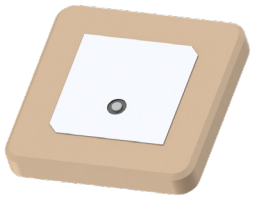
MPA-406-1612

PASSIVE GPS IRIDIUM MICROSTRIP ANTENNA

Ordering Part #: 189-00050-01



Description

The MPA-406-1612 is a high gain antenna customized for Iridium and GPS frequencies. This antenna is designed for embedded applications which feature Iridium and GPS such tracking devices and IOT solutions. The MPA-406-1612 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 Iridium antenna requirements. The interface connector is a through pin solution. This antenna has to be fully tuned and customized for Iridium applications and we encourage you to contact us here at Maxtena directly.

Electrical Specifications

70x70 mm ground plane

Parameter	Design Specifications
Frequency	1565 MHz - 1640 MHz
Center Frequency	1612 MHz ± 4 MHz
Bandwidth	79 MHz min
VSWR	1.5 max
Polarization	RHCP
Axial ratio	3 dB max
Gain at Zenith	+2.0 dBi (typical)
Impedance	50 Ohm
Operating Temperature	from -40˚C to 85˚C

Features

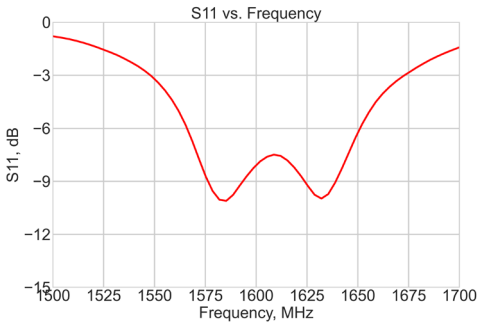
- Ultra High Performance
- Iridium & GPS Band Coverage
- Embedded Applications
- Pin Connector
- Custom Tuning and Matching

Applications

- IOT
- Remote Monitoring
- Telematics
- Utilities
- Transportation

S11 vs. Frequency plot

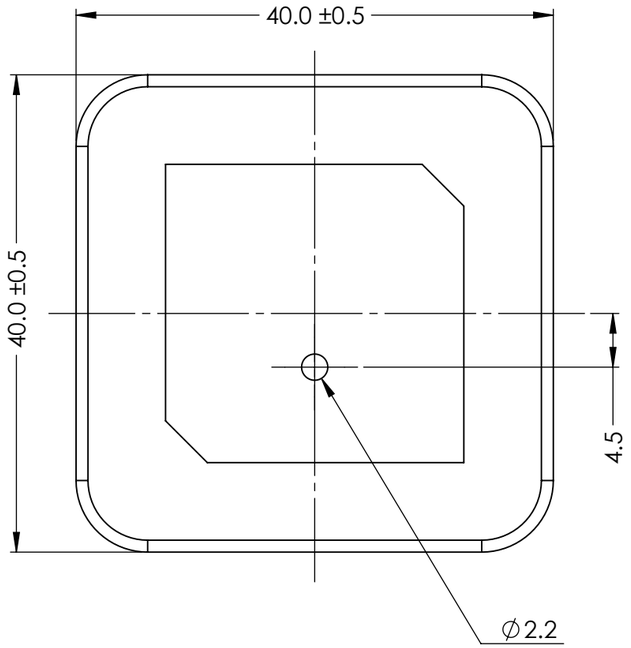
Measured at 1600.5 MHz on a 70x70 mm ground plane.

