



Ai-WB2-13 Specification

Version V1.1.2

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Manufacturer: Shenzhen Ai-Thinker Technology Co., Ltd

Model: Ai-WB2-13

Document resume

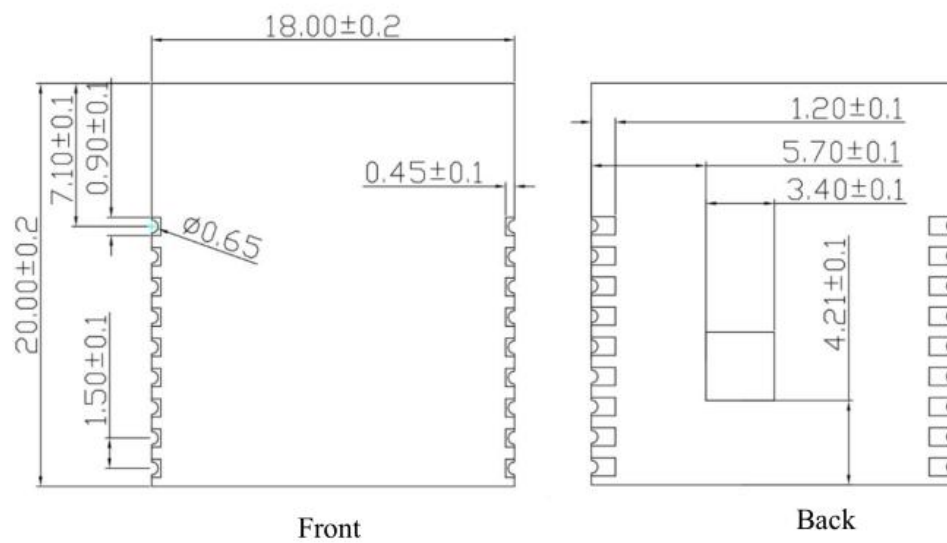
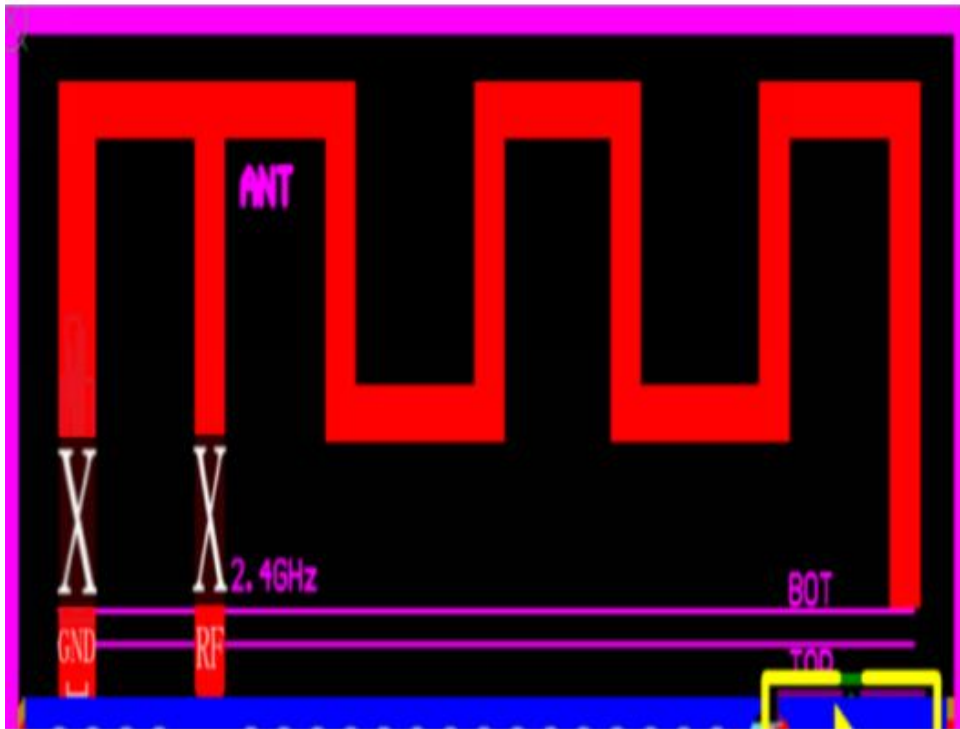
Version	Date	Develop/revise content	Edition	Approve
V1.1.0	2022.6.20	First Edition	NanNan Yuan	NingGuan
V1.1.1	2022.7.21	Update Rendering Figure	NanNan Yuan	NingGuan
V1.1.2	2022.10.31	Add RF OTA parameters	NanNan Yuan	NingGuan

