National Semiconductor

Semiconductors

Linear I.C.'s - Operational Amplifiers

LH0032C Ultra Fast FET Operational Amplifier

GENERAL DESCRIPTION

The LH0032/LH0032C is a high slew rate, high input impedance differential operational amplifier suitable for diverse application in fast signal handling. The high allowable differential input voltage, ease of output clamping, and high output drive capability particularly suit it for comparator applications. It may be used in applications normally reserved for video amplifiers allowing the use of operational gain setting and frequency response shaping into the megahertz region.

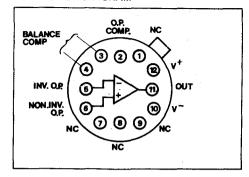
FEATURES

| High slew rate | 500V/μs |
|-----------------------------|----------|
| High bandwidth | 70MHz |
| High input impedance | 1012 Ω |
| Low input bias current | 20pA max |
| Offset null with single pot | |
| Low input offset voltage | 2mV max |
| No compensation for gains | above 50 |

The LH0032's wide bandwith, high input impedance and high output capacity make it an ideal choice for applications such as summing amplifiers in high speed D to A's, buffers in data acquisition systems, and sample and hold circuits. Additional applications include high speed integrators and video amplifiers. The LH0032 is guaranteed over the temperature range -55°C to +125°C and the LH0032C is guaranteed from -25°C to +85°C.

For information on other National operational amplifiers, see listing on last page.

CONNECTION DIAGRAM



See outline drawing No. 99 for dimensions

ABSOLUTE MAXIMUM RATINGS

| ± 18V |
|-------------------------------------|
| ± V _s |
| ±30V |
| See curve |
| - 55°C to +125°C - 25°C to +85°C |
| -65°C to +150°C |
| 300°C |
| |

REFERENCE TABLE

| Code | Stock No. | |
|----------|-----------|--|
| LH0032CG | 34499G | |