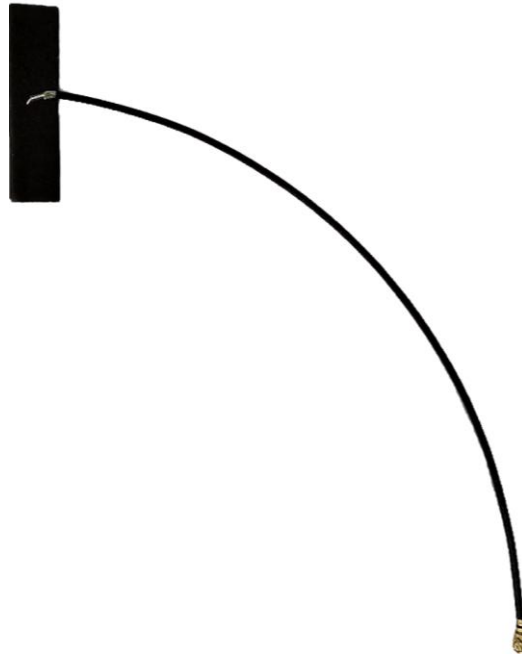




MODEL SPECIFICATIONS

Project Name: Orson

Author: Wistron NeWeb Corporation

Revision: 1.0

Revision Date: 2023/12/5

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Revision History

Rev. #	Author	Summary of Changes	Date
0.1	Evan Chen	New release	2023/12/5

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1. Introduction

This specification covers the PCB antenna for Wi-Fi dual band.

2. Electrical Specifications

Electrical characteristics of antenna. The antenna has the electrical characteristics given in Table 1 under WNC standard installation conditions shown in the figure.

Electrical Characteristics		
Wi-Fi	2G	5G
Freq. (MHz)	2400~2500	5150~5850
V.S.W.R.	≤ 2.0	≤ 2.0
Peak Gain	3.0dBi	6.8dBi
Eff. %(max./avg.)	70/66	73/70
Impedance	50 Ohm	
Cable type	ϕ 1.37	
Cable length	145mm (from the PCB edge) (total length:151mm)	
Connector	IPEX MHF	
Substrate	PCB	
Dimension	35mm x 8mm	

3. Environmental conditions

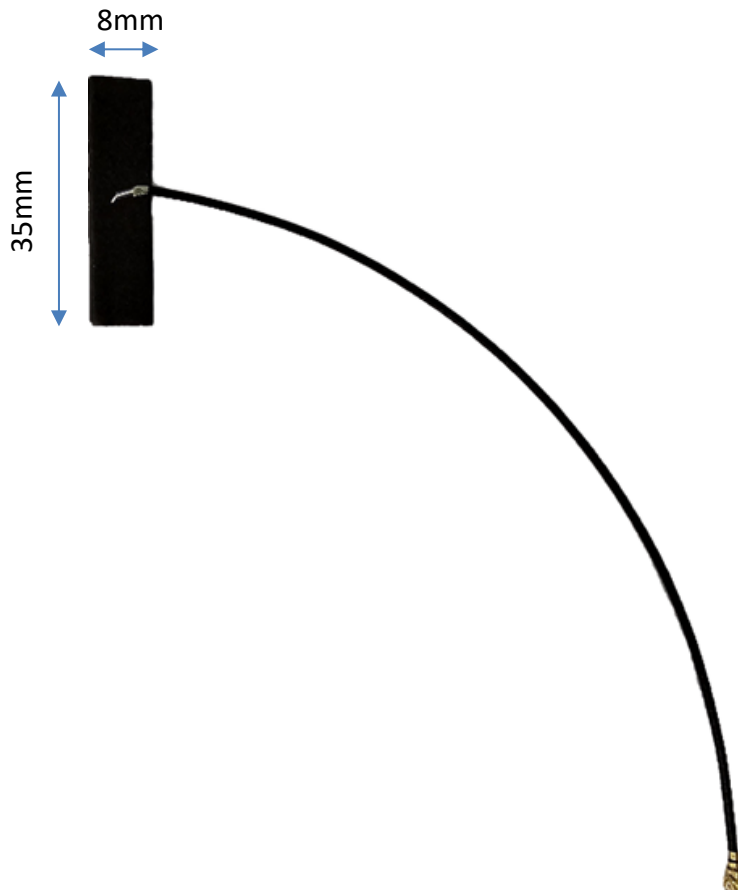
3.1 Operating conditions

The antenna has the electrical characteristics given in Tables 1 in the temperature range of -40°C to +105°C and under the environmental conditions of +40°C and 0-95% R.H.