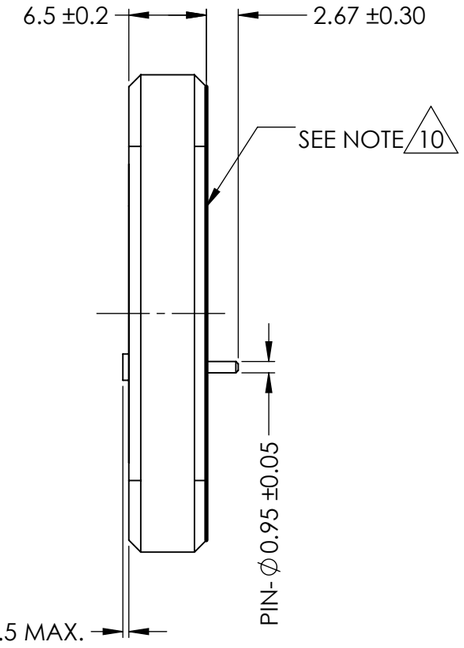


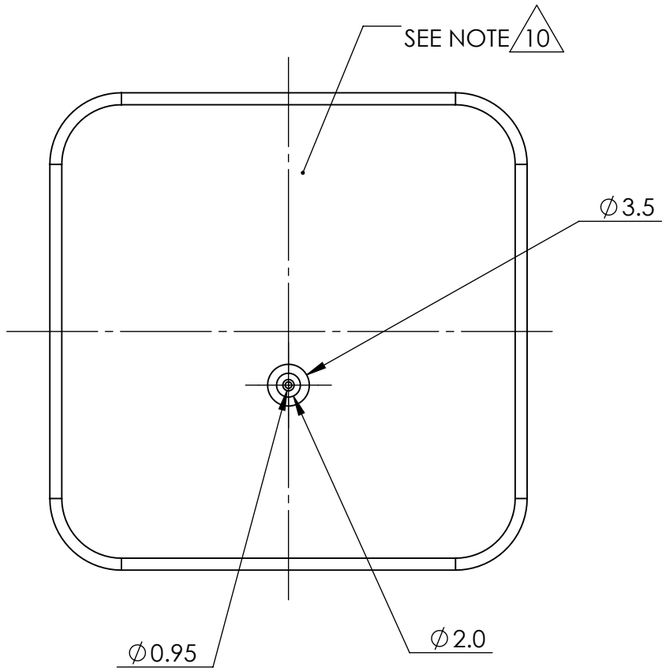
MAXTENA
WIRELESS INNOVATIONS COMPANY

Maxtena Inc.
7361 Calhoun Place, Suite 102
Rockville, MD 20855
1-877-629-8362
info@maxtena.com
www.maxtena.com

DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-01-27	QZ







NOTES:

1. RANGE OF RECEIVING FREQUENCY: 1600.5MHz±4 MHz
2. CENTER FREQUENCY: 1612MHz ± 4MHz(WITH78.32×75.63 mm GND PLANE)
3. BANDWIDTH: 79MHz MIN (RETURN LOSS@-10dBi)
4. VSWR: 1.5 MAX (CENTER FREQUENCY)
5. GAIN AT ZENITH: +2.0 dBi TYP.
6. AXIAL RATIO: 3 dBi MAX
7. POLARIZATION: RHCP
8. IMPEDANCE: 50 OHM
9. OPERATING TEMPERATURE: -40°C TO +105°C
10. DOUBLE-SIDE ADHESIVE ON THIS SURFACE FOR INDUSTRIAL USE

ITEM 189-00050-01 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-01-27	QZ

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MM
TOLERANCES:
FRACTIONAL ±
ANGULAR: MACH ± .5° BEND ±
INTEGER ± 2
ONE PLACE DECIMAL ± 1.0
TWO PLACE DECIMAL ± .50
INTERPRET GEOMETRIC TOLERANCING PER:

THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	QZ	2021-01-27
CHECKED	ZX	2021-01-28
ENG APPR.	NPC	2021-01-28
MFG APPR.		
Q.A.		

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

MAXTENA, INC

TITLE:
189-00050-01
MPA-406-1612, 40x40x6.5MM, IRIDIUM/GPS

SIZE	DWG. NO.	REV
B	117-00397-01	A

CAGE CODE: 5KQH7 | SCALE: NONE | SHEET 1 OF 1

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Maxtena:

MPA-406-1612