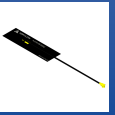


2.4GHz Bluetooth & Wi-Fi FPC Antenna



AANI-FB-0032

Request Samples



Check Inventory



50 x 15 x 0.2 mm
RoHS Compliant
MSL Level = N/A

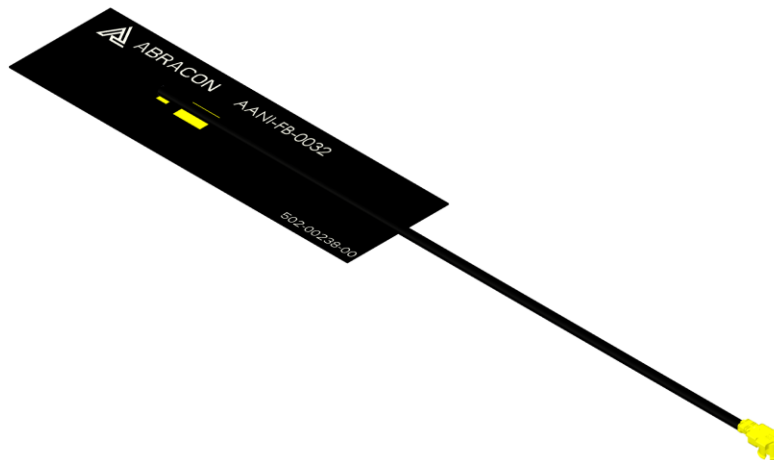
Features

- Frequency Range: 2400-2500 MHz
- Peak Gain: 2.8 dBi
- Efficiency: 73.7 %
- Ground Plane Independent
- Flexible to Fit Inside Plastic Enclosures
- Fully Customizable Cable Length and Connector Options
- RoHS Compliant

Applications

- Bluetooth® / ZigBee® / Thread / Matter / Wi-Fi®
- Bluetooth® / Wi-Fi® Modules
- Hearables & Wearables
- Smart Home & Smart Building
- Smart Metering
- Intelligent Lighting

Product Image



2.4GHz Bluetooth & Wi-Fi FPC Antenna



AANI-FB-0032

Request Samples



Check Inventory



50 x 15 x 0.2 mm
RoHS Compliant
MSL Level = N/A

Electrical Specification

Parameter	Specification	Unit
Operating Frequency	2400 – 2500	MHz
VSWR	2.0	:1
Peak Gain	2.8	dBi
Maximum Efficiency	73.7	%
Average Efficiency	72.1	%
Impedance	50	Ω
Polarization	Linear	-
Radiation Pattern (Azimuth)	Omni-directional	-
Maximum Input Power	5	W

Mechanical Specification

Parameter	Specification
Antenna Dimensions	50 x 15 x 0.2 mm
Antenna Type	Flexible PCB
Mounting Type	Adhesive Mount
RF Connector ⁽¹⁾	u.FL/IPEX-1/MHF1
RF Cable Type ⁽¹⁾	Ø1.13 mm
Cable Length ⁽¹⁾	150 mm

(1): Fully customizable RF Cable & Connector

Environmental Specification

Parameter	Specification
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
RoHS Complaint	Yes

2.4GHz Bluetooth & Wi-Fi FPC Antenna



AANI-FB-0032

Request Samples  Check Inventory 

50 x 15 x 0.2 mm
RoHS Compliant
MSL Level = N/A

Ordering Information

Part Number	Description	Connector Option
AANI-FB-0032-1	2.4GHz Bluetooth & Wi-Fi FPC Antenna with IPEX-1 connector and 150 mm cable length	u.FL/IPEX-1/MHF1
AANI-FB-0032-2	2.4GHz Bluetooth & Wi-Fi FPC Antenna with IPEX-1 connector and 100 mm cable length	u.FL/IPEX-1/MHF1
AANI-FB-0032-3	2.4GHz Bluetooth & Wi-Fi FPC Antenna with IPEX-1 connector and 200 mm cable length	u.FL/IPEX-1/MHF1

