



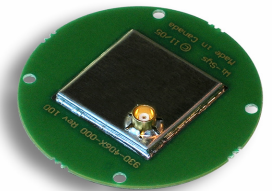
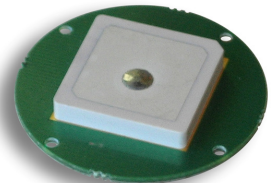
a time and place...
for everything

Wi-Sys Communications Inc.

WS4057/WS4067 OEM GPS Antenna with Built-in MCX Connector

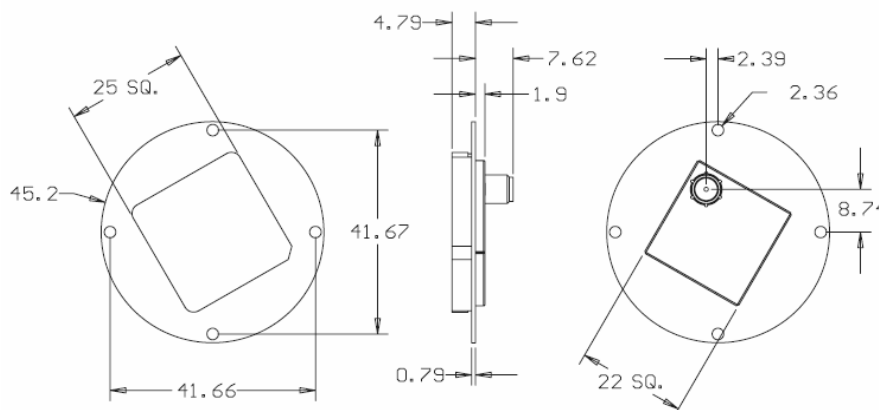
Applications:

- ◆ Portable Telematics
- ◆ Automotive Navigation Systems
- ◆ Fleet Management & Telematics Systems
- ◆ Marine Navigation Systems
- ◆ Asset Tracking Equipment
- ◆ Military Radios and In-Vehicle-Systems
- ◆ Law Enforcement Radios and In-Vehicle-Systems
- ◆ WLAN, WiMax and Cellular Base Station GPS Clock and Timing Systems



The WS4057/WS4067 OEM GPS antenna series with built-in connector is ideal for handheld GPS devices, mobile asset tracking equipment and GPS clock & timing applications. With its compact size and low price, the WS4057/WS4067 series is perfectly suited for OEM applications. The WS4057/WS4067 series features a custom designed ceramic patch element, a two-stage low noise amplifier and a SAW filter, enabling the WS4057/WS4067 series to provide great out-of-band signal rejection performance, consistent and clear signal while minimizing loss-of-lock. Both models come equipped with a MCX connector. The WS4057 comes in a very compact 25 mm square package and the WS4067 comes with a 45.2 mm dia. mini-ground plane.

Dimensions in mm (WS4067)



Features:

- ◆ Available with and without internal ground plane
- ◆ 2.7 to 5.0 V operation
- ◆ 28 dB gain @ 3.3 VDC
- ◆ 1.5 dB noise figure
- ◆ Built in MCX connector
- ◆ Ideal for embedded applications
- ◆ Low price



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WS4057/WS4067 OEM GPS Antenna

Designed for easy integration into a variety of OEM platforms, the connectorised WS4057/67 series integrates a two-stage low-noise amplifier to ensure a reliable and clear signal for the GPS receiver even in difficult conditions, as well as a SAW filter for even greater performance for telematics applications where out-of-band signal rejection is required.

The Wi-Sys OEM Antenna Family

WS3930-ULD: Quad Band Cellular
Covert Antenna

WS3940-ULD: Active GPS + Quad Band Cellular
Combined Covert Antenna

WS3947-ULD: Low Cost Active GPS + Quad
Band Cellular Combined Covert Antenna

WS3950/WS3960: High gain, Low Noise
Embedded Antenna

WS3954/WS3964: Low Current Embedded
GPS Antenna

WS3957/WS3967: Low Price Filtered
Embedded GPS antenna

WS4051/WS4061: Low Noise OEM GPS
Antenna with built-in MCX Connector

WS4055/WS4065: Low Current OEM GPS
Antenna with built-in MCX Connector

Technical Specifications

Environmental Specifications

- ◆ -40c to +80c operating temp. (-45c to +80c storage)
- ◆ Humidity 95% max (non condensing)

Mechanical

- ◆ **WS4057** – 25 mm x 25 mm x 6.7 mm (no ground plane)
(0.98" x 0.98" x 0.26")
- ◆ **WS4067** – 45.2 mm dia. x 6.7 mm (with ground plane)
(1.78" diameter x 0.26")
- ◆ Shock: Vertical axis 50G, Other axes 30G
- ◆ Vibration: 3 axis, sweep = 15 min,
10–200 Hz log sweep: 3G

Antenna Response

- ◆ Frequency: 1575.42 MHz
- ◆ Gain: @ 90° 3 dBic, @ 20° -2.0 dBic
- ◆ Polarization: Right Hand Circular
- ◆ Axial ratio: @ 90° 4 dB, @ 20° 6 dB

Electrical

- ◆ Voltage: 2.7 – 5.0 VDC
- ◆ Current: 15 mA @ 5V, 9 mA @ 3.3V
- ◆ Connector: MCX
- ◆ Cable Accessory: Custom cable assembly is available,
please contact factory.

LNA Specifications

- ◆ Frequency: 1572.42 – 1578.42 MHz
- ◆ Output Impedance: 50 Ohm
- ◆ VSWR: 1.5:1 max (at connector)
- ◆ Gain: @ 3.3VDC: 28 dB (typical)
@ 5.0VDC: 30 dB (typical)
- ◆ Noise figure: 1.5 dB (typ.)
- ◆ Out-of-band rejection: +/- 15 MHz: 5dB
+/- 20 MHz: 10 dB
+/- 30 MHz: 32 dB
+/- 40 MHz: 40 dB

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