ELECTRONICS, INC.
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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°C unless otherwise specified)

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

Electrical Characteristics: (V_{CC} = 20V, T_A = +25°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	–	kΩ
Output Noise Voltage	V_{NO}	BW = 20Hz to 20kHz, Rg = 1kΩ	–	100	200	μVrms

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

Pin Connection Diagram
(Front View)