

WPANT10004-SB

Dual-band Wi-Fi Embedded Antenna



Description / Application

This is a 2.4 GHz & 5.4 GHz Dual-band Wi-Fi on board Chip Antenna. Broad bandwidth, good efficiency, compact size and ease of integration make this an ideal choice for applications where there are tight space requirements.

We can assist your engineers to optimize mounting positions for these antennas in your specific application and can further assist to trouble shoot system integration issues such as TRP/TIS and FCC requirements. We specialize in developing customized Antenna solutions. Please contact sales@worldproducts.com with your specific application requirements.

Electrical Properties

Operating Frequency*	2.4 – 2.5 GHz	4.9 – 5.85 GHz
Approximate Antenna Impedance [Ω]	50Ω	50Ω
VSWR – Typical*	< 2:1	< 2.5:1
Peak Gain [dBi] (Typical)*	2 dBi	5 to 6 dBi
Efficiency [%] (Typical)*	60 – 70 %	50 – 80 %
Polarization	Linear	Linear
Pattern	Near Omni-directional	Near Omni-directional
Minimum Ground Plane Size Required	35 – 40 mm	35 – 40 mm

*Note: These performance metrics were recorded with the Antenna installed on a circuit board, with the board layout as prescribed in the Application Notes (please refer to the Application Notes).

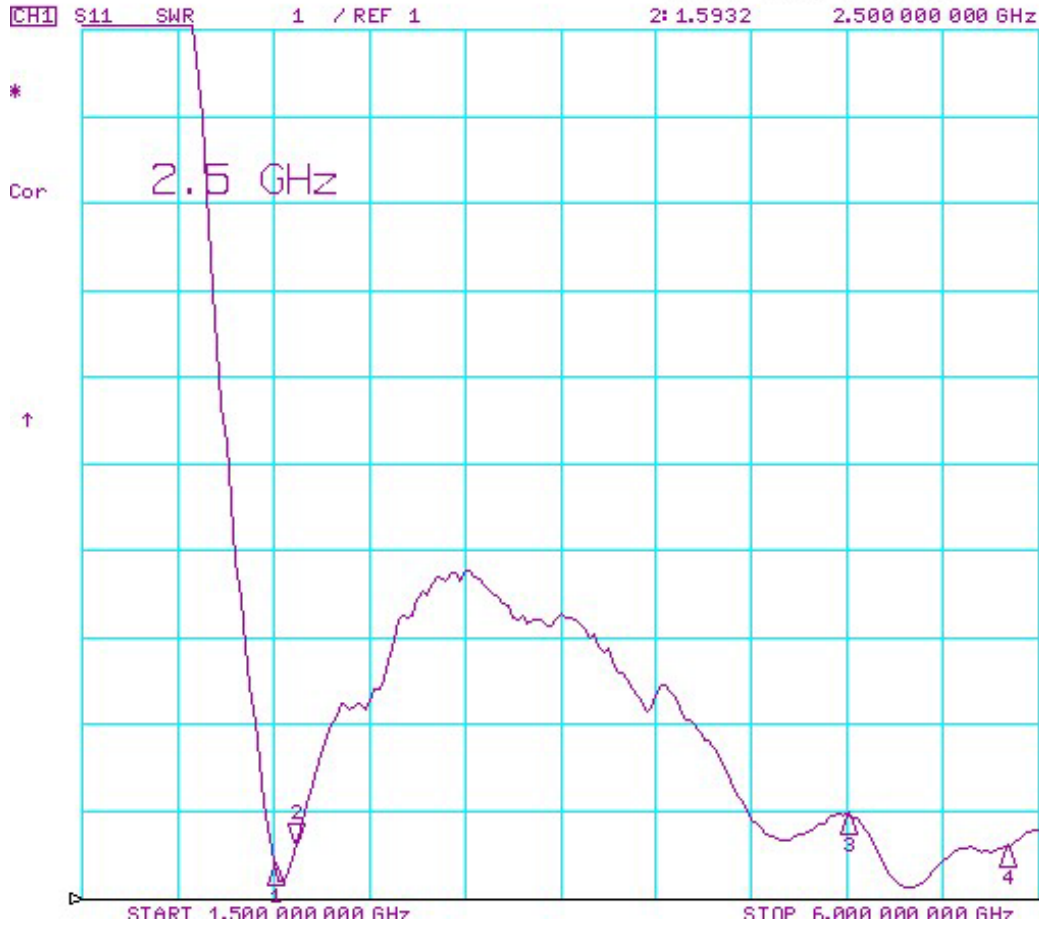
Mechanical / Environmental Properties

Antenna Dimensions	0.52" X 0.24" X 31 mils (13.3mm X 6mm X 0.79mm)
Antenna Color	Black
Operating / Storage Temperature	-40°C to +90°C
Environmental	Meets standards for UL 94V-0
Hazardous Materials	RoHS Compliant

