



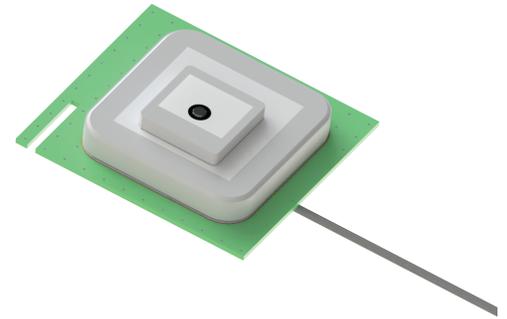
MPA-254-WIFI

WIFI 2.4/5 GHz Embedded Patch Antenna

Part #: 189-00055-01

Description

The MPA-254-WIFI is a high gain antenna customized for both 2.4 GHz & 5.8 GHz frequencies. The antenna features an optimized WIFI ceramic stacked patch with customizable cable and connectors. The MPA-254-WIFI has its own ground PCB board, and thus it is ground plane dependent. This antenna is designed for embedded applications which feature high performance WIFI such mobile applications and IOT solutions. The MPA-254-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	2400-2500 MHz	5700-5870MHz
Center Frequency	2450MHz	5800 MHz
Return Loss	≤ -9 dB	≤ -7 dB
Gain at Zenith	1.0 dBi typ.	1.0 dBi typ.
Polarization	Linear	
Impedance	50 Ω	

Features

- 2.4GHz & 5.8 GHz Wi-Fi frequency
- Integrated Ground plane with cable
- Easy mounting
- Surface Mount
- Compact size
- Advanced Ceramic Material
- Terminator using IPEX connector

Mechanical Specification

Parameter	Specification
Antenna Dimensions	25 x 25 x 4 mm
Operating Temperature	-40°C to 105°C
Connector	I-PEX (U.FL)
Cable Type	Ø1.13 mm COAXIAL
Cable Length	150 mm

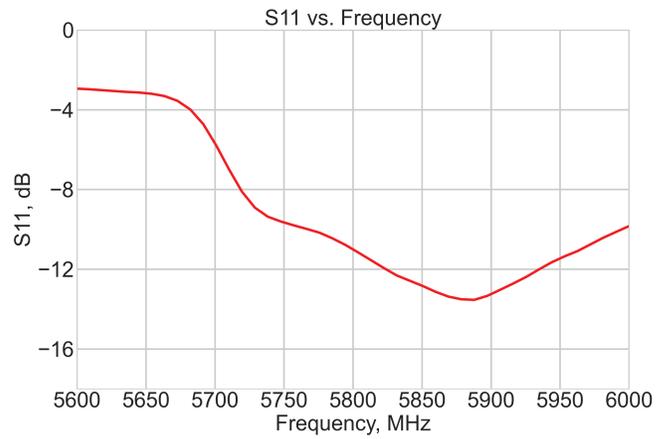
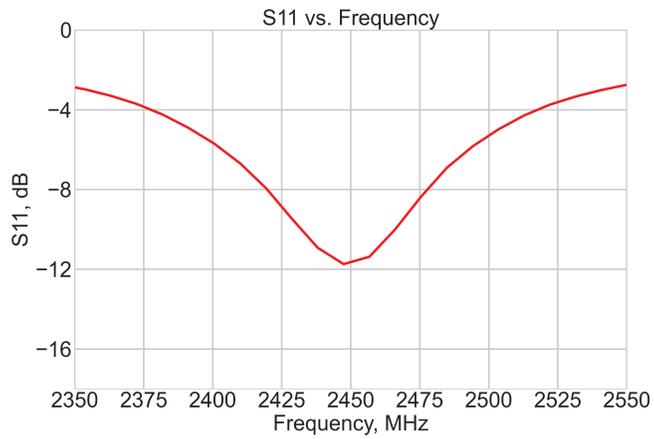
Applications