2.4GHz Bluetooth & Wi-Fi FPC Antenna

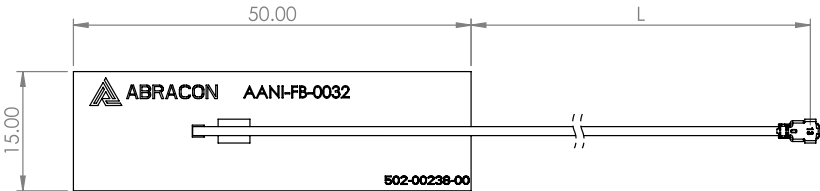


AANI-FB-0032

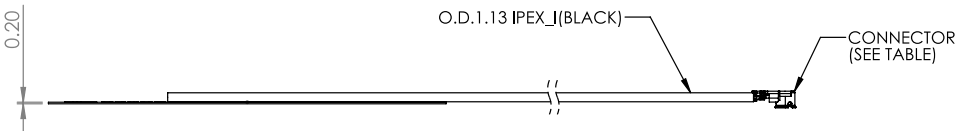
Request Samples Check Inventory

50 x 15 x 0.2 mm
RoHS Compliant
MSL Level = N/A

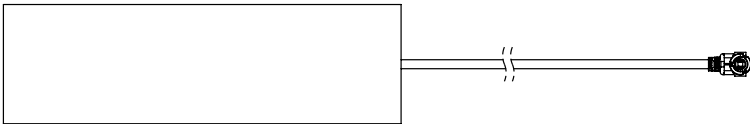
Product Dimensions



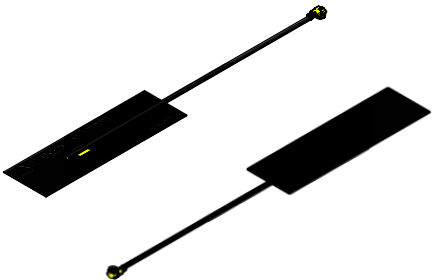
TOP VIEW



FRONT VIEW



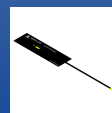
BOTTOM VIEW



PART NUMBER	CABLE LENGTH (L)	CONNECTOR
AANI-FB-0032-1	150	u.FL/IPEX-1/MHF1
AANI-FB-0032-2	100	u.FL/IPEX-1/MHF1
AANI-FB-0032-3	200	u.FL/IPEX-1/MHF1

