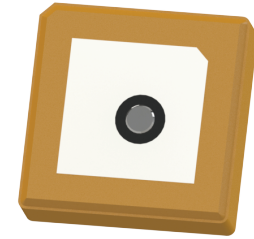




# MPA-134-GPS

## GLONASS MICROSTRIP ANTENNA

Part #: 189-00056-01



### Description

The MPA-134-GPS is a high gain antenna customized for GPS, and GLONASS frequencies. This antenna is designed for embedded applications which feature GNSS such tracking devices and IOT solutions. The MPA-134-GPS 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 GNSS multiband/multifrequency antenna requirements. The MPA-134-GPS ceramic passive antenna is intended for mounting directly on the application PCB with connection via the through-hole pin.

### Electrical Specifications

Parameter	Specification
Range Of Receiving Frequency	1595 - 1610 MHz
Center Frequency	1602 MHz
Bandwidth	16 MHz
Return Loss	≤ -10 dB
VSWR	≤ 2
Gain at Zenith	-1.5 dBic typ.
Axial Ratio	5 dBi
Polarization	RHCP
Impedance	50 Ω

### Mechanical Specification

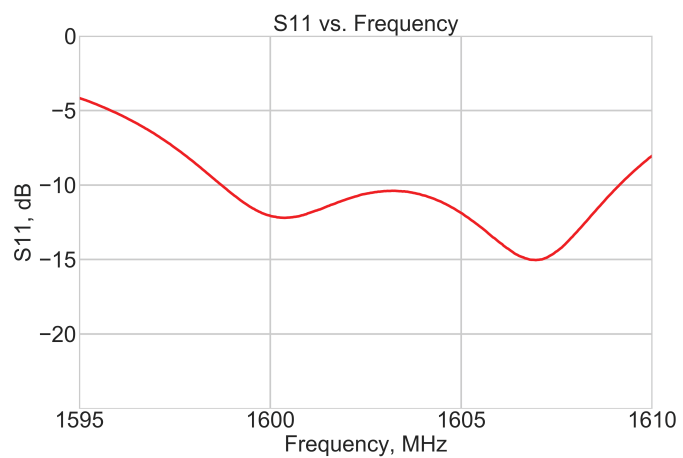
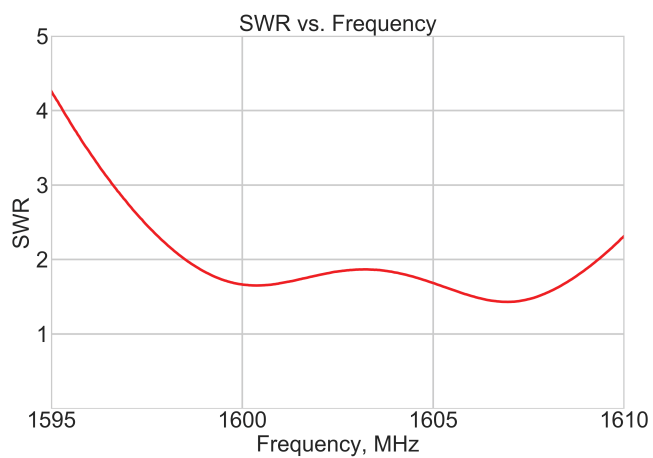
Parameter	Specification
Antenna Dimensions	13 x 13 x 4mm
Materials	Ceramic
Operating Temperature	-40°C to 105°C
RF Connector	Pin - Connector
Mounting type	Surface Mount

