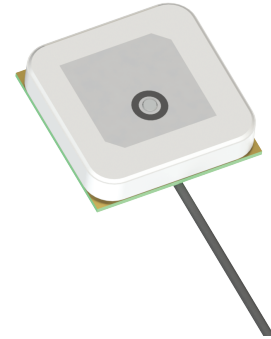


MPA-258-WIFI

Embedded WiFi Microstrip Antenna
Part #: 189-00051-01

Description

The MPA-258-WIFI is a high gain antenna customized for 2.4 GHz WIFI frequencies. This advanced ceramic patch antenna with cable includes a 25x25x4.5 mm embedded patch with mini-IPEX cable and connector. The MPA-258-WIFI has its own ground PCB board. This antenna is designed for embedded applications which feature high performance WIFI 2.4GHz mobile applications and IOT solutions. The MPA-258-WIFI utilizes a special semi ceramic based material which leads to higher upper hemisphere efficiency and a lower axial ratio as compared to regular patch antennas. This allows the antenna to be superior and a top choice for demanding WIFI multiband/multifrequency antenna requirements.



Electrical Specifications

Parameter	Specification
Range Of Receiving Frequency	2450 ± 50 MHz
Center Frequency	2451 ± 5 MHz
VSWR	< 2.5
Peak Gain	> 0.5 dBi
Polarization	Linear
Impedance	50 Ω

Features

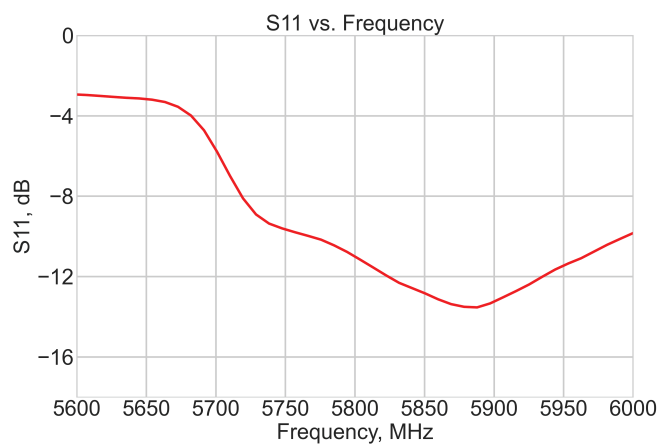
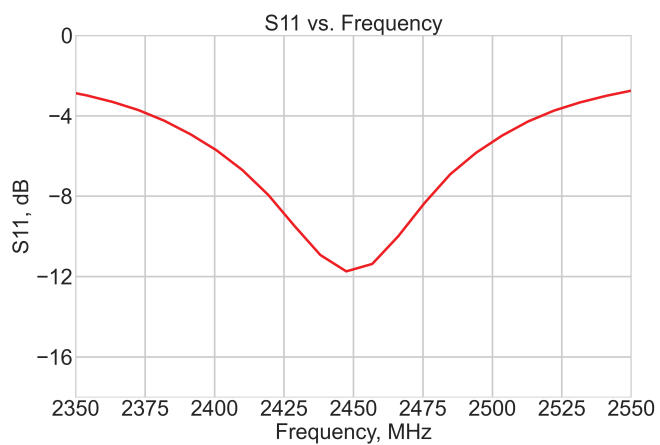
- 2.4GHz Wi-Fi frequency
- Integrated Ground plane with cable
- Easy mounting
- Surface Mount
- Compact size
- Advanced Ceramic Material
- Ground Plane Dependent
- Terminator using IPEX connector
- Dimensions 25 x 25 x 4.5 mm

