

LF411A/LF411 Low Offset, Low Drift JFET Input Operational Amplifier

General Description

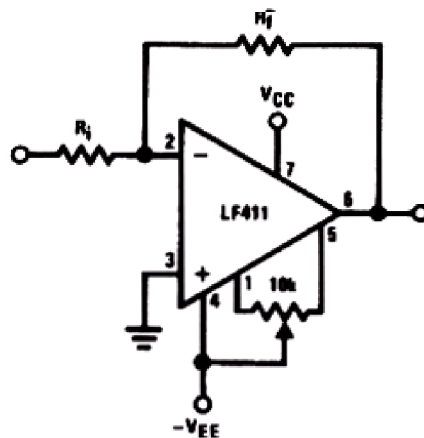
These devices are low cost, high speed, JFET input operational amplifiers with very low input offset voltage and guaranteed input offset voltage drift. They require low supply current yet maintain a large gain bandwidth product and fast slew rate. In addition, well matched high voltage JFET input devices provide very low input bias and offset currents. The LF411 is pin compatible with the standard LM741 allowing designers to immediately upgrade the overall performance of existing designs.

These amplifiers may be used in applications such as high speed integrators, fast D/A converters, sample and hold circuits and many other circuits requiring low input offset voltage and drift, low input bias current, high input impedance, high slew rate and wide bandwidth.

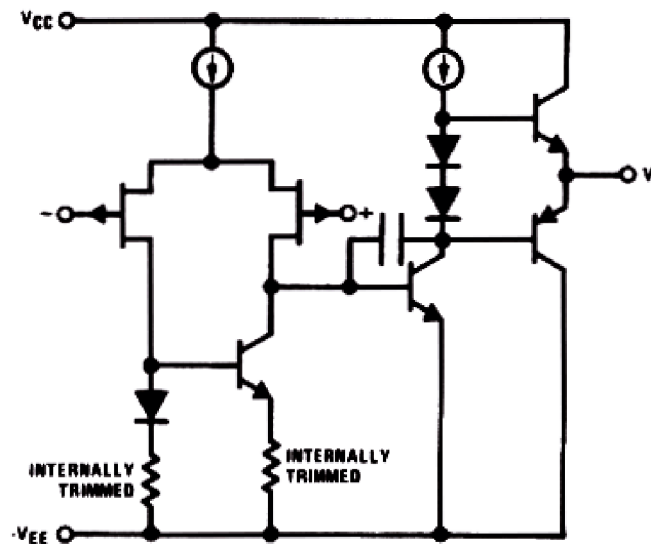
Features

- Internally trimmed offset voltage 0.5 mV(max)
- Input offset voltage drift 10 $\mu\text{V}/^\circ\text{C}$ (max)
- Low input bias current 50 pA
- Low input noise current 0.01 pA/ $\sqrt{\text{Hz}}$
- Wide gain bandwidth 3 MHz(min)
- High slew rate 10V/ μs (min)
- Low supply current 1.8 mA
- High input impedance 10¹² Ω
- Low total harmonic distortion $A_V = 10$,
 $R_L = 10\text{k}$, $V_O = 20\text{ Vp-p}$, $\text{BW} = 20\text{ Hz} - 20\text{ kHz}$ <0.02%
- Low 1/f noise corner 50 Hz
- Fast settling time to 0.01% 2 μs

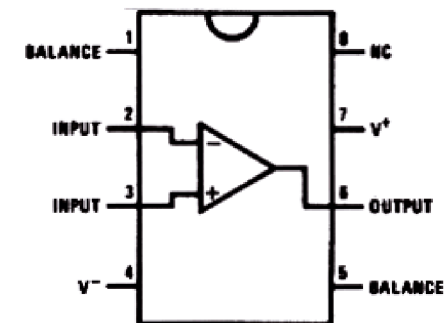
Typical Connection



Simplified Schematic



Connection Diagrams



Top View