### Features

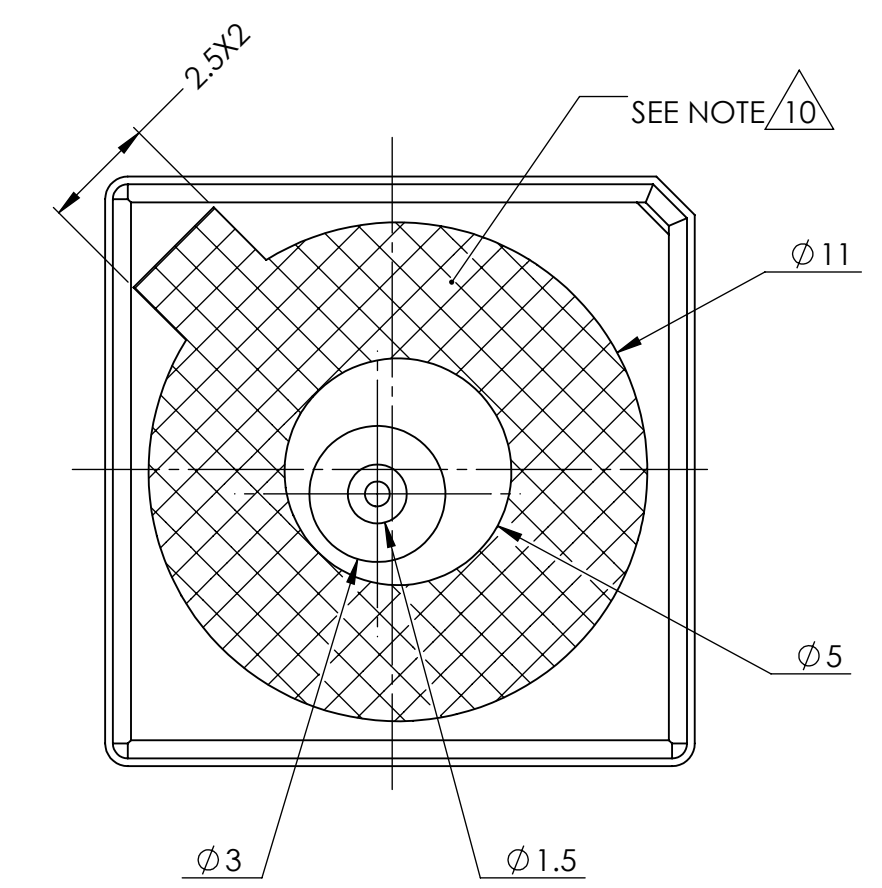
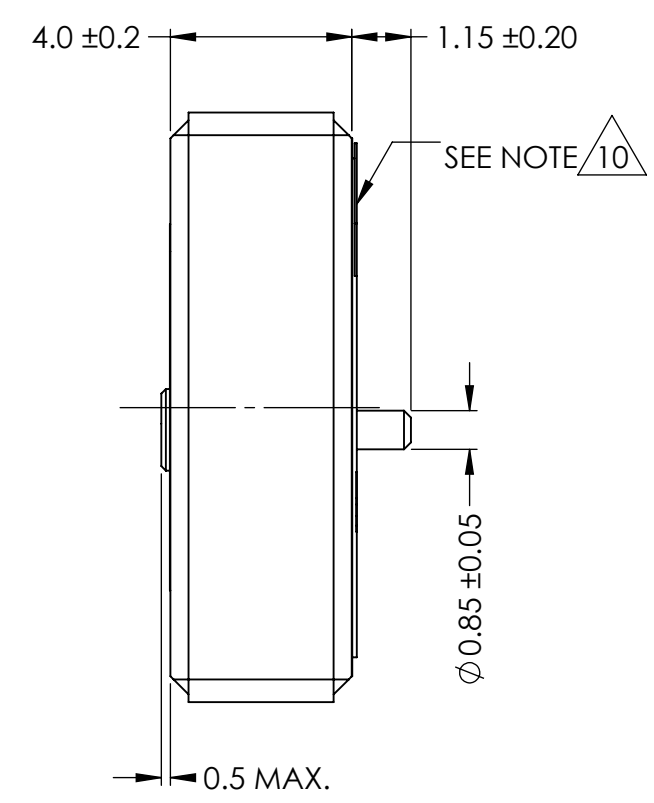
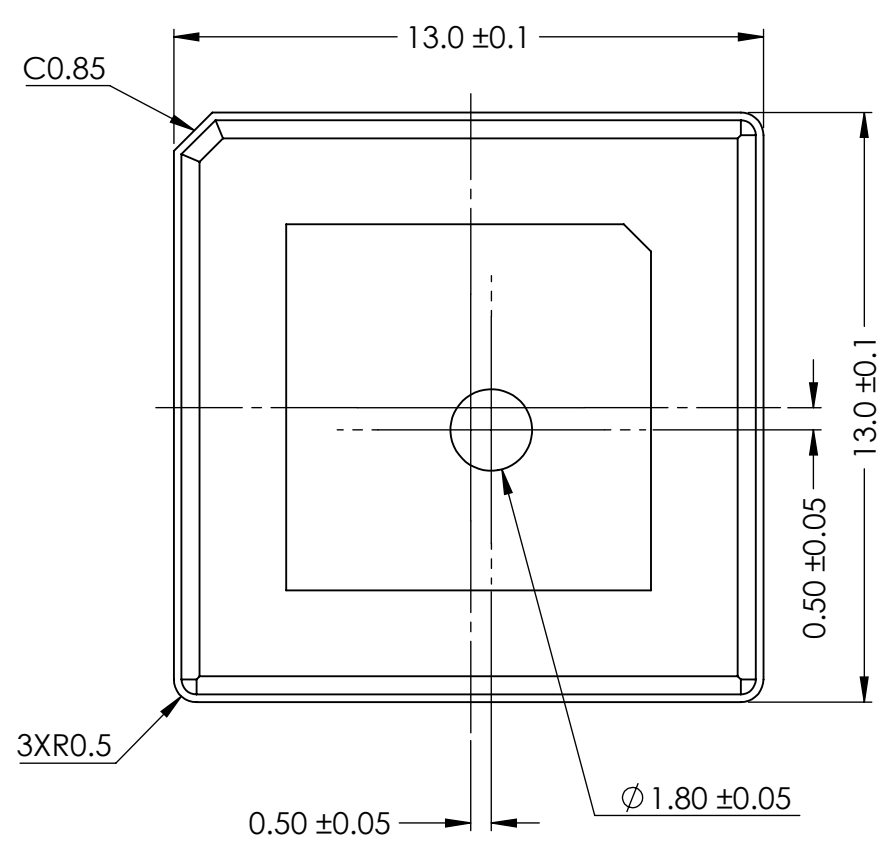
- GLONASS frequency
- Easy mounting
- Pin-Connector
- Compact size
- Advanced Ceramic Material
- Ground Plane Dependent
- Dimensions 13 x 13 x 4 mm

