



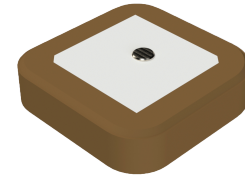
MPA-154-C

L1 PASSIVE GPS MICROSTRIP ANTENNA

Part #: 189-00081-01

Description

The MPA-154-C is a 15 mm ceramic GPS passive patch antenna based on Maxtena technology. 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. 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 mounted through pin solution, and double-sided adhesive.



Electrical Specifications

Parameter	Specification
Range Of Receiving Frequency	1575.42MHz \pm 1.023MHz
Center Frequency	1575 MHz
Bandwidth	\geq 19 MHz
Return Loss	-7.5 dB
VSWR	2.4
Gain at Zenith	-1.0 dBic typ.
Axial Ratio	\leq 3 dBi
Polarization	RHCP
Impedance	50 Ω
Radiation Pattern	Hemispherical

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

Mechanical Specification

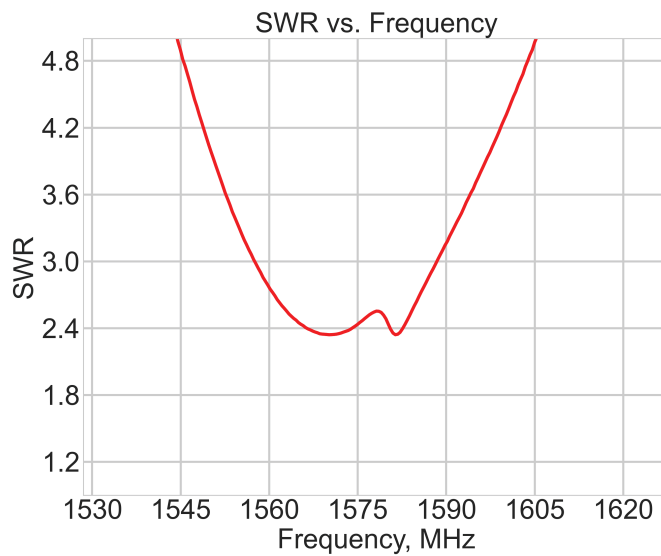
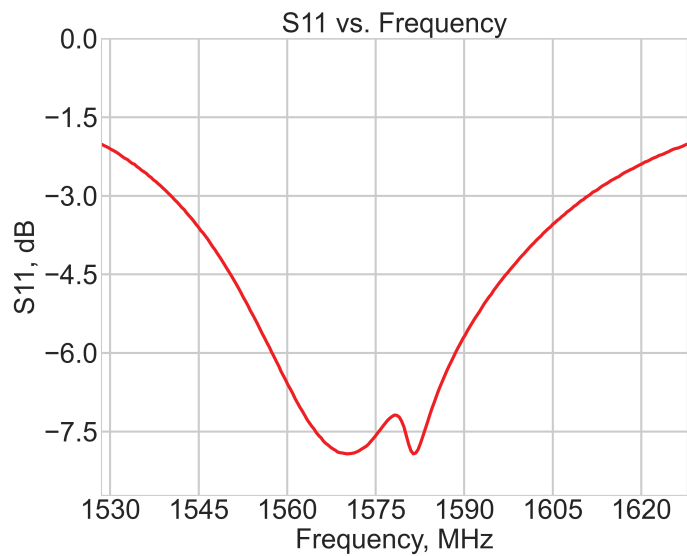
Parameter	Specification
Antenna Dimensions	15.1 x 15.1 x 4.2 mm
Antenna Type	Ceramic patch
Operating Temperature	-40°C to 105°C
Connector	Pin
Mounting type	Embedded
Weight	5 g

*Mounted on Ground Plane of 72 x 15 mm



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 Rockville, MD 20855
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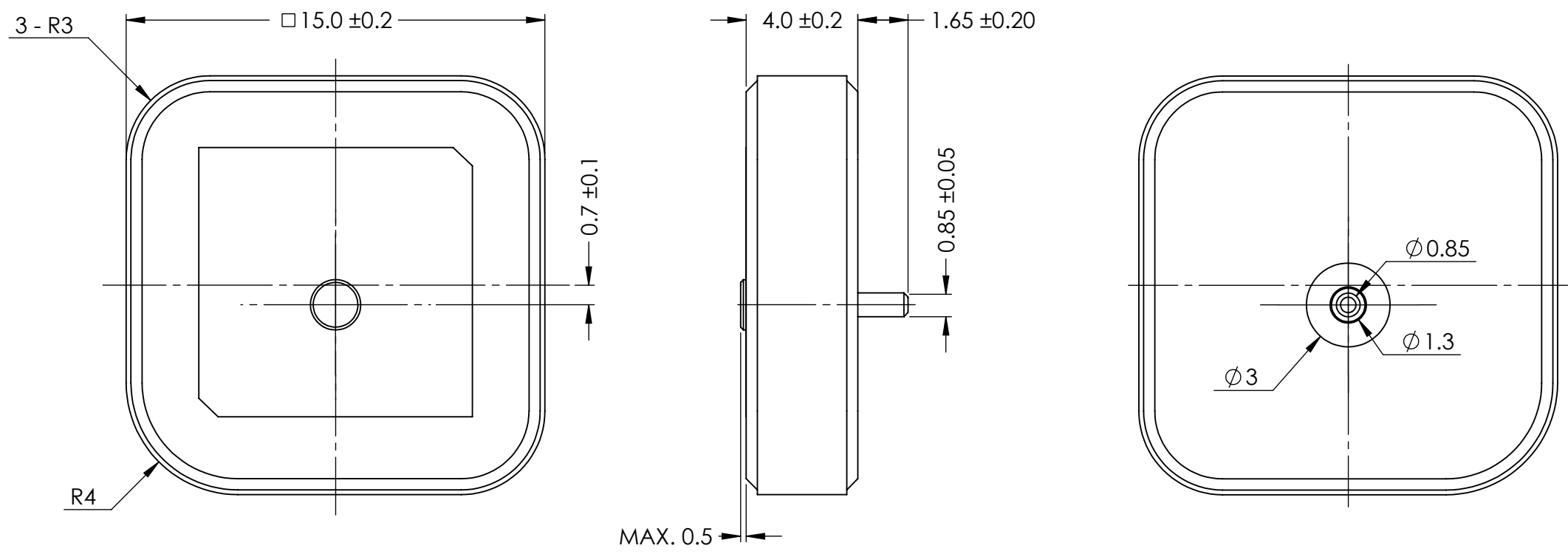
www.maxtena.com



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

D
C
B
A

D
C
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A



NOTES:

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

ITEM 189-00081-01 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
1	INITIAL RELEASE	2021-12-15	SZ

PROPRIETARY AND CONFIDENTIAL

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UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<p style="text-align: center;">MAXTENA, INC</p> <p style="text-align: center;">TITLE: 189-00081-01 MPA-154-C</p>			
DIMENSIONS ARE IN MM		DRAWN	SZ 2021-12-15				
TOLERANCES:		CHECKED	ZX 2021-12-15				
FRACTIONAL ±		ENG APPR.	NPC 2021-12-15				
ANGULAR: MACH ± .5° BEND ±		MFG APPR.					
ONE PLACE DECIMAL ± 1.0		Q.A.		SIZE	DWG. NO.	REV	
TWO PLACE DECIMAL ± .50		CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.		B	117-00548-01	A	
INTERPRET GEOMETRIC TOLERANCING PER:		DO NOT SCALE DRAWING		CAGE CODE: 5KQH7		SCALE: NONE	SHEET 1 OF 1