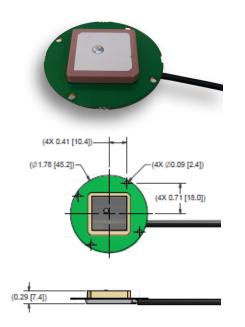
#### **Embedded GPS Antenna**

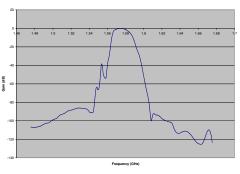




## Low Noise Amplifier Specifications

Nominal Impedance: 50 Ohm
VSWR: 1.5:1 max (at connector)
Nominal Gain:  @ 3.3VDC: 25 dB  @ 5VDC: 25.5 dB
Noise Figure: 3.1 dB (typical)
Voltage: 2.7 - 5 VDC

### Out-of-band Filter Rejection Chart



# 3961D-HR High Rejection Embedded GPS Antenna

The 3961D-HR Embedded GPS Antenna provides 25 dB gain, superior out-of-band rejection performance and is the optimum choice for embedded GPS Tracking and Timing applications with high RF fields. It features a precision tuned custom ceramic patch element for maximum signal reception, 15KV ESD circuit protection, a 3 stage LNA circuit and dual high rejection SAW filters. This enables the 3961D-HR to provide a reliable and clear GPS signal while minimizing loss-of-lock, even when conditions are less than ideal. The 3961D-HR comes with a 45.2 mm diameter mini ground plane.

#### **Features**

- High out-of-band rejection for stand-alone or mobile applications where interference is a concern and performance is critical
- Innovative dual SAW filter design
- Low current draw: 7.5 mA @ 3.3 VDC
- · Comes with internal ground plane
- 15 KV ESD circuit protection

## **RF/Electrical Specifications**

Center Frequency	Gain	Polarization	Current Draw
1575.42MHz ±10 MHz	3 dBic @ 90° -2 dBic @ 20°	Right Hand Circular	7.5 mA @ 3.3VDC (typical)

## **Mechanical Specifications**

Antenna Dimensions	Weight	Shock	Vibration
1.8" x .3" (45.2 x 7.7 mm)	.56 oz (16 g)	Vertical axis 50G, other axes 30G	3 axis, sweep = 15 min 10 - 200 Hz log sweep: 3G
Cable*			Connector*
6" (15 cm) RG174 Size			MCX right angle

## **Environmental Specifications**

Temperature Range	Humidity
-40°C to +85°C operating	95% max (non condensing)

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<sup>\*</sup>For alternate cable length and connector options, please refer to the GPS Mobile Antenna Parts Number Guide