antenna conceptor

Product Datasheet

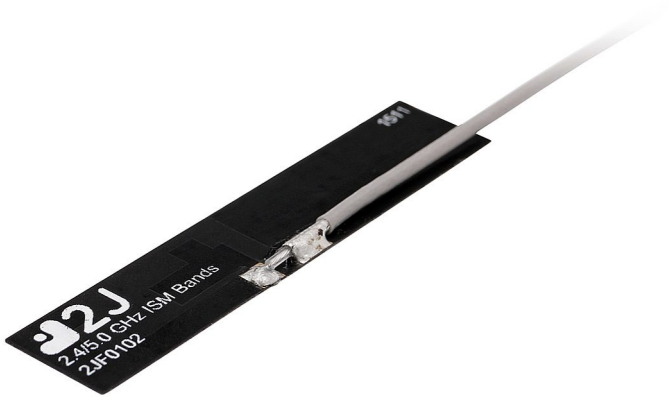
2JF0102P

2.4/5.0/6.0 GHz ISM Flexible Polymer

Key Features

2.4/5.0/6.0 GHz ISM
- 2410-2490 MHz
- 4920-7125 MHz

Embedded Antenna
Wifi 6E Antenna
High Performance
Ground Plane Independent
Self-Adhesive
Dimensions 39.6 × 8.4 × 0.1 mm
Customizable Cable and Connector



Manufacturer: 2J Antennas USA, Corp
Address: 2020 W Guadalupe Rd Suite 8 Gilbert AZ, 85233 USA

Description

2JF0102P antenna is flexible high efficiency embedded solution covering 2.4 GHz, 5.0 GHz and 6.0 GHz bands. Antenna can be easily mounted in most devices due to self-adhesive layer and small size. 2JF0102P is omnidirectional, ground plane independent antenna.Cable and connector is upon request.

antenna conceptor

1. Antenna and electrical specifications

Parameters	2.4/5.0/6.0 GHz ISM Antenna		
Standards	WiFi 6E, BT, ZigBee, ISM, SigFox, LoRa		
Band (MHz)	2.4 GHz	5.0 GHz	6.0 GHz
Frequency (MHz)	2410-2490	4920-5925	5925-7125
Return Loss (dB)	~-20.8	~-15.5	~-8.9
VSWR	~1.2:1	~1.4:1	~2.1:1
Efficiency (%)	~76	~82	~60.4
Peak Gain (dBi)	~2.2	~3.8	~3.2
Average Gain (dB)	~-1.2	~-0.8	~-2.2
Impendance (Ohm)	50		
Polarisation	Linear		
Radiation Pattern	Omni-Directional		
Max. Input Power (W)	25		
Connector Type	Most RF Connectors (U.FL Standard)		
Cable Length	Any Cable Length (100mm Standard)		
Cable Type	Other Cables Available (1.37mm Standard)		

Antenna Measurement Conditions:

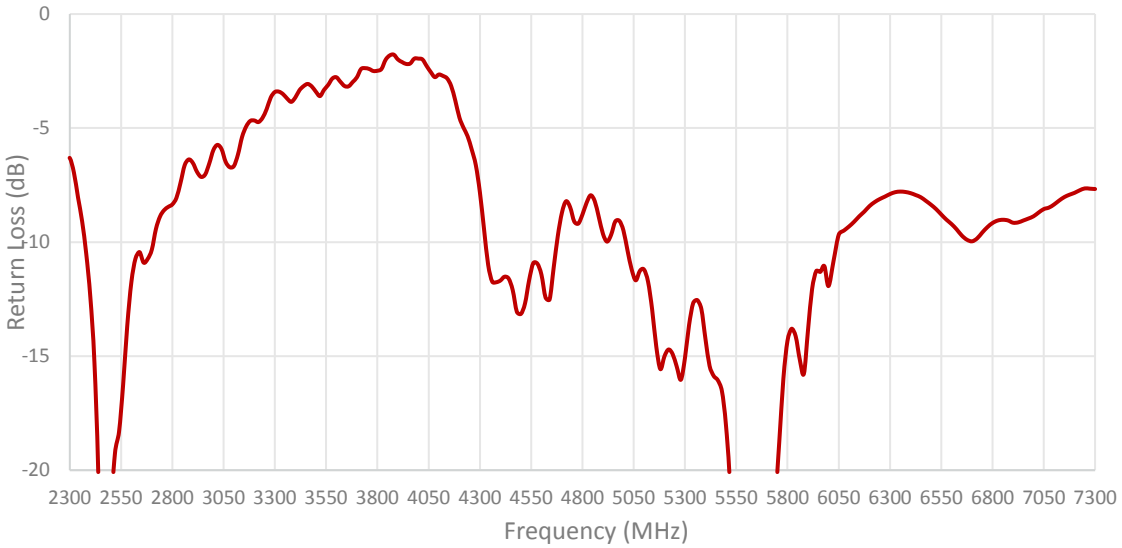
Mounted 30x30x0.25 Cm ABS Plastic Plate

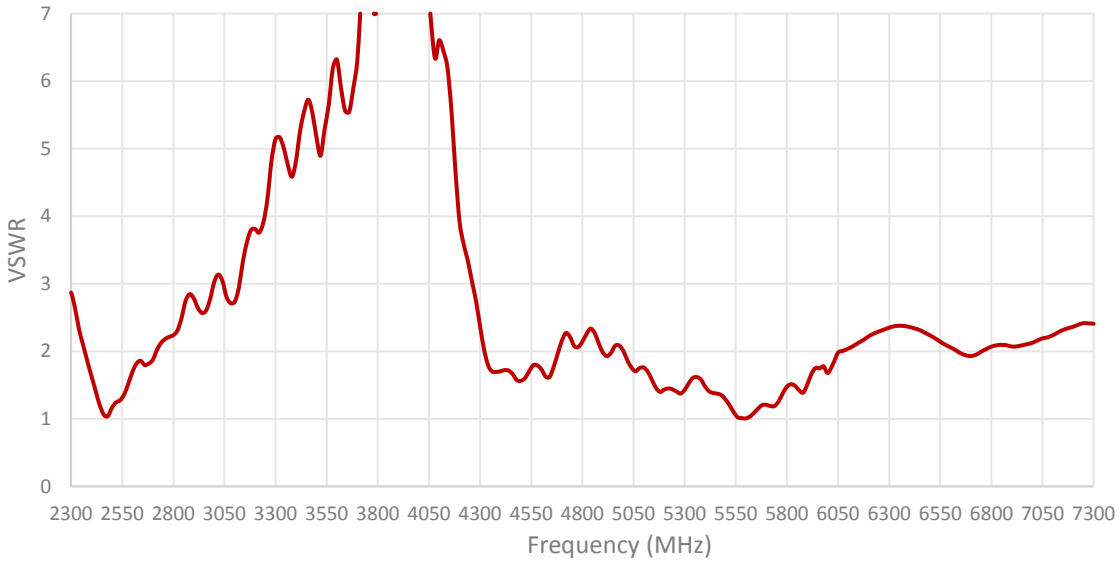
Measured in Certified CTIA 3D Anechoic Chamber

