



LF156 monolithic JFET input operational amplifier

general description

The LF156 is the first monolithic JFET input operational amplifier to incorporate well-matched, high voltage JFETs on the same chip with standard bipolar transistors. The amplifier features low input bias and offset currents, low offset voltage and offset voltage drift, coupled with offset adjust which does not degrade drift or common-mode rejection. The device was also designed for high slew rate, wide bandwidth, extremely fast settling time, low voltage and current noise and a low $1/f$ noise corner.

features

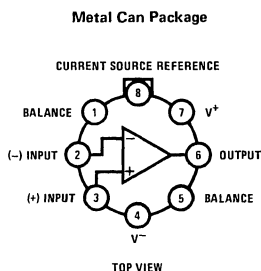
- Low input current 30 pA
- Low offset voltage 3 mV
- Guaranteed offset voltage drift $5\mu\text{V}/^\circ\text{C}$
- Low input noise voltage $12\text{ nV}/\sqrt{\text{Hz}}$

- Low $1/f$ noise corner $< 100\text{ Hz}$
- Wide bandwidth 5 mHz
- Fast slew rate $15\text{ V}/\mu\text{s}$
- Fast settling to 0.01% 1.4 μs
- Internally compensated
- Stable with large capacitive loads
- Operates from standard op amp supplies

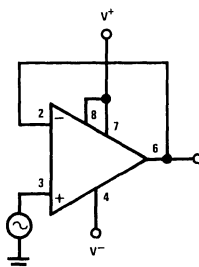
applications

- Precision high speed integrators
- Sample and hold circuits
- Fast D/A and A/D converters
- Low noise amplifiers for high impedance transducers
- Wideband low noise, low drift amplifiers
- High impedance buffers
- High frequency, high impedance active filters

connection diagram



typical application



Note: Pin 8 must be connected to Pin 7 when offset adjust is not used.