1. Main parameters

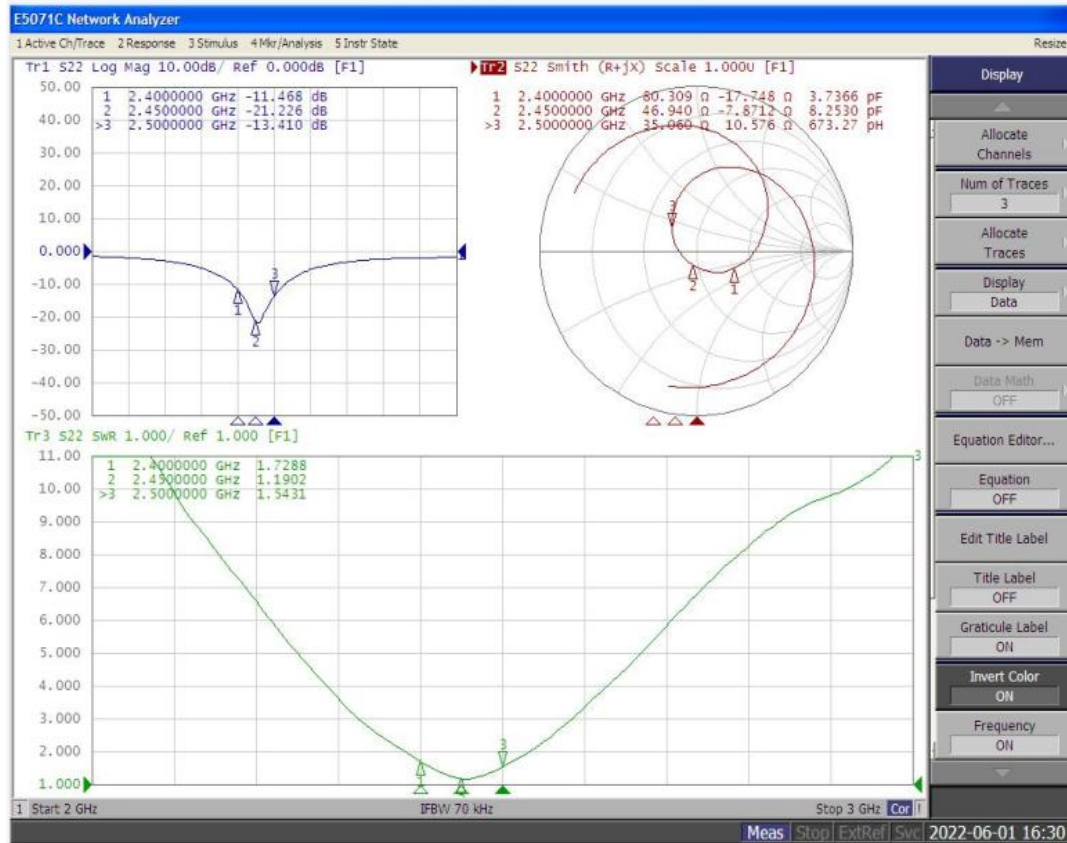
Table 1 Description of the main parameters

Model	Ai-WB2-13
Package	SMD-18
Size	20.0*18.0*3.1(±0.2)mm
Antenna	on-board PCB antenna
Frequency	2400 ~ 2483.5MHz
Operating temperature	-40°C ~ 85°C
Storage temperature	-40°C ~ 125°C, < 90%RH
Power supply	Support voltage 2.7V ~ 3.6V,supply current ≥500mA
Interface	UART/GPIO/ADC/PWM/I2C/SPI
IO	11
UART rate	Default 115200 bps
Security	WPS/WEP/WPA/WPA2 Personal/WPA2 Enterprise/WPA3
Flash	Default 4MByte,Support expansion

2. Appearance Dimensions



3. Antenna S parameter



4. Antenna Gain and Efficiency

Table 7 Antenna Gain and efficiency

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency(MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	2.36	2.38	2.15	2.25	2.06	2.49	2.46	2.44	2.42	2.13	2.30
Efficiency (%)	70.35	70.39	67.97	69.50	65.53	71.32	70.92	69.44	67.91	61.87	61.11

5. Antenna pattern

