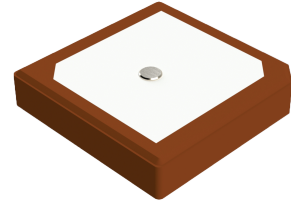




MPA-184-C

L1 PASSIVE GPS MICROSTRIP ANTENNA

Part #: 189-00082-01



Description

Our patch antenna offerings are perfect for projects with a smaller scope and budget for which high-performance and lower weight is not a primary factor for consideration for the antenna. They are 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 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 Specification

Parameter	Specification
Frequency Range	1573 - 1585 MHz
Center Frequency	1580 MHz
Bandwidth	12 MHz
Return Loss	-29.2 dB @ center frequency
VSWR	1.1 @ center frequency
Gain at Zenith	+2.5 dBic typ.
Axial Ratio	3 typ.
Polarization	RHCP
Impedance	50 Ω
Radiation Pattern	Hemispherical

Mechanical Specification

Parameter	Specification
Antenna Dimensions	18 x 18 x 4.26 mm
Antenna Type	Ceramic Patch Antenna
Operating Temperature	-40°C to 105°C
Connector	Pin
Mounting type	Embedded
Weight	6 g

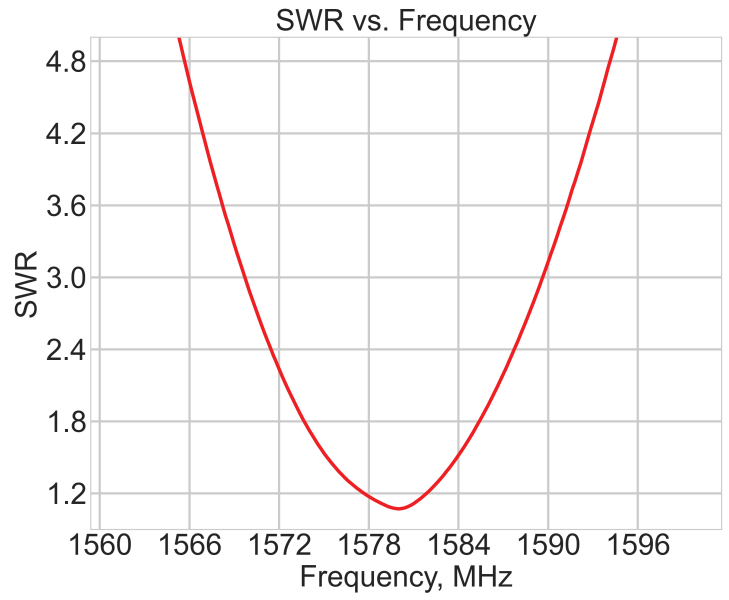
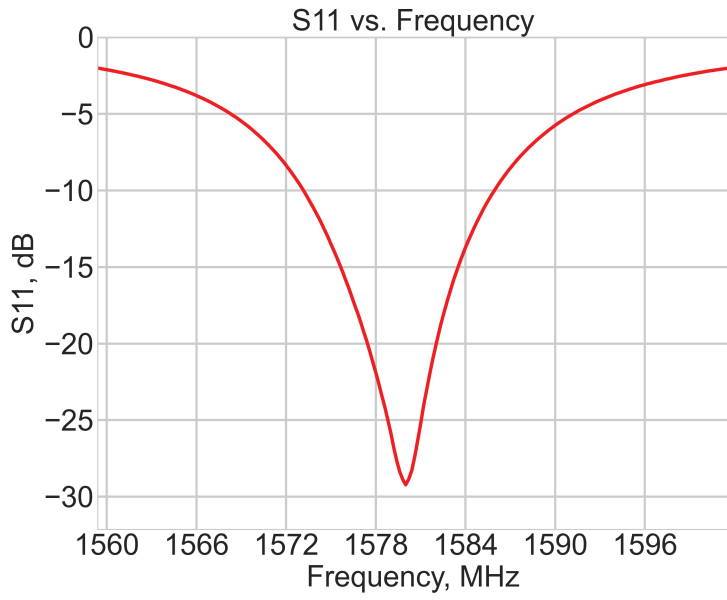
*Mounted on Ground Plane of 72 x 75 mm

