

WIFI Tri-band PIFA PCB Antenna Specification



Brand name	Advantech
Advantech P/N	TBD
Manufacture P/N	RFA-27-JP818P2-4B500
Manufacture	ARISTOTLE
Manufacture Address	5F., No. 27, Xinmin St., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.)
Description	• Internal PIFA PCB antenna • Wi-Fi 5/6/6E/7 applications • Tri-band 2.4&5&6 GHz
Version	1.0
Date	2025/11/20

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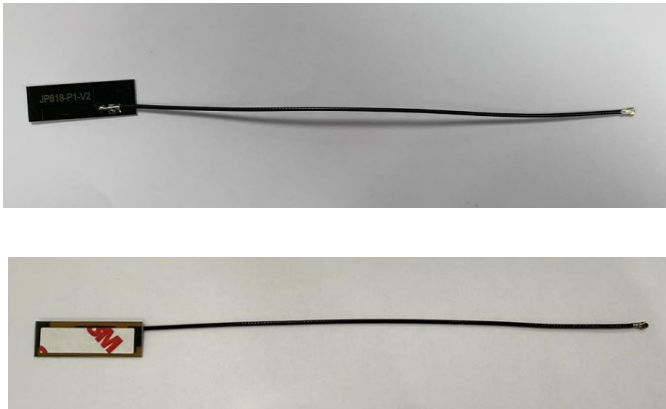


