

3951D Low Noise Embedded GPS Antenna

The 3951D Embedded GPS Antenna has one of the industry's lowest noise figures. It features a tuned custom ceramic patch element that minimizes detuning effects caused by adjacent objects. It also features ESD circuit protection, an innovative LNA (low noise amplifier) and a high rejection SAW filter which enable a consistent, clear signal while minimizing loss-of-lock even when GPS conditions are less than ideal.

Features

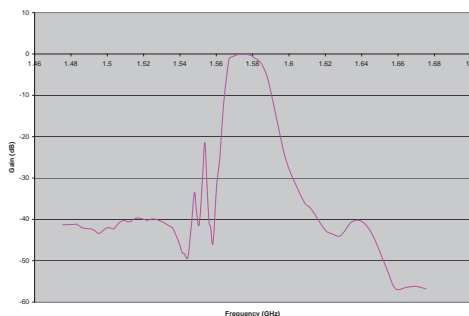
- 15 KV ESD circuit protection
- Low noise figure: 0.5 dB LNA
- Excellent out-of-band signal rejection
- Ideal for embedded applications



Low Noise Amplifier Specifications

Nominal Impedance: 50 Ohm
VSWR: 1.5:1 max (at connector)
Nominal Gain: @ 3.3VDC: 28 dB @ 5VDC: 30 dB
Noise Figure: 0.5 dB (typical)
Voltage: 2.7 - 5.0 VDC

Out-of-band Filter Rejection Chart



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
1.1" x 1.1" x .3" (28.4 x 28.3 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	MCX right angle

Environmental Specifications

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

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