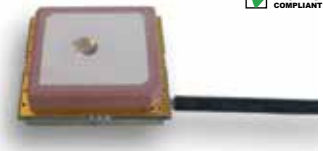




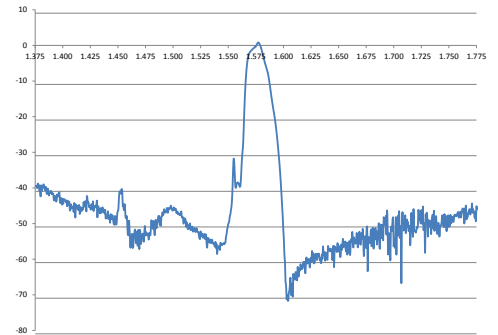
## High Rejection GPS Embedded Antenna, NGP

The 3951D-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, 15 KV ESD circuit protection, a multi-stage LNA circuit and dual high rejection SAW filters. This enables the 3951D-HR to provide a reliable and clear GPS signal while minimizing loss-of-lock, even when conditions are less than ideal.



3951D-HR

Out-of-band filter rejection chart



### 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
- 15 KV ESD circuit protection

### STANDARD CONFIGURATION

Model	Cable	Connector
3951D-HR	6" (15 cm) RG174	MCX right angle

### ELECTRICAL SPECIFICATIONS - GNSS ANTENNA

Frequency Range	LNA Gain	Element Gain	Polarization	Noise Figure
1575.42 ± 10 MHz	@ 3.3 VDC: 25 dB @ 5 VDC: 25.5 dB	3 dBic @ 90° -2 dBic @ 20°	Right hand circular	3.1 dB (typical)

### ELECTRICAL SPECIFICATIONS - GNSS ANTENNA, continued

Current Draw	DC Voltage	VSWR	Nominal Impedance
7.5 mA @ 3.3 VDC (typical)	2.7-5.0 VDC	2.0:1 (max)	50 ohms

### MECHANICAL SPECIFICATIONS

Dimensions	Weight	Shock	Vibration
1.1" x 1.1" x 0.3" (28.4 x 28.4 x 7.7 mm)	0.56 oz (16 g)	Vertical axis 50G, other axes 30G	3 axis, sweep = 15 min 10 – 200 Hz log sweep: 3G

### ENVIRONMENTAL SPECIFICATIONS

Temperature Range	ESD Circuit Protection	Humidity
-40°C to +85°C operating	15 KV	95% max (non condensing)