Unit : mm

2.4GHz Bluetooth & Wi-Fi FPC Antenna



AANI-FB-0032

Request Samples



Check Inventory

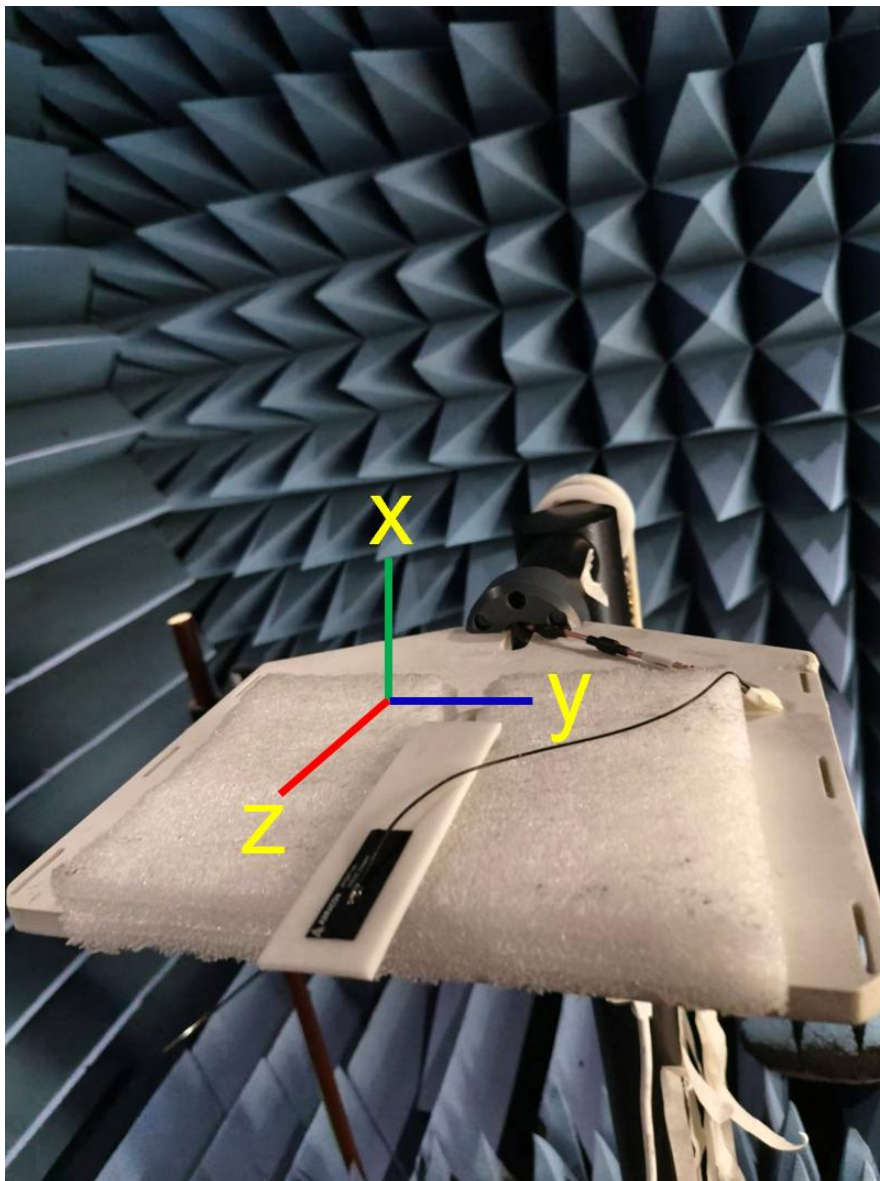


50 x 15 x 0.2 mm

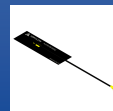
RoHS Compliant

