

PART NUMBER: SEN-0002H  
Rev A



## CURRENT AMPLIFIER

### Features:

- Replacement for industry standard LH0002
- Available as DSCC 7801301XX
- Various packages available, including surface mount (consult factory)

### Applications:

- Line Driver
- 30 MHz buffer
- D/A conversion
- Precision current source

### Maximum Ratings

Description	Symbol	Value	Units
Supply voltage range	$V_S$	$\pm 22$	V
Input voltage range		$\pm 22$	V
Storage temperature range		-65 to 150	$^{\circ}\text{C}$
Power dissipation, $T_A = 25^{\circ}\text{C}$	$P_D$	600	mW
Lead temperature (10 seconds)		300	$^{\circ}\text{C}$
Thermal resistance (junct. to case)	$\Theta_{JC}$	40	$^{\circ}\text{C}/\text{W}$
Junction temperature	$T_J$	175	$^{\circ}\text{C}$

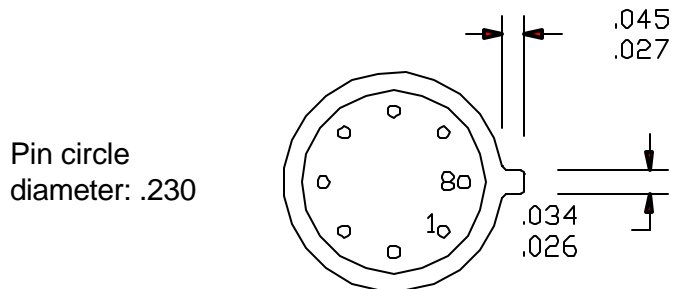
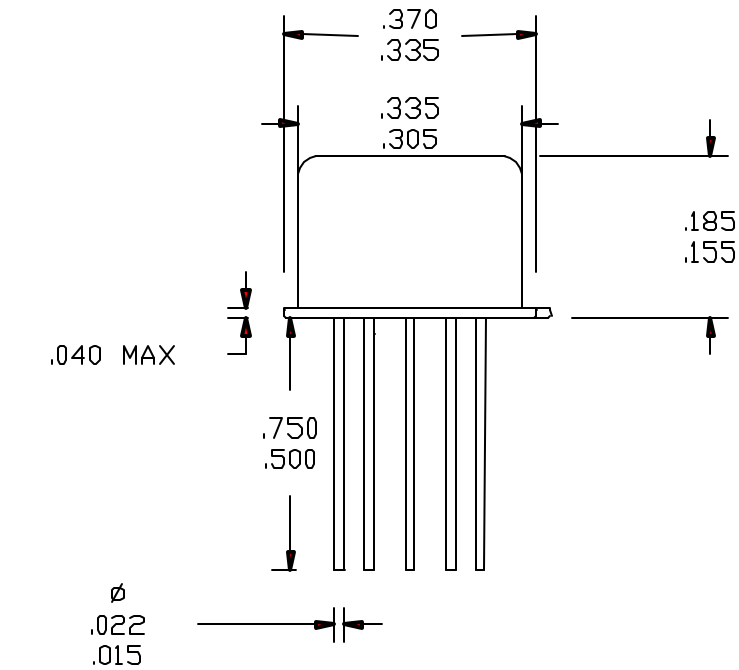
### Electrical Characteristics $-55^{\circ}\text{C} < T_A < 125^{\circ}\text{C}$ unless otherwise specified.

Test Conditions	Symbol	Min.	Max.	Units
$R_S = 10\text{k}\Omega$ , $R_L = 1.0\text{k}\Omega$	$I_{IO}$	-10	+10	$\mu\text{A}$
$R_S = 300\Omega$ , $R_L = 1.0\text{k}\Omega$	$V_{IO}$	-30	30	mV
$V_{IN} = \pm 12\text{V}$ , $R_L = 1.0\text{k}\Omega$ , $T_A = +25^{\circ}\text{C}$	$V_O$	$\pm 10$		V
$V_{IN} = \pm 10\text{V}$ , $R_L = 100\Omega$ , $T_A = +25^{\circ}\text{C}$ $V_S = \pm 15\text{V}$		$\pm 9.5$		V
$R_S = 10\text{k}\Omega$ , $R_L = 1.0\text{k}\Omega$ , $V_{IN} = 0\text{V}$ , $T_A = 25^{\circ}\text{C}$	$+I_{CC}$		+10.0	mA
$R_S = 10\text{k}\Omega$ , $R_L = 1.0\text{k}\Omega$ , $V_{IN} = 0\text{V}$ , $T_A = 25^{\circ}\text{C}$	$-I_{CC}$	-10.0		
$V_{IN} = 3.0\text{V}_{pp}$ , $R_S = 10\text{k}\Omega$ , $R_L = 1.0\text{k}\Omega$ , $f = 1.0\text{kHz}$	$A_V$	0.95		
$V_{IN} = 1.0\text{V}_{rms}$ , $R_S = 200\text{k}\Omega$ , $R_L = 1.0\text{k}\Omega$ , $f = 1.0\text{kHz}$ , $T_A = 25^{\circ}\text{C}$	$Z_{IN}$	180		$\text{k}\Omega$
$V_{IN} = 1.0\text{V}_{rms}$ , $R_S = 10\text{k}\Omega$ , $R_L = 50\Omega$ , $f = 1.0\text{kHz}$ , $T_A = 25^{\circ}\text{C}$	$Z_{OUT}$		10	$\Omega$
$V_{OUT} = 2.5\text{V}_{pp}$ , $R_S = 100\Omega$ , $R_L = 50\Omega$ , $T_A = 25^{\circ}\text{C}$	$t_r$		12	ns

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**MECHANICAL DIMENSIONS (standard package): in inches**

Consult factory for alternate packages



BOTTOM

1	V1+
2	V2+
3	E3
4	OUT
5	E4
6	V2-
7	V1-
8	IN

**TECHNICAL DATA**

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