

TECHNICAL DATA
DATA SHEET 4189, REV. -

OPERATIONAL AMPLIFIER

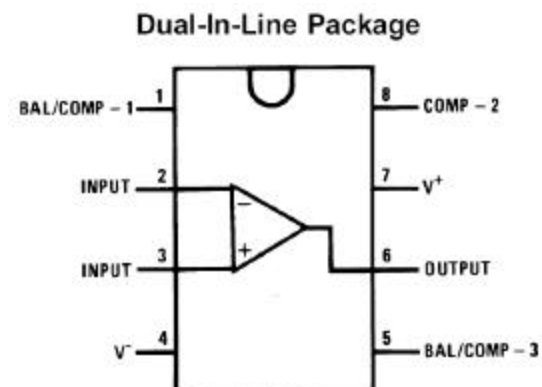
High Speed

Features:

- Hermetic package / high temperature operation (-55°C to 125°C)
- Radiation data available for total dose exposure up to 200kRads(Si)
- 15MHz small signal bandwidth
- Guaranteed 50V/ms slew rate
- Maximum bias current of 250nA
- Operates from supplies of $\pm 5\text{V}$ to $\pm 20\text{V}$
- Internal frequency compensation
- Input and output overloads protected
- Pin compatible with general purpose op amps

Maximum Ratings:

Characteristics	Max.	Units
Supply Voltage	± 20	V
Power Dissipation	500	mW
Differential Input Current	± 10	mA
Input Voltage	± 15	V
Output Short-Circuit Duration	Continuous	
Operating Temperature Range	-55°C to 125°C	
Storage Temperature Range	-65°C to 150°C	



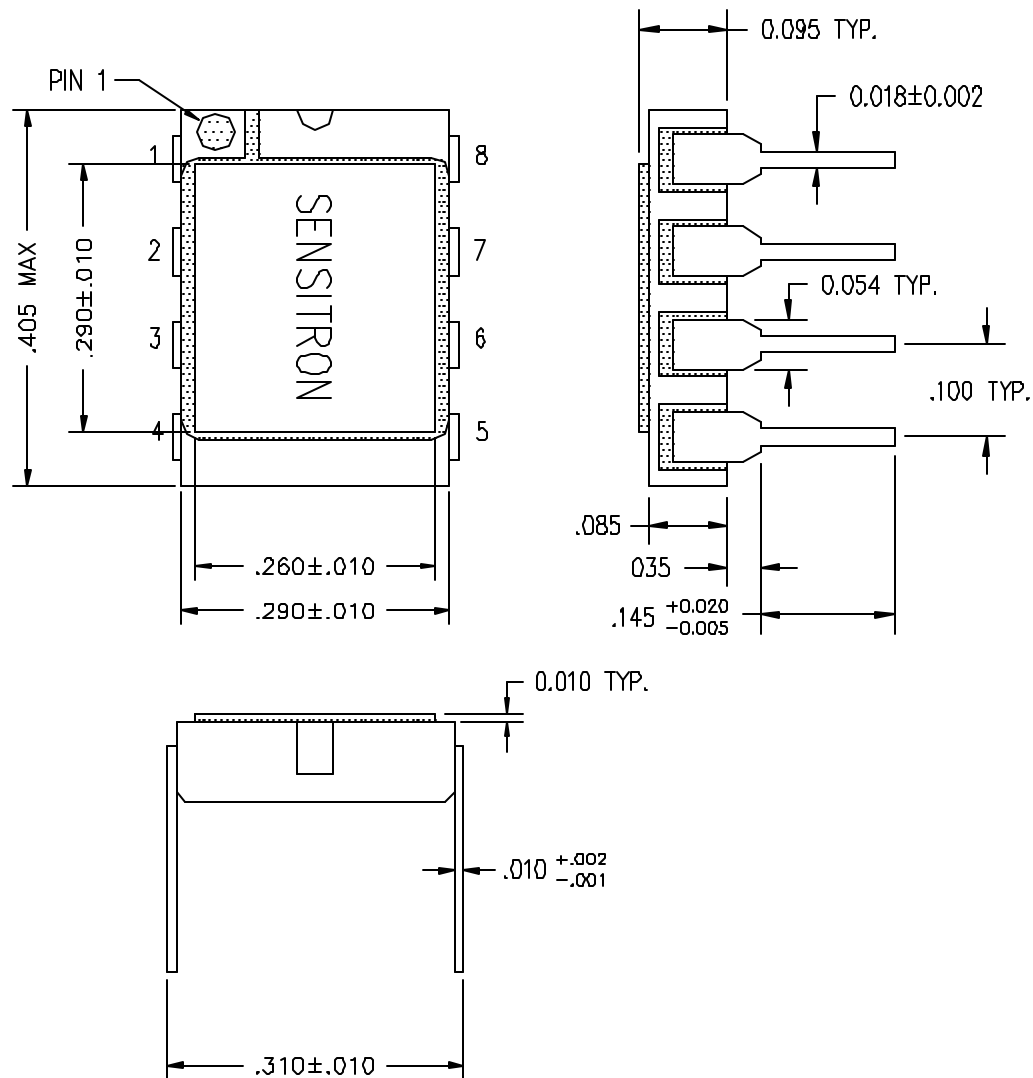
Electrical Characteristics:

Parameter	Conditions	Min	Max	Units
Input Offset Voltage	$T_A = 25^{\circ}\text{C}$		4	mV
Input Offset Current	$T_A = 25^{\circ}\text{C}$		50	nA
Input Bias Current	$T_A = 25^{\circ}\text{C}$		250	nA
Input Resistance	$T_A = 25^{\circ}\text{C}$	1		M Ω
Supply Current	$T_A = 25^{\circ}\text{C}$		8	mA
Large Signal Voltage Gain	$T_A = 25^{\circ}\text{C}$, $V_S = \pm 15\text{V}$ $V_{OUT} = \pm 10\text{V}$, $R_L \geq 2\text{ k}\Omega$	50		V/mV
Slew Rate	$T_A = 25^{\circ}\text{C}$, $V_S = \pm 15\text{V}$, A_V	50		V/ μs
Small Signal Bandwidth (typical)	$T_A = 25^{\circ}\text{C}$, $V_S = \pm 15\text{V}$	15	15	MHz
Input Offset Voltage			6	mV
Input Offset Current			100	nA
Input Bias Current			500	nA
Supply Current	$T_A = 125^{\circ}\text{C}$		7	mA
Large Signal Voltage Gain	$V_S = \pm 15\text{V}$, $V_{OUT} = \pm 10\text{V}$ $R_L \geq 2\text{ k}\Omega$	25		V/mV
Output Voltage Swing	$V_S = \pm 15\text{V}$, $R_L = 2\text{ k}\Omega$	± 12		V
Input Voltage Range	$V_S = \pm 15\text{V}$	± 11.5		V
Common-Mode Rejection Ratio		80		dB
Supply Voltage Rejection Ratio		70		dB

SENSITRON

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Mechanical Dimensions: in inches / mm

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