1. Revision History

Version	Date	Change Notification	Description
1.0	2025/11/20	Initial version	

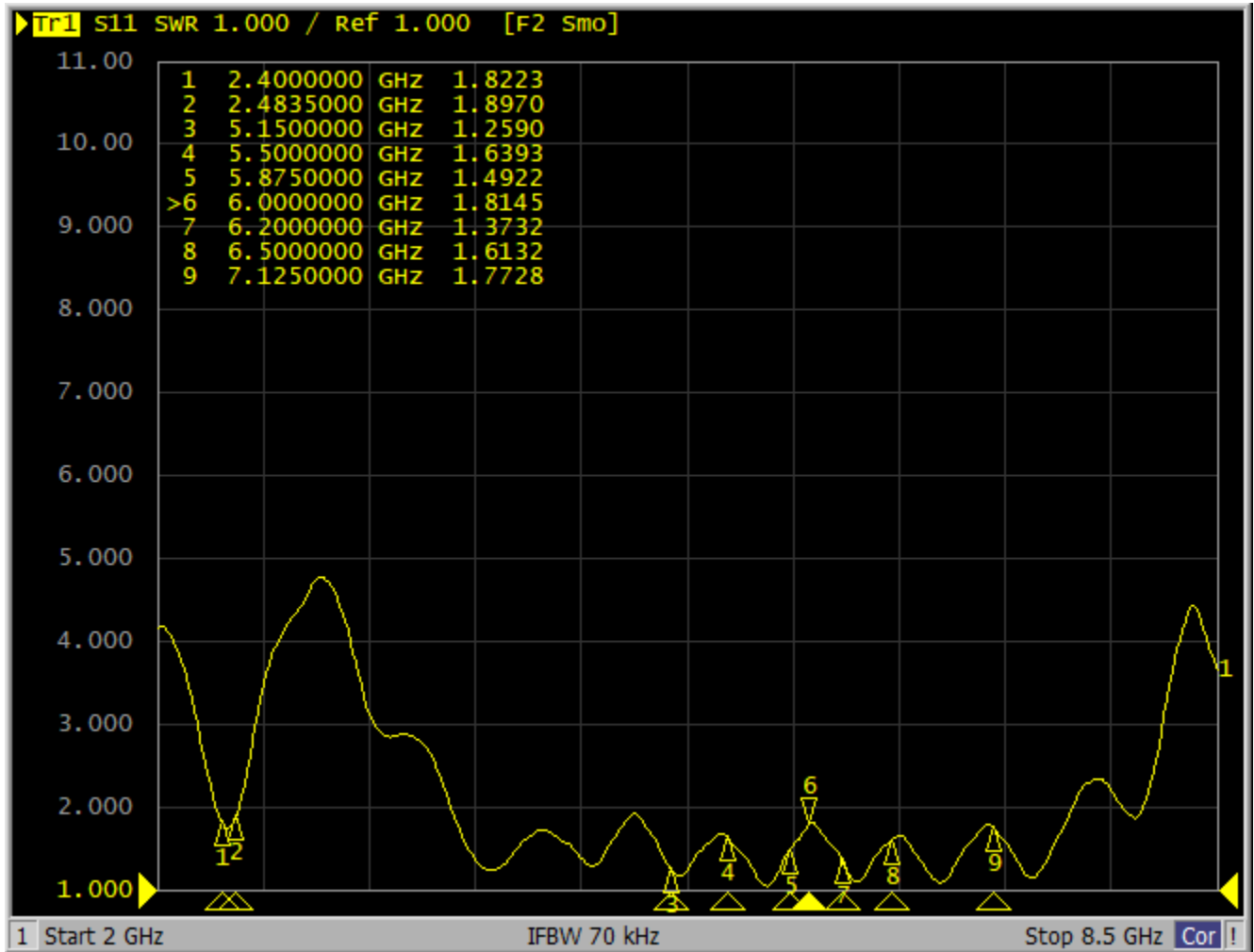


2. Specification

Sample Photo	
	
Antenna PCB Dimension- 30*10*0.8 mm ³	
Electrical Characteristics	
Frequency	2400 – 2500 MHz, 5150 – 5900 MHz, 5925 – 7125 MHz
V.S.W. R	<= 2.5 @ 2400 – 2500 MHz <= 2.5 @ 5150 – 5900 MHz <= 2.5 @ 5925 – 7125 MHz
Peak Gain	3.51 dBi @ 2400 – 2500 MHz 4.79 dBi @ 5150 – 5900 MHz 5.08 dBi @ 5925 – 7125 MHz
Efficiency	60.11 % @ 2400 – 2500 MHz 61 % @ 5150 – 5850 MHz 56.68 % @ 5925 – 7125 MHz
Polarization	Linear
Radiation Pattern	Omni-direction
Impedance	50 ohm
Application	WIFI5 & 6 & 6E & 7
Antenna Type	PIFA
Material & Mechanical Characteristics	
Antenna Dimension	30*10*0.8 mm ³
Cable Length	Customized
Material of Radiator	Copper
Material of Substrate	FR4
Antenna Color	Black
Cable Type	O.D 1.13 mm Coaxial Cable
Connector Type	IPEX4 (MHF4L)

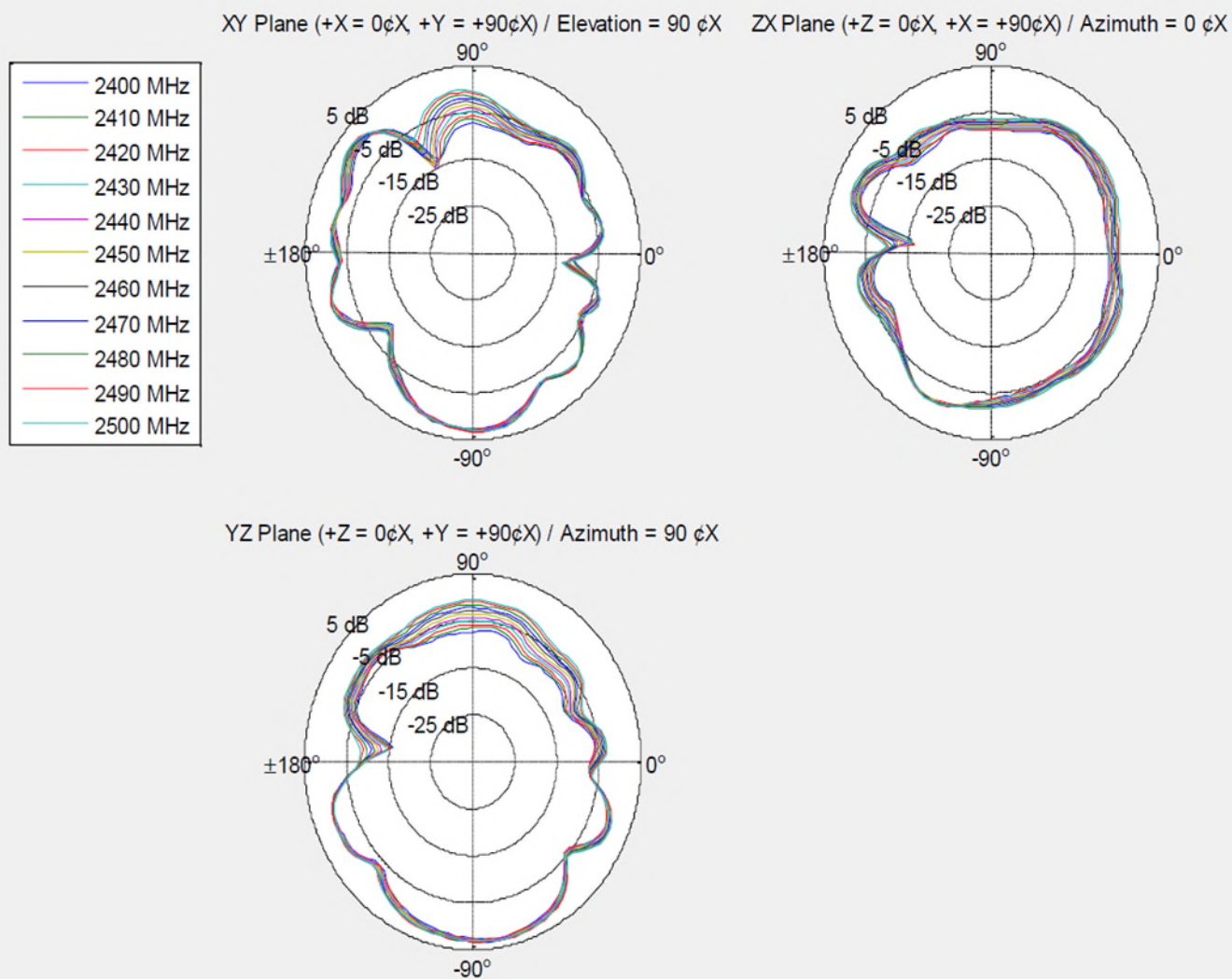
Environmental	
Operation & Storage Temperature	-40 ~ 85 °C
Humidity	95% @ 25 °C
Power Handling	2 W

