MSP

Monolithic Silicon Power

MSP6150

High-Performance Amplifier

General Description

The MSP6150 is an extremely fast, low-noise, rail-to-rail out single supply voltage feedback unity gain stable op amp which provides excellent DC plus AC performance.

With 1.5GHz gain-bandwidth, 1700V/μs slew rate, 100mA of output current, MSP6150 offers this level of performance; yet it only consumes 3.5mA of supply current.

Additional features include extremely low input bias current, exceptionally low input offset voltage, remarkably high CMRR and PSRR. These excellent performance specs make MSP6150 the superior choice for A/D converter drivers,

The MSP6150 family maintains excellent performance for supply voltages of 1.8V to 5.5V. With an input range exceeding to negative rail and output range that encompasses the entire supply range, the op amp can accommodate wide swinging signals and supply operation.

MSP6150 fits into tiny SOT23-5 package and is built on Complementary BiCMOS SiGe technology.

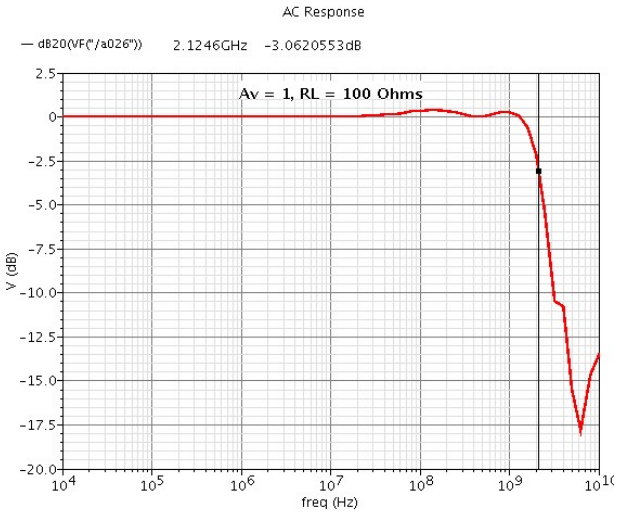
Features

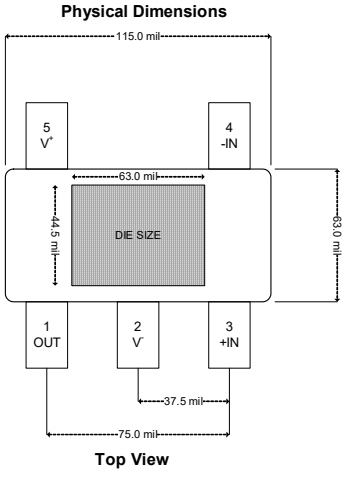
- Easy to Use voltage Feedback Topology
- Extremely High Slew Rate of 1700V/μs
- GBW = 1.5GHz
- -3dB Bandwidth = 3GHz
- Low Supply Current of 3.5mA
- Rail-to-Rail Output
- Input Common Mode to Negative Rail
- Operating Voltage of 1.8V to 5.5V
- Large Output Current of 100mA
- Package SOT23-5

Applications

- Driving GHz A/D Converters
- Supper Fast Transimpedance Amplifiers
- Active Filters
- Computer peripheral products
- High Speed Single-ended to Differential Conversion
- Pulse Amplifier and Peak Detector

MSP6150 Typical Performance





MSP6150 Typical Performance

High-Performance Amplifier with 3GHz -3dB Bandwidth in SOT23-5 Package