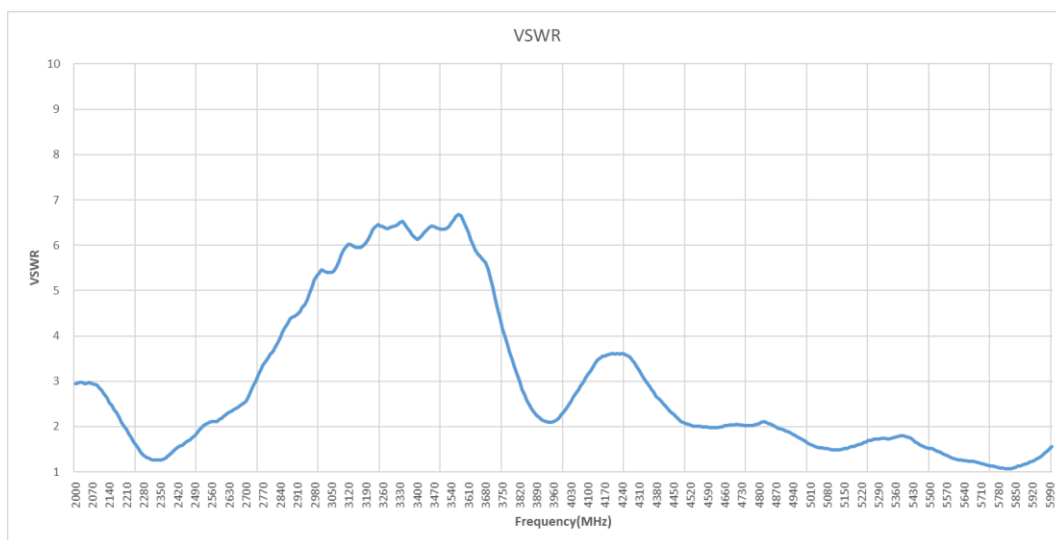
3.2 Storage temperature range

The storage temperature range of product is -40°C to +105°C.