MSL Level = N/A

Measurement Setup photo



2.4GHz Bluetooth & Wi-Fi FPC Antenna



AANI-FB-0032

Request Samples



Check Inventory

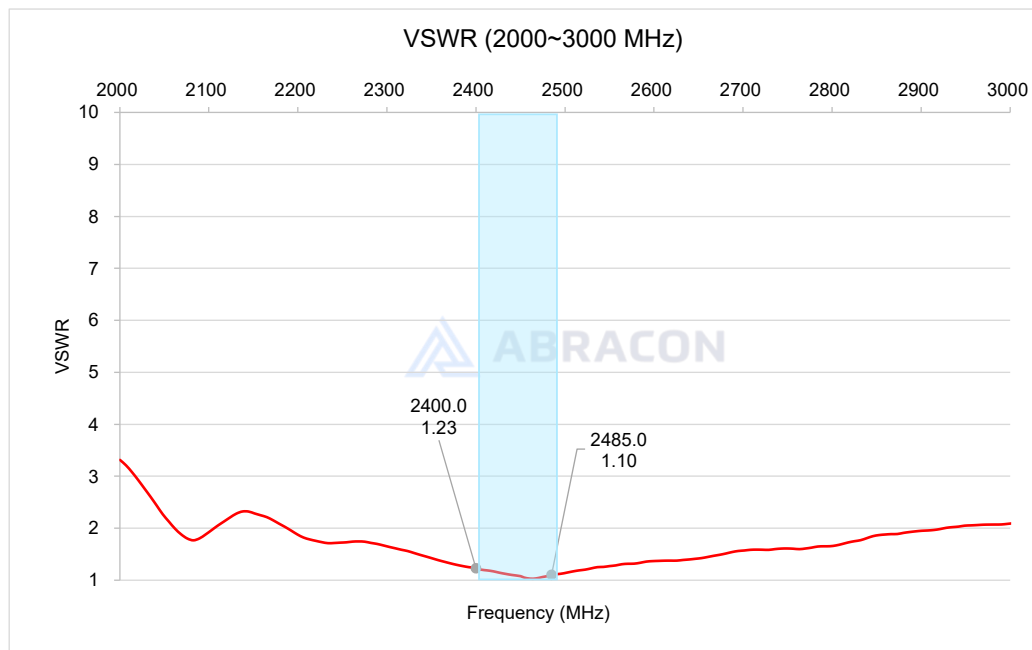
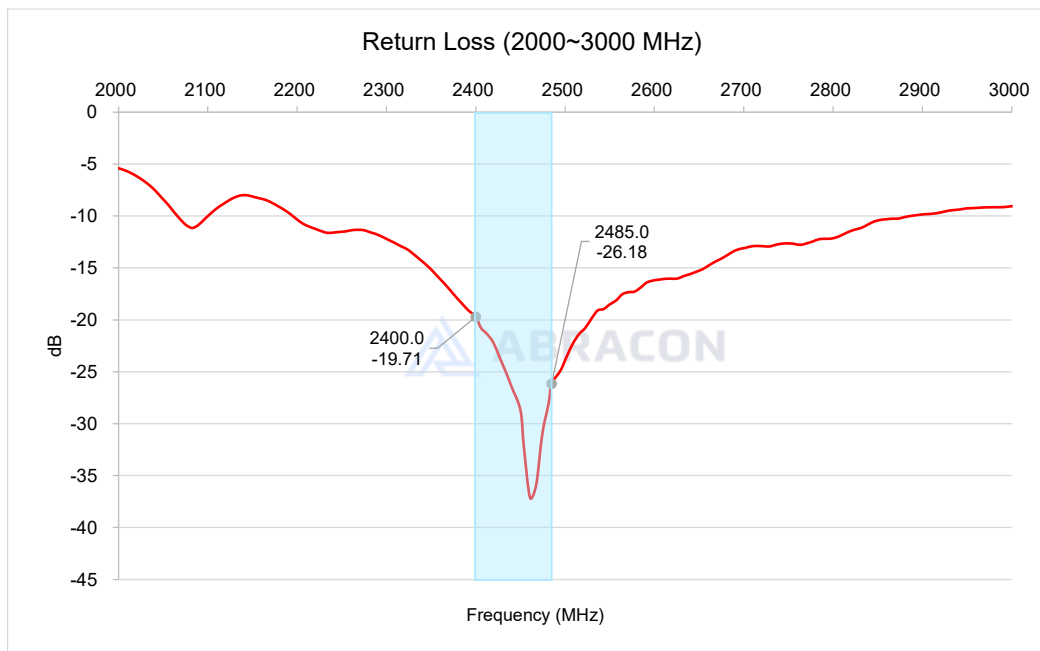