3. Antenna - S Parameter Test Data

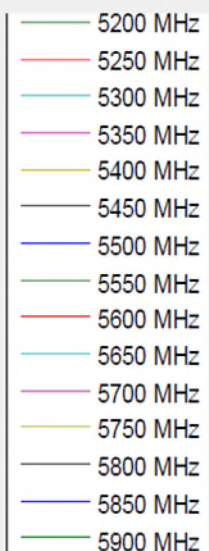


4. Antenna – Gain & Radiation Pattern Test Data

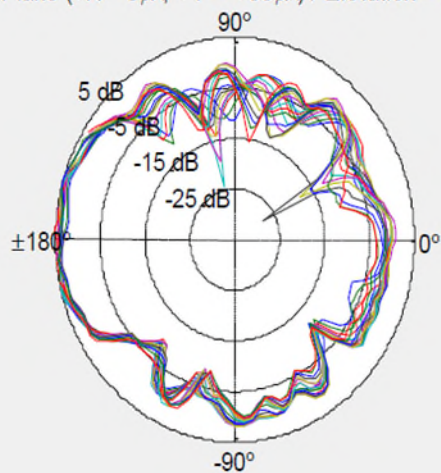
2G Band = 2400 - 2500 MHz % 2G BAND



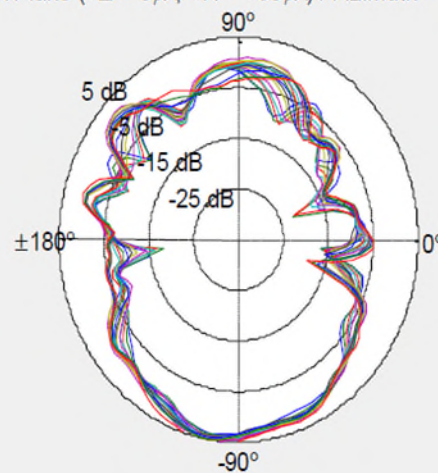
5G Band = 4900 - 5975 MHz



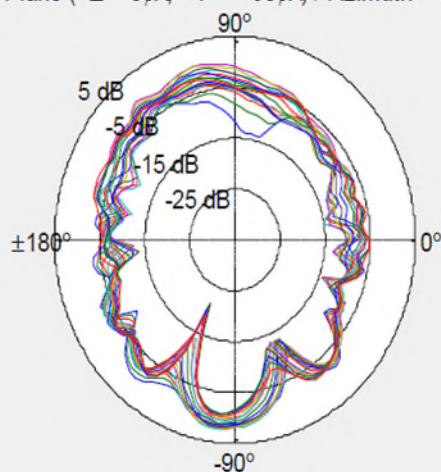
XY Plane (+X = 0°X, +Y = +90°X) / Elevation = 90°X



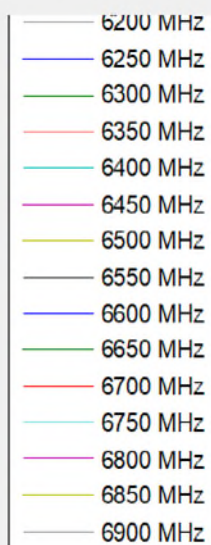
ZX Plane (+Z = 0°X, +X = +90°X) / Azimuth = 0°X



