

DUAL OPERATIONAL AMPLIFIER

1458
276-038

GENERAL DESCRIPTION

The 1458 is a general purpose dual operational amplifier. The two amplifiers share a common bias network and power supply leads. Otherwise, their operation is completely independent. Features include:

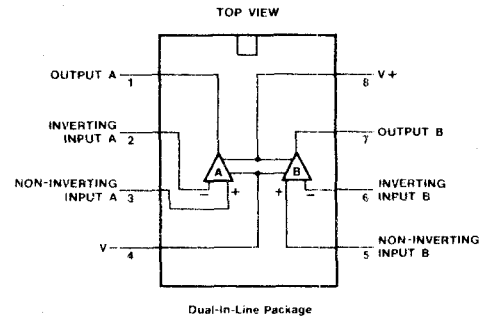
FEATURES

- No frequency compensation required.
- Short-circuit protection
- Wide common-mode and differential voltage ranges
- Low-power consumption
- No latch up when input common mode range is exceeded

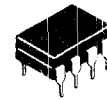
ABSOLUTE MAXIMUM RATINGS

Supply Voltage.....	±16V
Power Dissipation.....	400 mW
Differential Input Voltage.....	±30V
Input Voltage.....	±15V
Output Short-Circuit Duration.....	Indefinite
Operating Temperature Range.....	0°C to 70°C
Storage Temperature Range.....	-65°C to 150°C
Lead Temperature (Soldering, 10 sec).....	300°C

PIN CONNECTION



Dual-In-Line Package



QUAD OPERATIONAL NORTON AMPLIFIER

3900
276-1713

GENERAL DESCRIPTION

The 3900 series consists of four independent, dual input, internally compensated amplifiers which were designed specifically to operate off of a single power supply voltage and to provide a large output voltage swing. These amplifiers make use of a current mirror to achieve the non-inverting input function. Application areas include: ac amplifiers, RC active filters, low frequency triangle, squarewave and pulse waveform generation circuits, tachometers and low speed, high voltage digital logic gates.

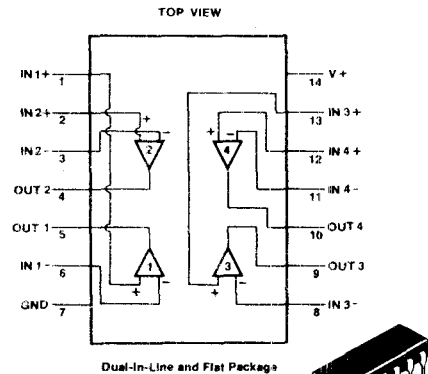
FEATURES

- Wide single supply voltage 4 V_{DC} to 36 V_{DC}; range or dual supplies ±2 V_{DC} to ±18 V_{DC}
- Supply current drain independent of supply voltage
- Low input biasing current 30 nA
- High open-loop gain 70 dB
- Wide bandwidth 2.5 MHz (Unity Gain)
- Large output voltage swing (V⁺ - 1) V_{p-p}
- Internally frequency compensated for unity gain
- Output short-circuit protection

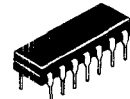
ABSOLUTE MAXIMUM RATINGS

Supply Voltage (Wide Range, Single Supply).....	32 V _{DC}
Supply Voltage (Wide Range, Dual Supply).....	±16 V _{DC}
Power Dissipation (T _A = 25°C)	
Flat Pack.....	570 mW
Input Currents, I _{IN} ⁺ or I _{IN} ⁻	20 mA _{DC}
Output Short-Circuit Duration—One Amplifier.....	Continuous
T _A = 25°C (See Application Hints)	
Operating Temperature Range.....	0°C to +70°C
Storage Temperature Range.....	-65°C to +150°C
Lead Temperature (Soldering, 10 seconds).....	300°C

PIN CONNECTION



Dual-In-Line and Flat Package



TYPICAL APPLICATIONS

Basic Instrumentation Amplifier