Features

- GPS L1 frequency
- Adhesive mounting
- Pin connector
- Compact size
- Custom tuning

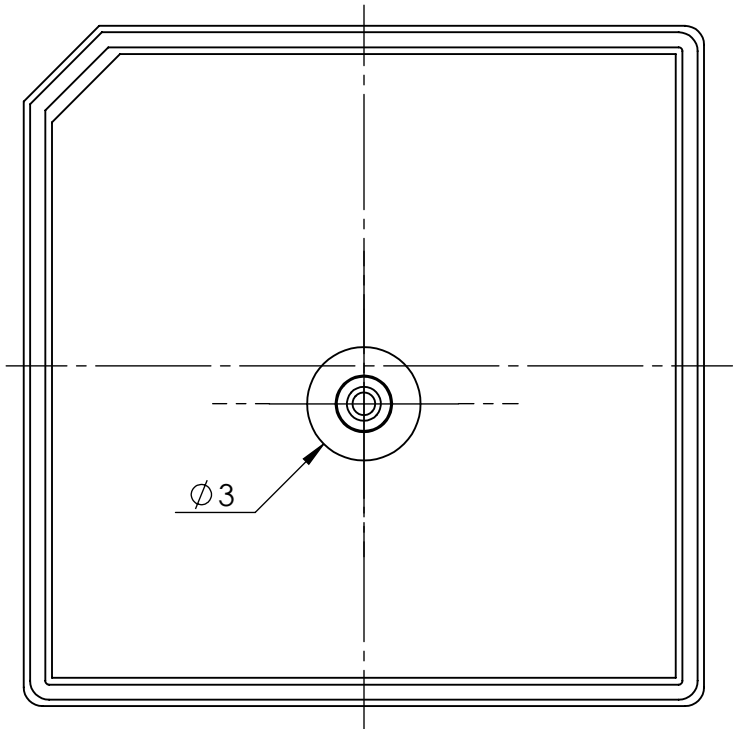
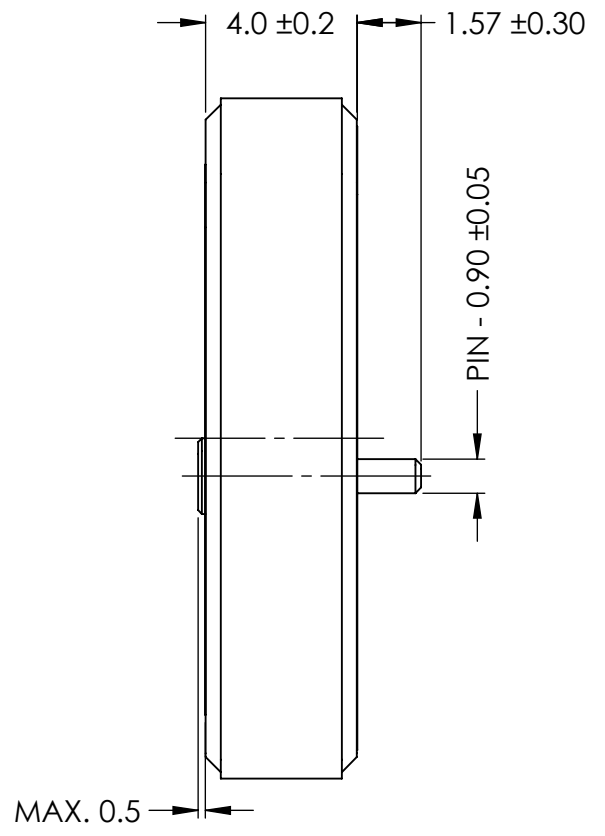
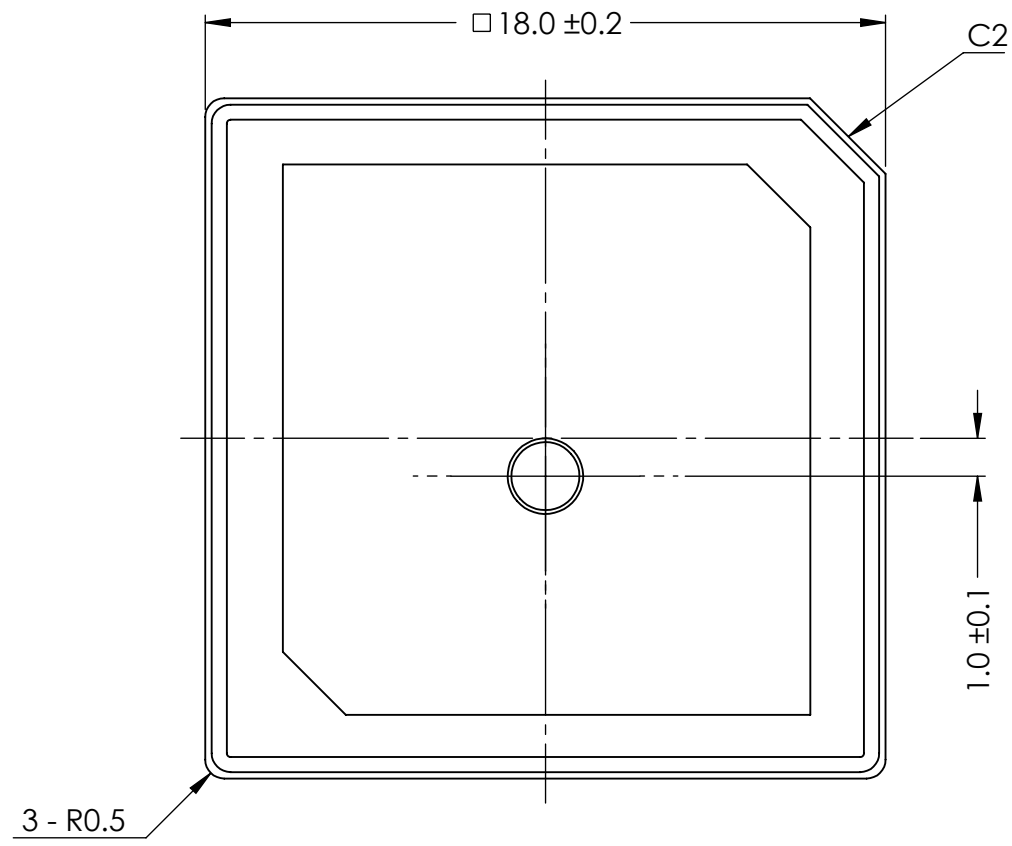
Applications

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



DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-12-15	SZ

D
C
B
A



NOTES:

1. FREQUENCY: 1575 MHz ± 4 MHz
2. OPERATING TEMPERATURE: -40°C ~ +105°C
3. STORAGE TEMPERATURE: -40°C ~ +105°C

ITEM 189-00082-01 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
1	INITIAL RELEASE	2021-12-15	SZ

PROPRIETARY AND CONFIDENTIAL

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UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN MM
TOLERANCES:
FRACTIONAL ±
ANGULAR: MACH ± .5° BEND ±
ONE PLACE DECIMAL ± 1.0
TWO PLACE DECIMAL ± .50

INTERPRET GEOMETRIC TOLERANCING PER:

THIRD ANGLE PROJECTION
DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	SZ	2021-12-15
CHECKED	ZX	2021-12-15
ENG APPR.	NPC	2021-12-15
MFG APPR.		
	Q.A.	

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

MAXTENA, INC

TITLE: 189-00082-01
MPA-184-C

SIZE B	DWG. NO. 117-00549-01	REV A
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CAGE CODE: 5KQH7 SCALE: NONE SHEET 1 OF 1

8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1