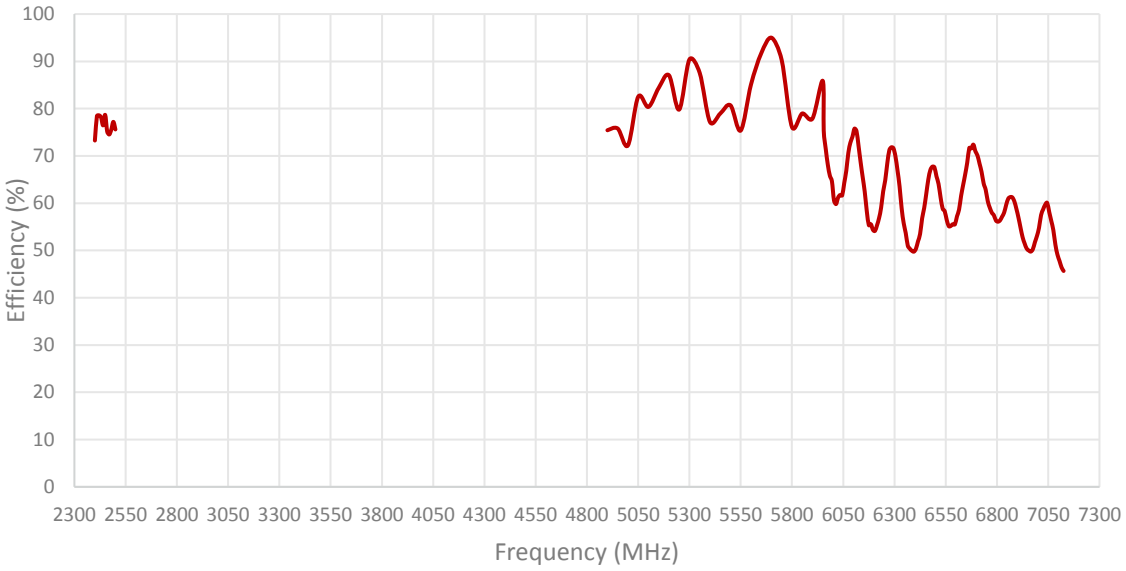
2. Mechanical and environmental specifications

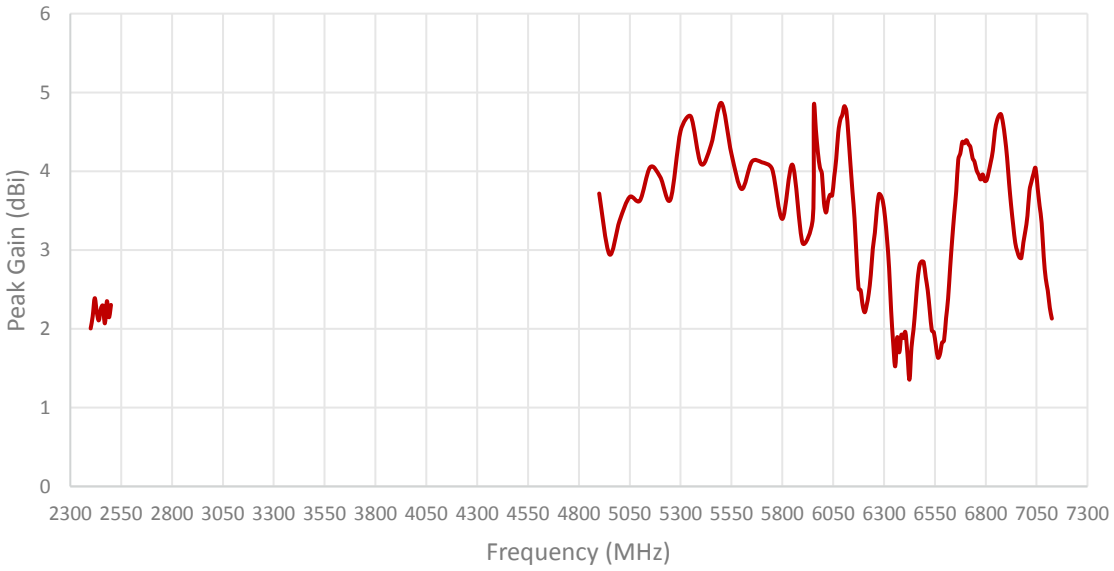
Specifications	2JF0102P
Mounting Type	Self-Adhesive
Dimensions (mm)	39.6x 8.4 x 0.1
Adhesive Type	3M 467
Material	Flexible Polymer
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS