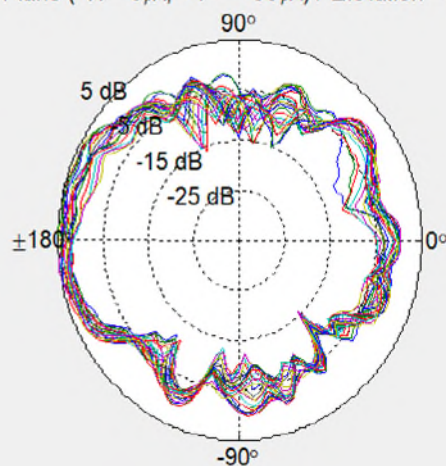
YZ Plane (+Z = 0°X, +Y = +90°X) / Azimuth = 90°X



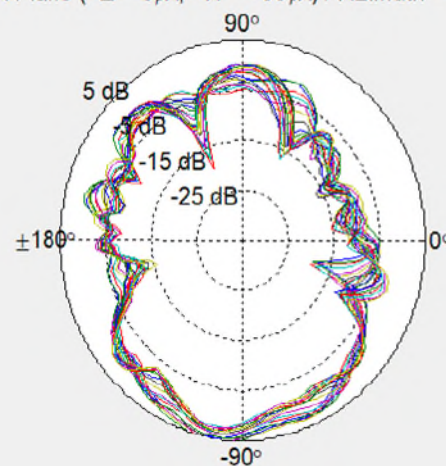
6G Band = 5900 - 8500 MHz



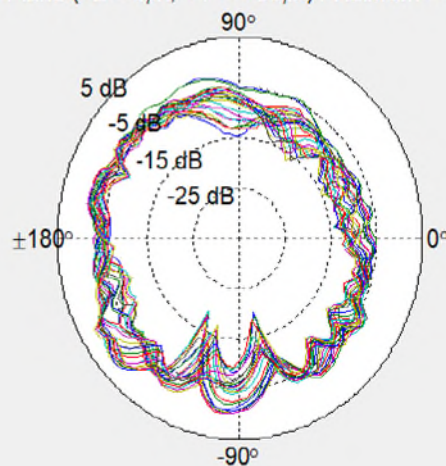
XY Plane (+X = 0°X, +Y = +90°X) / Elevation = 90°X



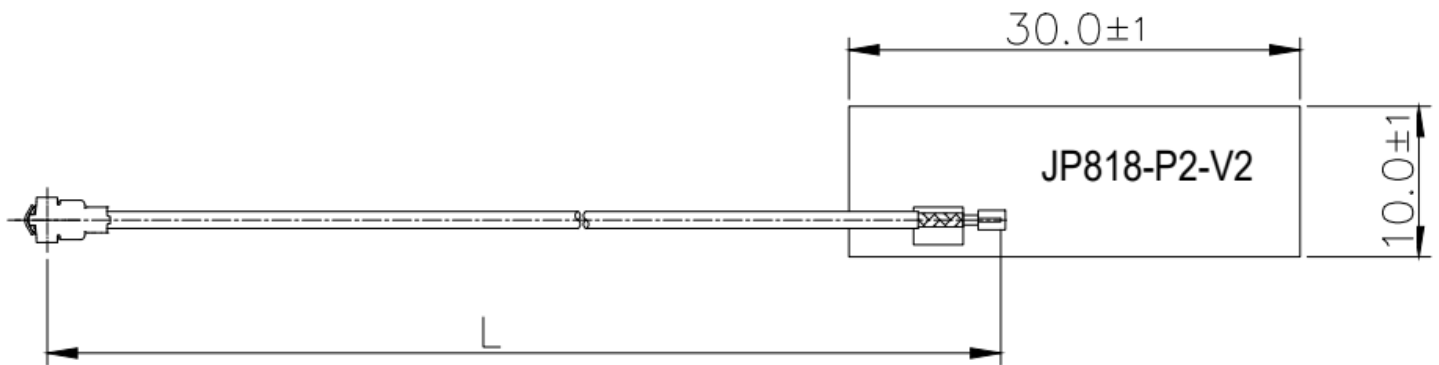
ZX Plane (+Z = 0°X, +X = +90°X) / Azimuth = 0°X



YZ Plane (+Z = 0°X, +Y = +90°X) / Azimuth = 90°X



5. Mechanical Drawing



6. Packing Drawing

產品包裝規範 PACKING CRITERION