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

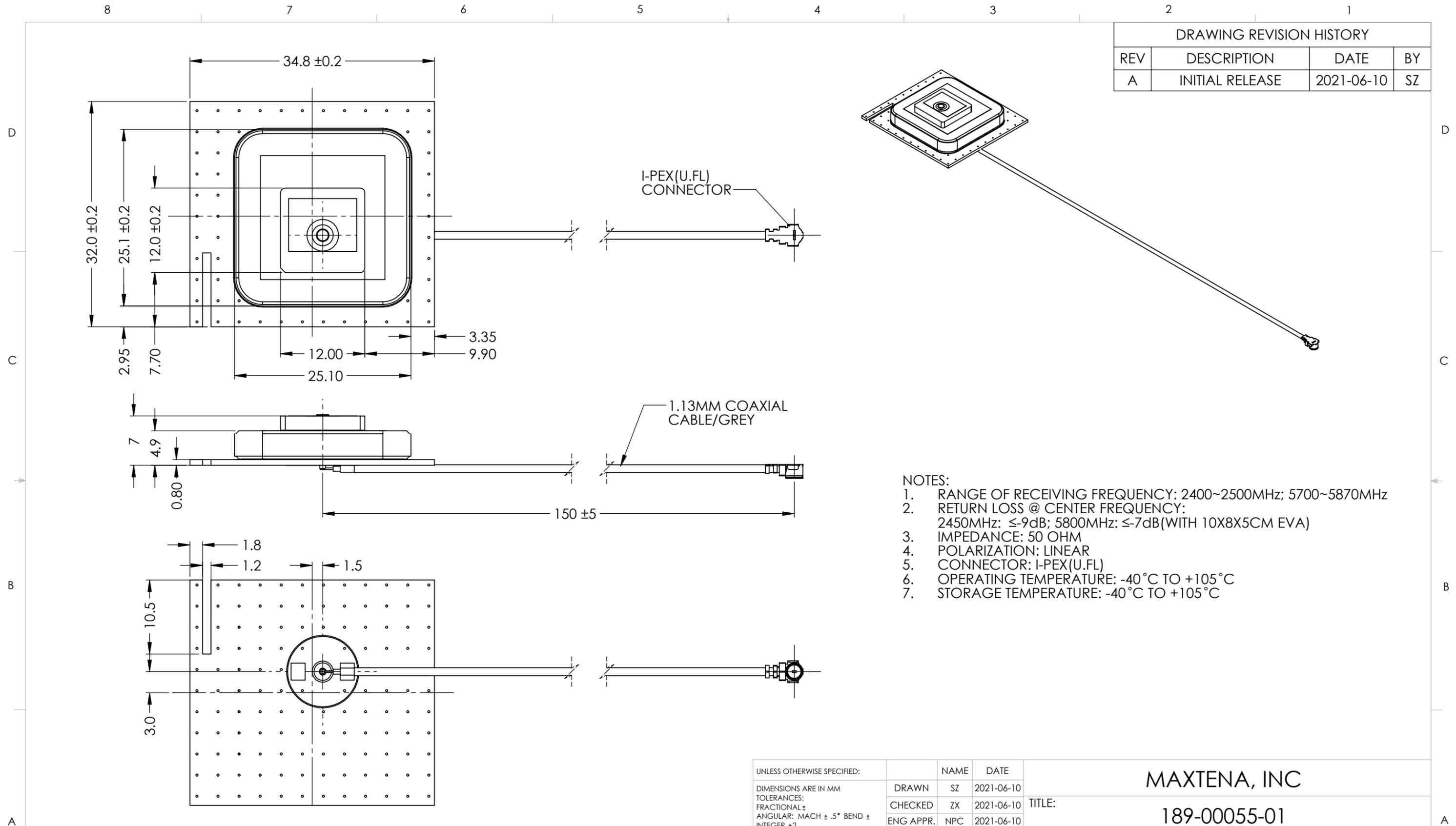


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DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-06-10	SZ



- NOTES:
1. RANGE OF RECEIVING FREQUENCY: 2400~2500MHz; 5700~5870MHz
 2. RETURN LOSS @ CENTER FREQUENCY:
2450MHz: ≤-9dB; 5800MHz: ≤-7dB(WITH 10X8X5CM EVA)
 3. IMPEDANCE: 50 OHM
 4. POLARIZATION: LINEAR
 5. CONNECTOR: I-PEX(U.FL)
 6. OPERATING TEMPERATURE: -40°C TO +105°C
 7. STORAGE TEMPERATURE: -40°C TO +105°C

ITEM 189-00055-01 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-06-10	SZ

UNLESS OTHERWISE SPECIFIED:	NAME	DATE
DIMENSIONS ARE IN MM	DRAWN	SZ 2021-06-10
TOLERANCES:	CHECKED	ZX 2021-06-10
FRACTIONAL ±	ENG APPR.	NPC 2021-06-10
ANGULAR: MACH ± .5° BEND ±	MFG APPR.	
INTEGER ±2	Q.A.	
ONE PLACE DECIMAL ± 1.0		
TWO PLACE DECIMAL ± .50		
INTERPRET GEOMETRIC TOLERANCING PER:		
	CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.	
THIRD ANGLE PROJECTION		
DO NOT SCALE DRAWING		

MAXTENA, INC		
TITLE: 189-00055-01 MPA-254-WIFI		
SIZE	DWG. NO.	REV
B	117-00404-01	A
CAGE CODE: 5KQH7	SCALE: NONE	SHEET 1 OF 1

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