

NTE1468 Integrated Circuit Audio, Low Power Output Amplifier

Applications:

- Line Output Amplifier
- Recording Head Driver and Headphone Driver of Tape Recorder Deck.

Features:

- Low Noise: $V_{NI} = 1\mu V_{rms}$
- Wide Operating Supply Voltage Range: $V_{CC} = 3.5$ to $25V$
- 150mW Audio Output Power at $V_{CC} = 20V$, $R_L = 150\Omega$

Absolute Maximum Ratings: ($T_A = +25^\circ C$ unless otherwise specified)

Supply Voltage, V_{CC}	25V
Power Dissipation, P_D	400mW
Derated Above $25^\circ C$	4mW/ $^\circ C$
Operating Temperature Range, T_{opr}	-25° to $+75^\circ C$
Storage Temperature Range, T_{stg}	-55° to $+125^\circ C$

Electrical Characteristics: ($V_{CC} = 20V$, $T_A = +25^\circ C$, $R_L = 150\Omega$, $R_f = 600\Omega$, $f = 1kHz$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Operating Supply Voltage Range	V_{CCopr}		3.5	20	25	V
Supply Current	I_{CC}	$f = 1kHz, V_{OUT} = 0$	–	4.0	6.0	mA
		$f = 1kHz, V_{OUT} = 4.5V_{rms}$	–	16.5	–	mA
Voltage Gain (Open Loop)	G_{VO}	$R_f = 0\Omega$	–	63	–	dB
Voltage Gain (Closed Loop)	G_V	Note 1	36.5	40.0	43.5	dB
Total Harmonic Distortion	THD	$V_{OUT} = 4.5V_{rms}$	–	0.5	1.0	%
		$V_{CC} = 6.5V, V_{OUT} = 1.0V_{rms}$	–	1.0	–	%
Maximum Output Voltage	V_{OM}	THD = 10%	–	6	–	V_{rms}
Input Resistance	R_{IN}		–	30	–	k Ω
Output Noise Voltage	V_{NO}	BW = 20Hz to 20kHz, $R_g = 1k\Omega$	–	100	200	μV_{rms}

Note 1. In regard to the value of voltage gain (closed loop), it is possible to be classified.

Pin Connection Diagram (Front View)

