

FRF-151 DATA SHEET

Description:

The FIRST RF Corporation FRF-151 is a passive L1 / L2 GPS antenna with incorporated limiter and filter. It may be mounted flat, or adapted to a radial curvature. In both instances the antenna is externally secured with standard #10-32 screws. The antenna provides very uniform, hemispherical coverage for optimum reception of the GPS satellite signal.

RF Performance Overview:

Frequency:

1575.42 ± 10 MHz / 1227.60 ± 10 MHz

VSWR:

< 2.0:1

Polarization:

RHCP

Impedance:

50 omhs

Radiation Pattern:

Hemispherical

Antenna Gain:

90° Elevation (Zenith)	+0.7 dB
90-40° Elevation	+0.5 dB
40-30° Elevation	-0.3 dB
30-20° Elevation	-0.8 dB
20-10° Elevation	-1.6 dB

Power Handling:

15 W Continuous
4000 W Peak

Filter Rejection:

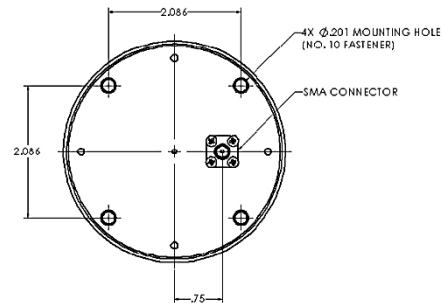
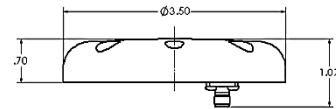
> 15 dB above 3 GHz

Limiter:

44 dBm Max Power Out

Lighting Protection:

DC Grounded



Mechanical Overview:

Weight:

0.37 lbs (antenna only)
0.58 lbs (with adapter plate and gasket)

Physical Dimensions:

3.4" diameter × 0.7" thick
(antenna element only)

3.4" diameter × 1.26" thick
(with adapter plate and gasket)

Connector:

SMA Jack (Female)

Environmental:

Temperature:

-55°C to +85°C

Vibration:

> 30 G's

Altitude:

> 50,000 ft.

Protection:

Sealed from rain, sand, dust, salt fog in accordance with MIL-STD-810.