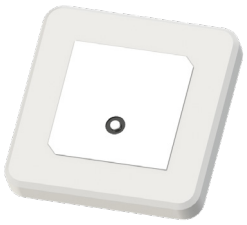
MPA-406-1227

PASSIVE GPS L2 MICROSTRIP ANTENNA

Ordering Part #: 189-00047-01



Description

The MPA-406-1227 is an optimized high performance GPS L2 patch antenna. This antenna is perfect for projects with a smaller scope and budget. The antenna is ideal for less demanding applications where extreme performance and battery life can be sacrificed at the expense of device cost. This antenna is designed for embedded applications which feature split antennas for GPS L1/L2 applications such as GPS handheld units, mobile devices, and tracking devices. It features higher upper hemisphere efficiency and a lower axial ratio as compared to regular patch antennas. The interface connector is a through pin solution.

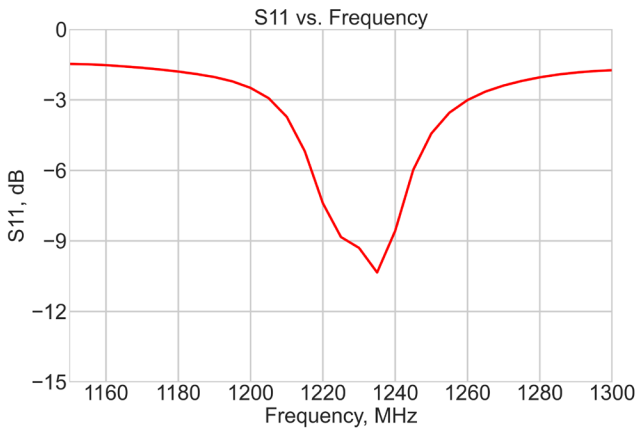
Electrical Specifications

70x70 mm ground plane

Parameter	Design Specifications
Frequency	1227.6 ± 10 MHz
Center Frequency	1226 MHz ± 4 MHz
Bandwidth	18 MHz min
VSWR	1.8 max
Polarization	RHCP
Gain at Zenith	-3.8 dBi typ.
Axial Ratio	3 typ.
Impedance	50 Ohm
Operating Temperature	from -40˚C to +105˚C

S11 vs. Frequency plot

Measured at 1227.6 MHz on a 70x70 mm ground plane.



Features

- GPS L2 frequency
- Adhesive mounting
- Pin connector
- Compact size
- Custom tuning

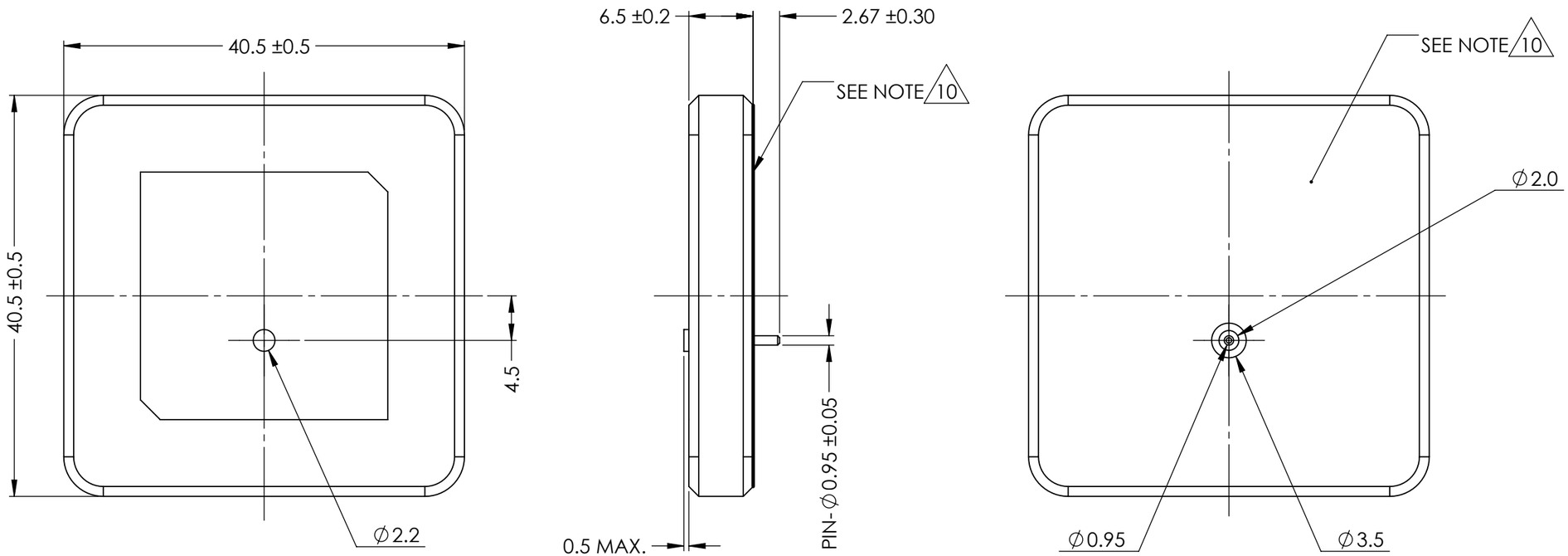
Applications

- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Embedded applications
- Oil & gas industries
- Navigation devices
- Mining equipment
- LBS & M2M applications
- Handheld devices
- Law enforcement

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DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2121-01-27	QZ



NOTES:

1. RANGE OF RECEIVING FREQUENCY: 1227.6±10MHz
2. CENTER FREQUENCY: 1226MHz ± 4MHz(WITH 70.00×77.38MM GND PLANE)
3. BANDWIDTH: 18MHz MIN(RETURN LOSS@-10dBi)
4. VSWR: 1.8MAX
5. GAIN AT ZENITH: -3.8dBi TYP.
6. AXIAL RATIO: 3 TYP.
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 189-00047-01 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-01-27	QZ

UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN MM TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± .5° BEND ± .5° INTEGER ± 2 ONE PLACE DECIMAL ± 1.0 TWO PLACE DECIMAL ± .50 INTERPRET GEOMETRIC TOLERANCING PER:	DRAWN	QZ	2021-01-27
	CHECKED	ZX	2021-02-02
	ENG APPR.	NPC	2021-02-04
	MFG APPR.		
	Q.A.		
THIRD ANGLE PROJECTION	CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.		
DO NOT SCALE DRAWING			

MAXTENA, INC

TITLE:
189-00047-01
MPA-406-1227, 40x40x6.5MM
PASSIVE PATCH, 1227MHZ

SIZE	DWG. NO.	REV
B	117-00394-01	A

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

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