Mechanical Specification

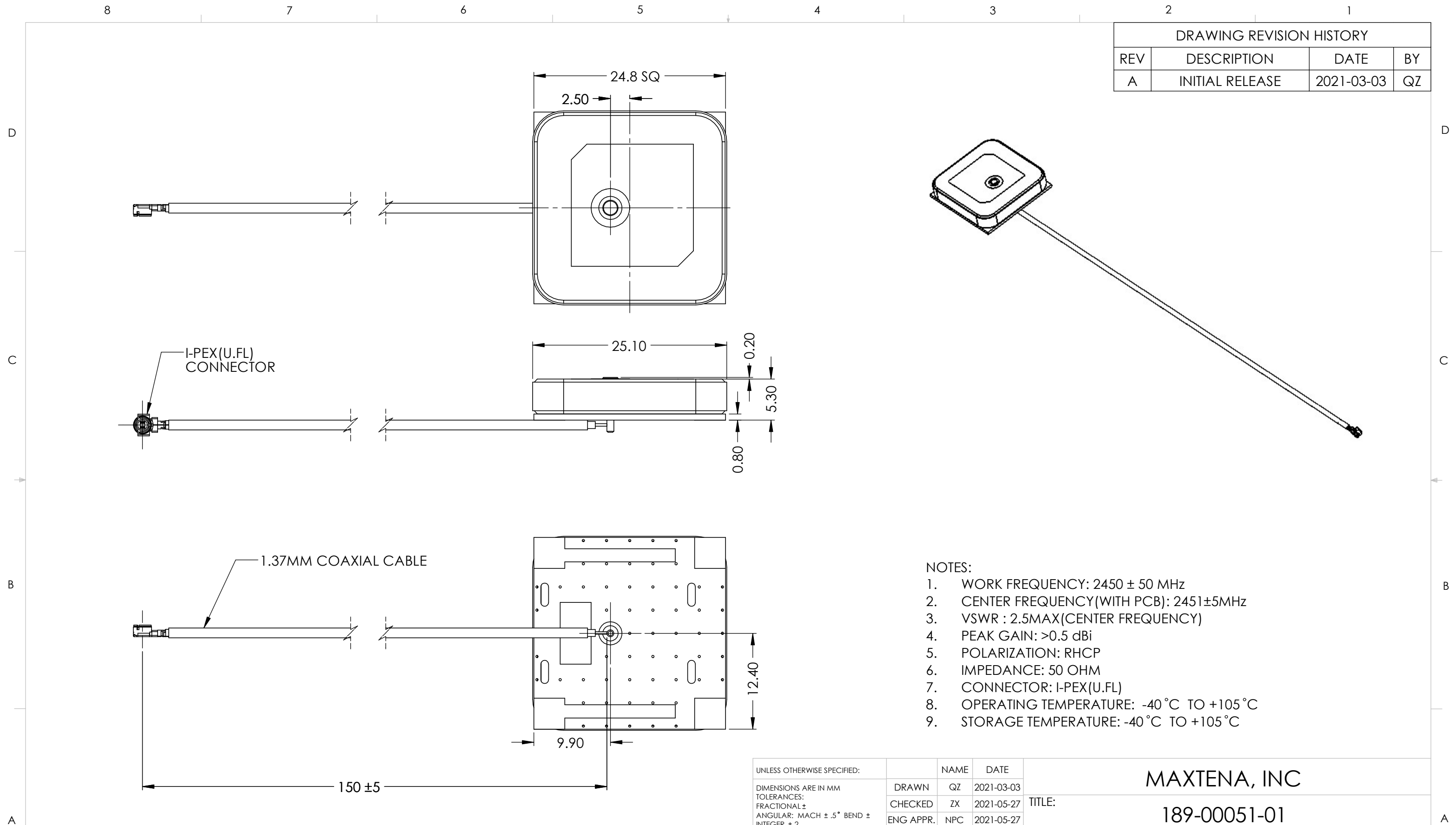
Parameter	Specification
Antenna Dimensions	25 x 25 x 4.5 mm
PCB	24.8 x 24.8 x 0.8 mm
Operating Temperature	-40°C to 105°C
Connector	I-PEX (MHF)
Cable Type	Ø1.37 mm
Cable Length	150 mm

Applications

- WiFi Applications
- Mobile applications
- Drones, robotics
- IoT applications
- VR/AR applications
- Industrial controls



DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-03-03	QZ



- NOTES:
1. WORK FREQUENCY: 2450 ± 50 MHz
 2. CENTER FREQUENCY(WITH PCB): 2451±5MHz
 3. VSWR : 2.5MAX(CENTER FREQUENCY)
 4. PEAK GAIN: >0.5 dBi
 5. POLARIZATION: RHCP
 6. IMPEDANCE: 50 OHM
 7. CONNECTOR: I-PEX(U.FL)
 8. OPERATING TEMPERATURE: -40 °C TO +105 °C
 9. STORAGE TEMPERATURE: -40 °C TO +105 °C

ITEM 189-00051-01 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-03-03	QZ

UNLESS OTHERWISE SPECIFIED:	NAME	DATE
DIMENSIONS ARE IN MM	DRAWN	QZ 2021-03-03
TOLERANCES:	CHECKED	ZX 2021-05-27
FRACTIONAL ±	ENG APPR.	NPC 2021-05-27
ANGULAR: MACH ± .5° BEND ±	MFG APPR.	
INTEGER ± 2	Q.A.	
ONE PLACE DECIMAL ± 1.0	CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.	
TWO PLACE DECIMAL ± .50	THIRD ANGLE PROJECTION	
INTERPRET GEOMETRIC TOLERANCING PER:	DO NOT SCALE DRAWING	

MAXTENA, INC		
TITLE: 189-00051-01 MPA-258-WIFI		
SIZE	DWG. NO.	REV
B	117-00403-01	A
CAGE CODE: 5KQH7	SCALE: NONE	SHEET 1 OF 1

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