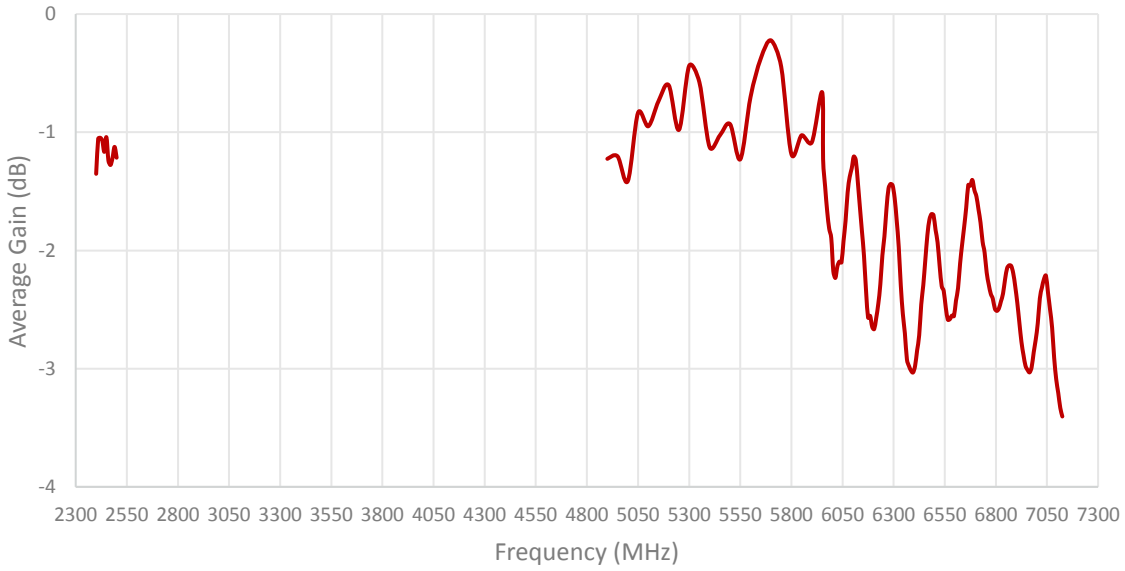
3. Antenna parameters

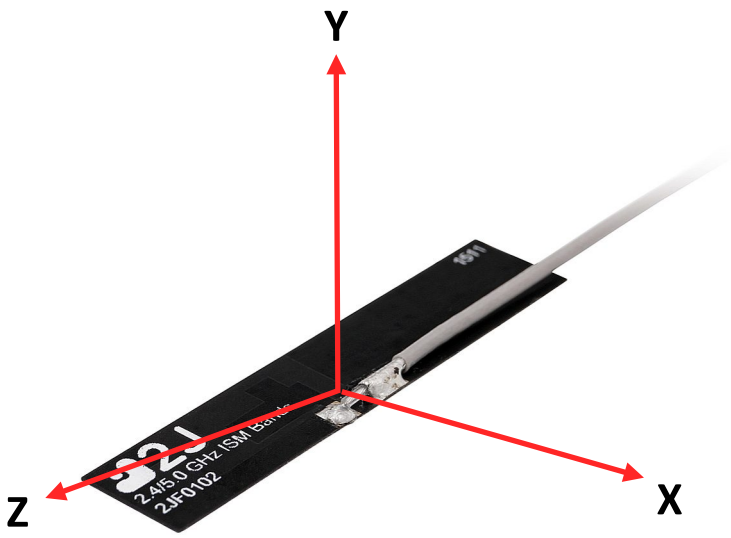




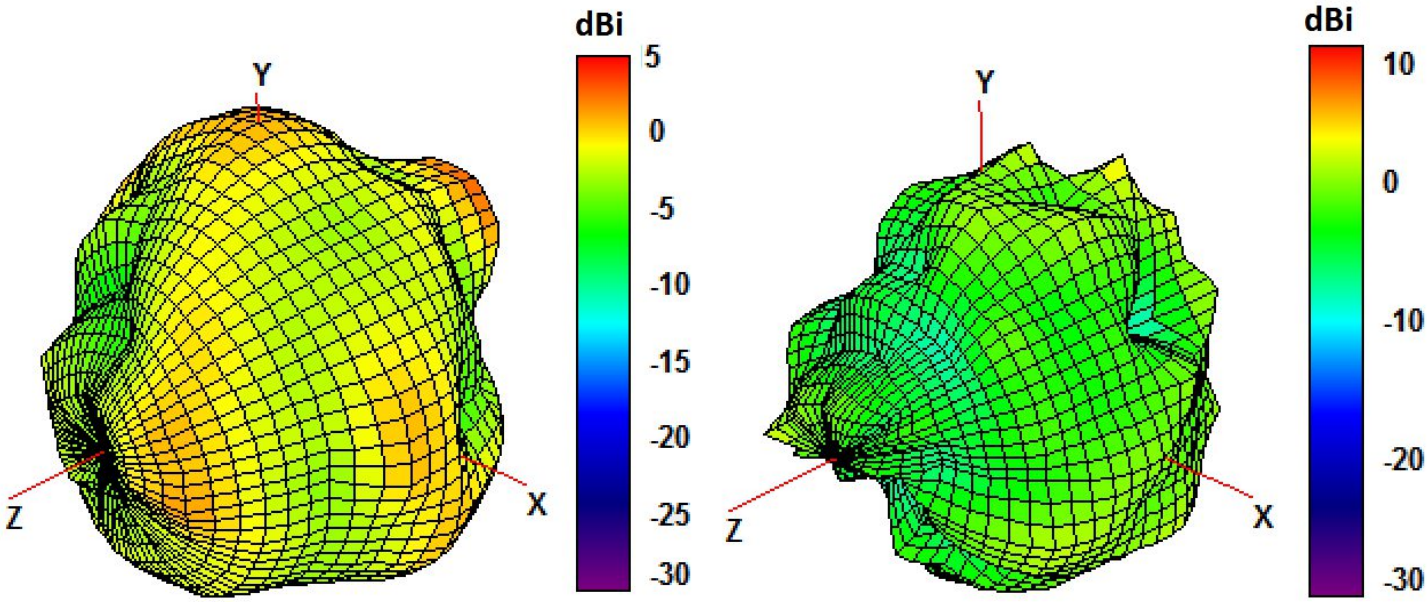

100
90
80
70
60
50
40
30
20
10
0
Efficiency (%)
2300 2550 2800 3050 3300 3550 3800 4050 4300 4550 4800 5050 5300 5550 5800 6050 6300 6550 6800 7050 7300
Frequency (MHz)


6
5
4
3
2
1
0
Peak Gain (dBi)
2300 2550 2800 3050 3300 3550 3800 4050 4300 4550 4800 5050 5300 5550 5800 6050 6300 6550 6800 7050 7300
Frequency (MHz)