### 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	2021-03-03	QZ



NOTES:

- CENTER FREQUENCY: 1602MHz (WITH 67.3X69.5MM SQUARE GND PLANE)
- BANDWIDTH: 16MHz MIN (RETURN LOSS≤-10dB)
- VSWR: 2 MAX
- GAIN AT ZENITH: -1.5dBic TYP.
- AXIAL RATIO: 5 dBi.
- POLARIZATION: RHCP
- IMPEDANCE: 50 OHM
- OPERATING TEMPERATURE: 40°C to +105°C
- DOUBLE-SIDE ADHESIVE ON THIS SURFACE FOR INDUSTRIAL USE.

ITEM 189-00056-01 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-03-03	QZ

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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

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

NAME		DATE	<b>MAXTENA, INC</b> <b>189-00056-01</b> <b>MPA-134</b>
DRAWN	QZ	2021-03-03	
CHECKED	PL	2021-05-21	
ENG APPR.	NPC	2021-05-27	
MFG APPR.			TITLE:
Q.A.			
SIZE	DWG. NO.	REV	
<b>B</b>	<b>117-00405-01</b>	<b>A</b>	
CAGE CODE: 5KQH7		SCALE: NONE	SHEET 1 OF 1

8 7 6 5 4 3 2 1

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8 7 6 5 4 3 2 1