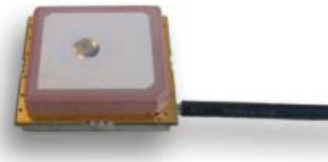


3957D Embedded GPS Antenna

The 3957D GPS antenna is ideal for ruggedized handheld GPS devices, mobile asset tracking equipment and GPS timing applications. This antenna features a custom designed ceramic patch element, a two-stage low noise amplifier and a SAW filter, enabling it to provide great out-of-band signal rejection performance, consistent and clear signal while minimizing loss-of-lock. The 3957D comes in a compact square package.

Features

- 2.7 - 5 V operation
- 15 KV ESD circuit protection
- Ideal for embedded applications



RF/Electrical Specifications

| Center Frequency | Gain (typical) | Polarization | Current Draw |
|--------------------|-------------------------------|---------------------|---------------------------|
| 1575.42MHz ±10 MHz | 3 dBic @ 90° -2 dBic @ 20° | Right Hand Circular | 9 mA @ 3.3V 15 mA @ 5V |

Mechanical Specifications

| Antenna Dimensions | Weight | Shock | Vibration |
|--|------------------|-------------------------------------|---|
| 1.2" x 1.1" x 0.3" (29.5 x 28.4 x 8 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 | Right angle MCX |

Environmental Specifications

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

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: 1.5 dB (typical) |
| Voltage: 2.7 - 5 VDC |
| Out-of-band Rejection: +/- 15 MHz: 5 dB +/- 20 MHz: 10 dB +/- 30 MHz: 32 dB +/- 40 MHz: 40 dB |

Out-of-band Filter Rejection Chart