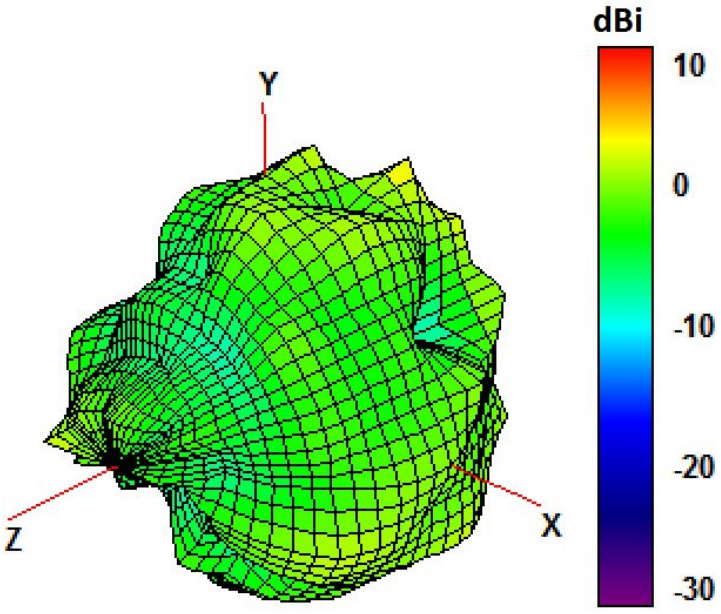




Radiation pattern reference

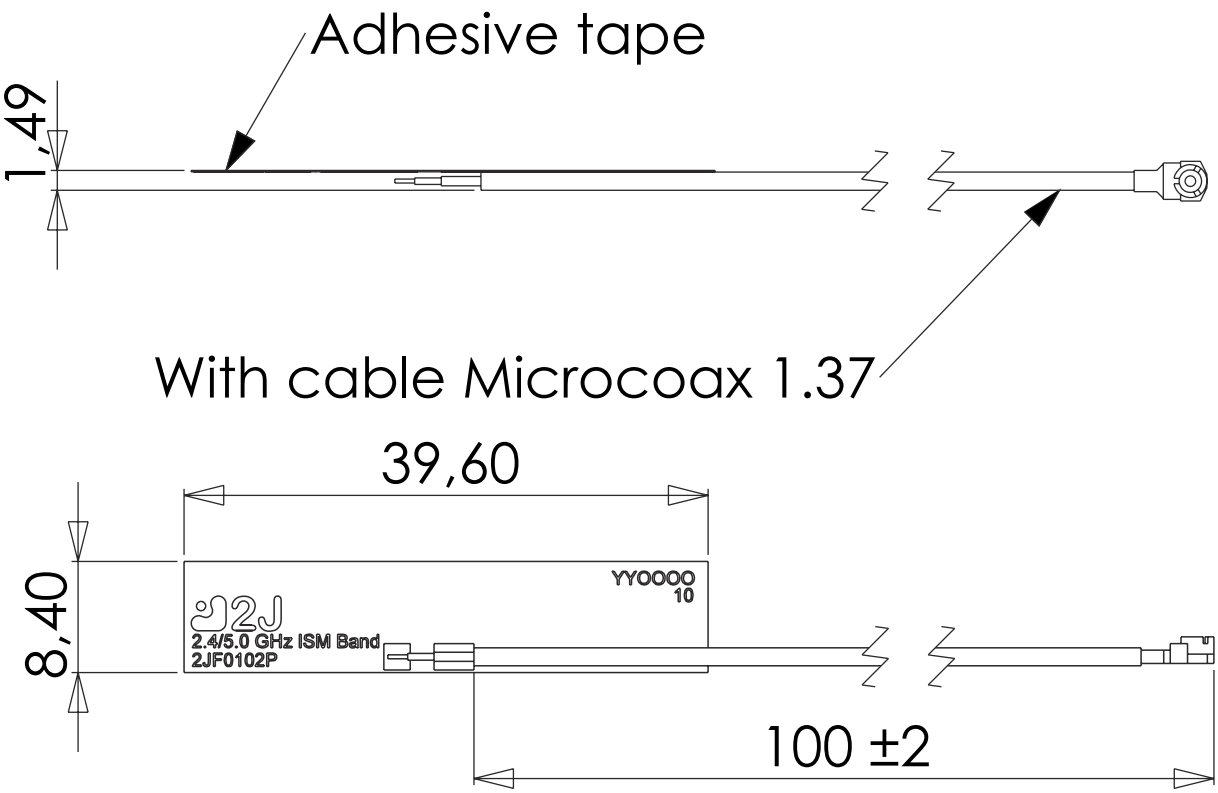


2450 and 5500 MHz Radiation pattern



6500 MHz Radiation pattern

4. Antenna drawings



5. Antenna Images