Pictures of the Antenna



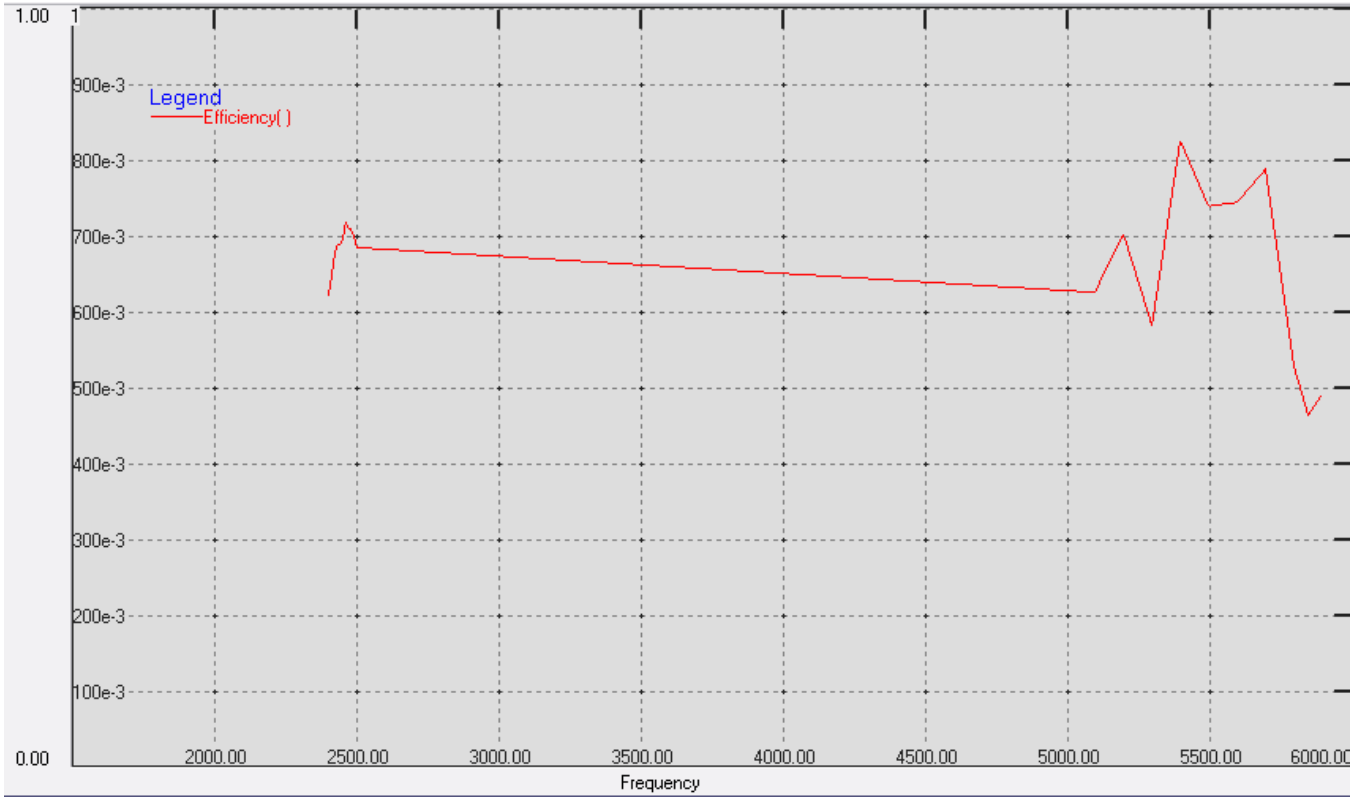
VSWR of the Antenna



CH1 Markers

1:	1.3920
	2.40000 GHz
3:	1.9888
	5.10000 GHz
4:	1.5952
	5.85000 GHz

Total Radiation Efficiency of the Antenna in % (including VSWR losses)



Peak Gain of the Antenna in dBi

