ELECTRONICS, INC.
44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748–5089

NTE1458
Integrated Circuit
Dual Audio Preamp

Absolute Maximum Ratings:

Supply Voltage, V_{CC} 18V
Supply Current, I_{CC} 15mA
Power Dissipation (T_A = +75°C), P_D 270mW
Operating Temperature Range, T_{opt} . . . . . –30° to +75°C
Storage Temperature Range, T_{stg} . . . . . –40 to +125°C

Recommended Operating Condition:

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Voltage	V_{CC}		6.0	13.2	17.0	V

Electrical Characteristics: (T_A = +25°C, V_{CC} = 13.2V, f = 1kHz, R_L = 10kΩ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	I_{CC}	υ_i = 0	2.5	3.3	5.5	mA
Open Loop Voltage Gain	$A\upsilon o$	υ_o = 0.3V	78	88	–	dB
Voltage Gain	$A\upsilon$	υ_o = 0.3V, NAB = 45dB	–	45	–	dB
Maximum Output Voltage	V_{OM}	THD = 1%, NAB = 45dB	1.0	1.6	–	V_{rms}
Total Harmonic Distortion	THD	υ_o = 0.3V, NAB = 45dB	–	0.13	0.3	%
Input Impedance	Z_{in}		50	100	–	kΩ
Equivalent Input Noise Voltage	υ_{nin}	R_G = 2.2kΩ, NAB = 45dB, BPF (15Hz to 30kHz)	–	1.2	2.0	μV_{rms}
Crosstalk		υ_o = 1V, NAB = 45dB, R_G = 2.2kΩ	–	–65	–	dB
Channel Balance		υ_o = 0.3V	–0.5	0	+0.5	dB

Pin Connection Diagram
(Front View**)**