50 x 15 x 0.2 mm

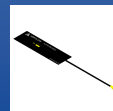
RoHS Compliant

MSL Level = N/A

Reflection Characteristics – Return Loss & VSWR



2.4GHz Bluetooth & Wi-Fi FPC Antenna



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Request Samples



Check Inventory

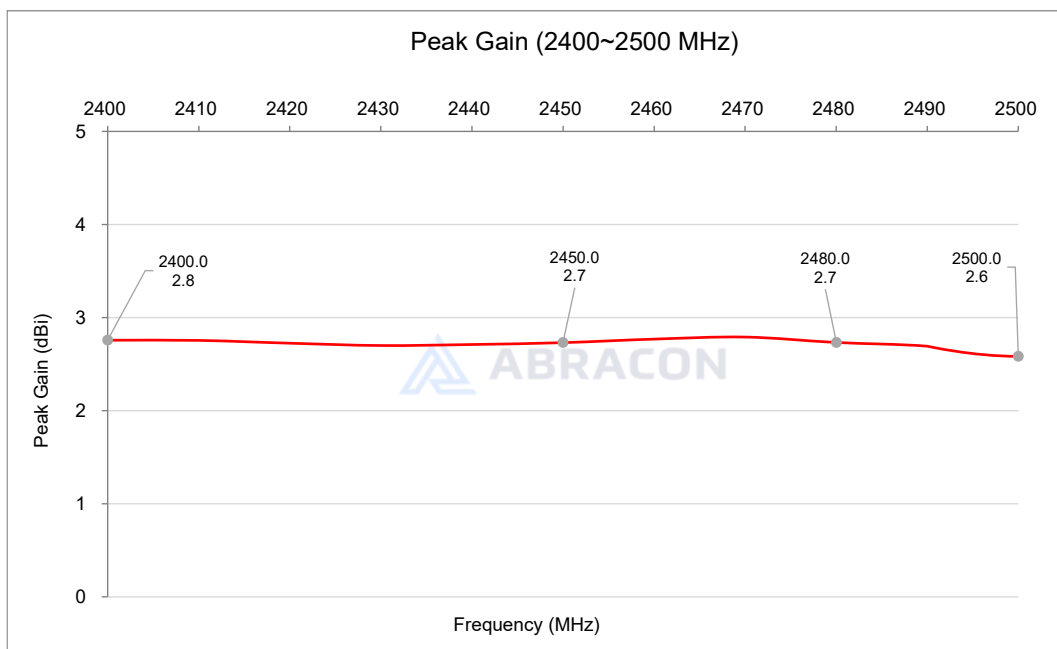


50 x 15 x 0.2 mm

RoHS Compliant

MSL Level = N/A

Radiation Characteristics – Peak Gain



2.4GHz Bluetooth & Wi-Fi FPC Antenna

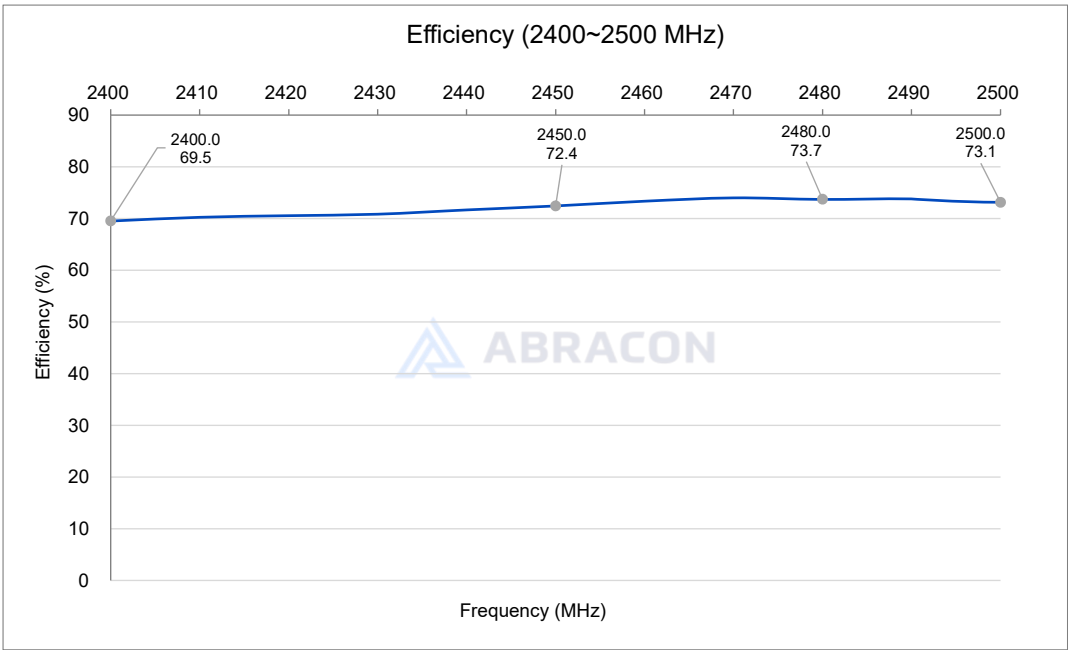


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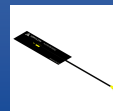
Request Samples  Check Inventory 

