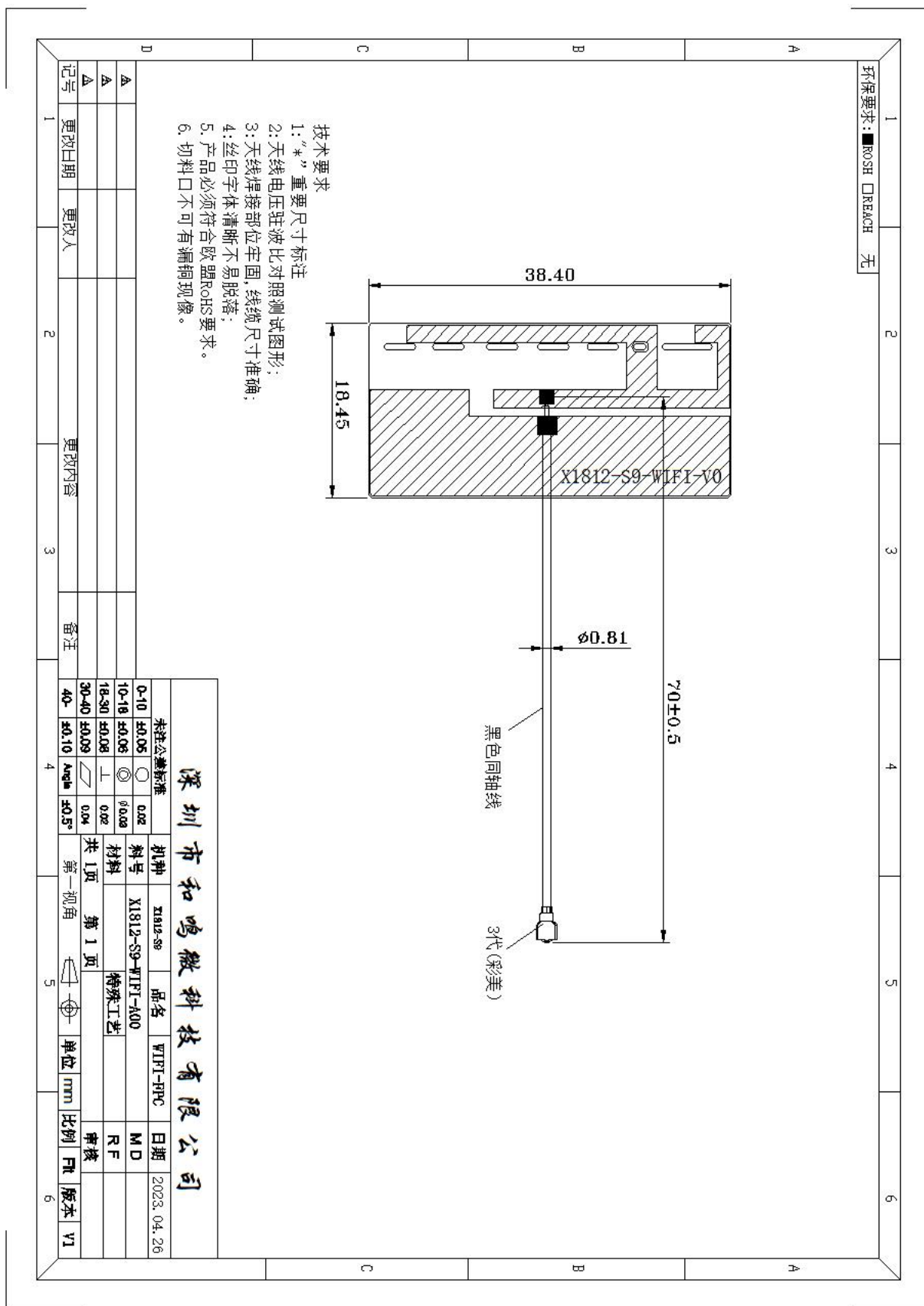
3.2 Gain&Efficiency

WIFI 2.4/5G 天线效率测试					
Frequency (MHz)	Gain (dB)	Efficiency (%)	Frequency (MHz)	Gain (dB)	Efficiency (%)
2400	3.28	53.37	5150	4.42	56.86
2410	3.25	52.48	5200	4.5	55.71
2420	3.17	51.07	5250	4.44	54.83
2430	2.99	49.65	5300	4.77	57.21
2440	2.72	49.39	5350	4.6	54.76
2450	2.7	50.81	5400	4.58	53.38
2460	2.59	52.08	5450	4.61	54.05
2470	2.43	52.94	5500	4.62	54
2480	2.27	53.36	5550	4.61	54.19
2490	2.25	53.3	5600	4.17	53.43
2500	2.2	51.85	5650	3.68	51.46
			5700	3.14	51.04
			5750	3.04	52.31
			5800	2.92	51.8
			5850	3.49	52.63

3.3 Antenna TRP&TIS test results

2.4G		TRP	TIS	5G		TRP	TIS
11b	1	15.38	-76.37	11a	36	14.53	-69.38
	7	15.48	-75.63		157	14.72	-69.52
	13	15.54	-75.45		165	15.16	-68.47

4. Antenna Engineer drawing



5. Reliability Testing Report

customer	Smatek	part number	FPC	Work Date	2023.05.09
Test item	Test requirement			Test result	Evaluation
neutral Salt-Fog test	Hydrochloric fog through neutral testing: In the time of 24 hours, no rust corrosion, color fading or solder peel off to the antenna fpc sop in Nacl 5% ± 1% PH value 6.5-7.2, above 85% humidity. and 35°C ± 2°C Seals environment.			Norust corrosion, color fading or solder peel off on the antenna surface after testing	pass
tester: 伍海沅			approval: 伍海沅		