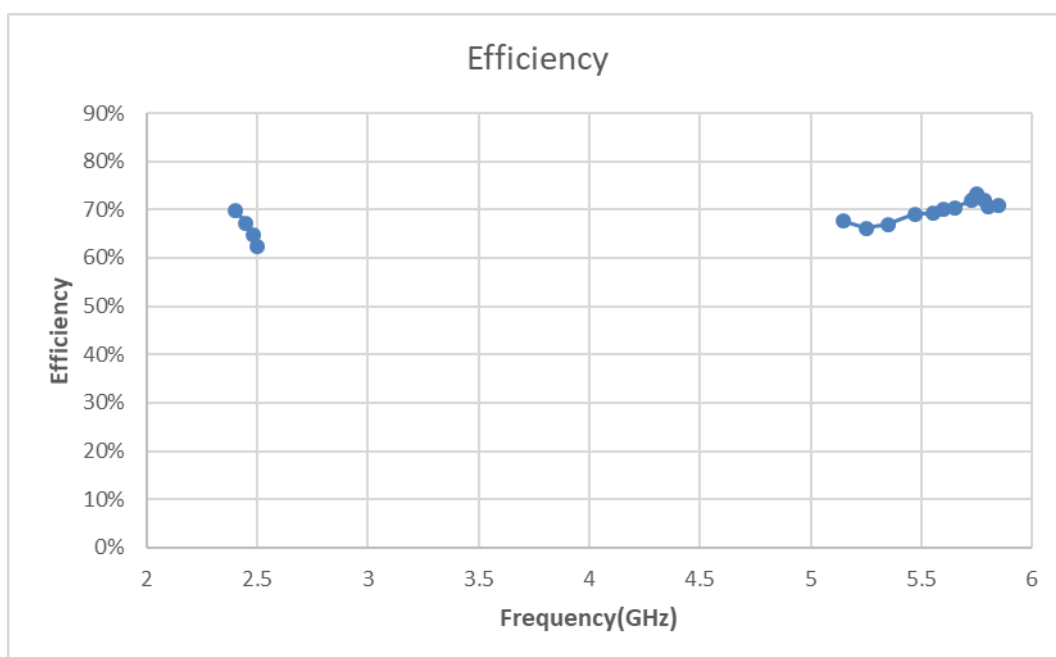
4. Shape and Dimension



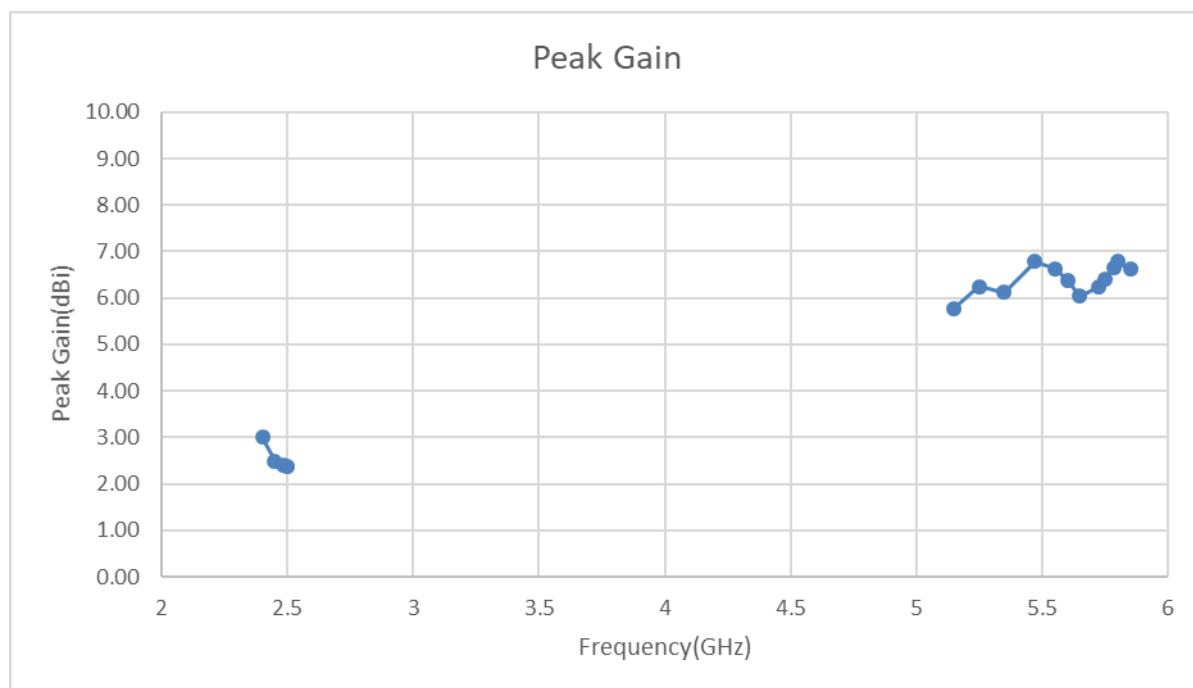
5. VSWR



6. Efficiency



7. Peak Gain



8. Raw data

	Frequency	2400	2450	2484	2500	Avg.
2G	Efficiency	70%	67%	65%	62%	66%
	Average Gain	-1.55	-1.72	-1.89	-2.05	
	Peak Gain	3.00	2.49	2.41	2.38	

	Frequency	5150	5250	5350	5470	5550	5600	5650	5725	5750	5785	5800	5850	Avg.
5G	Efficiency	68%	66%	67%	69%	69%	70%	70%	72%	73%	72%	71%	71%	70%
	Average Gain	-1.70	-1.79	-1.74	-1.61	-1.60	-1.55	-1.52	-1.44	-1.35	-1.42	-1.52	-1.50	
	Peak Gain	5.78	6.25	6.13	6.79	6.63	6.38	6.04	6.24	6.40	6.65	6.79	6.61	

9. Radiation Pattern