50 x 15 x 0.2 mm
RoHS Compliant
MSL Level = N/A

Radiation Characteristics – Total Efficiency (%)



2.4GHz Bluetooth & Wi-Fi FPC Antenna



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Request Samples



Check Inventory



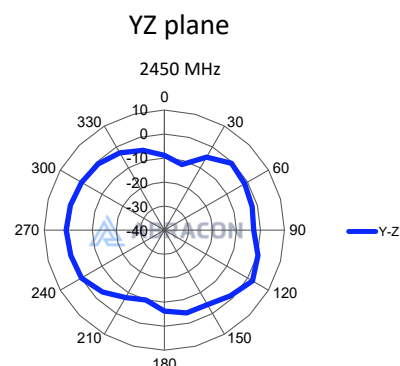
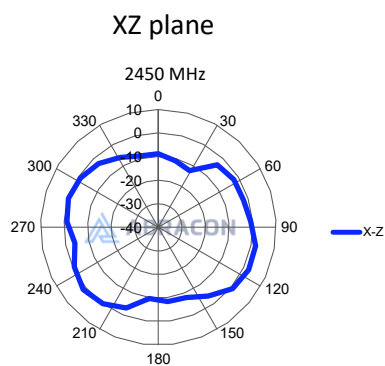
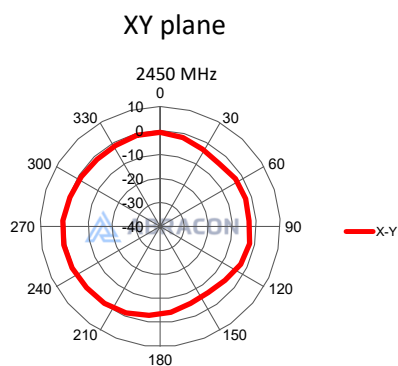
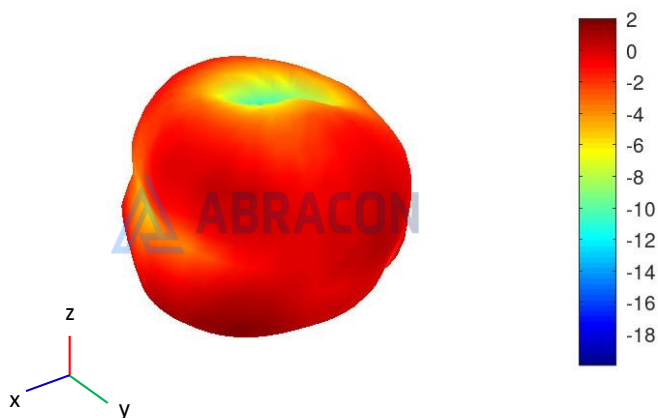
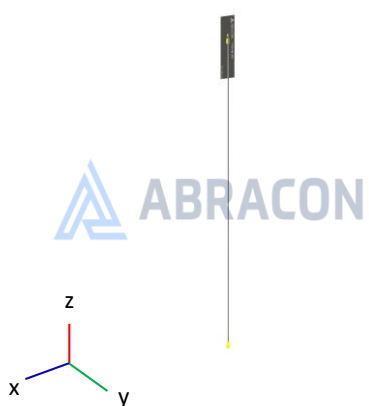
50 x 15 x 0.2 mm

RoHS Compliant

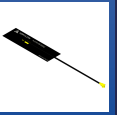
MSL Level = N/A

Radiation Characteristics – 3D & 2D pattern

2450MHz



2.4GHz Bluetooth & Wi-Fi FPC Antenna



AANI-FB-0032

Request Samples



Check Inventory



50 x 15 x 0.2 mm
RoHS Compliant
MSL Level = N/A

Packaging

Number of Antenna/ bags: 50 pcs

Total Pcs / package: 1000 pcs

ATTENTION: Abracon LLC's products are Commercial-Off-The-Shelf ('COTS'), which are designed, intended, and validated for use in commercial, industrial, and automotive applications. The customer is responsible for testing and verifying the performance of an Abracon solution to meet their system-level requirements.



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REVISED: 05-26-25

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