ELECTRONICS, INC.
44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748–5089
http://www.nteinc.com

NTE1278
Integrated Circuit
Audio Power Amp, 5.8W

Features:
- Few External Parts Required
- Adjustable Closed–Loop Gain
- High Sustaining Over Voltage
- Excellent Ripple Rejection
- High Power and Low Distortion
- Audio Muting Circuit
- Protection Circuit for Load Short, Excessive Supply Voltage, and Thermal Shutdown

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Peak Supply Voltage (200ms), V_{CC}surge 40V
DC Supply Voltage, $V_{CC(DC)}$ 25V
Operating Supply Voltage, $V_{CC(ope)}$ 18V
Peak Output Current, $I_{O(Peak)}$ 4.5A
Power Dissipation (T_C = +25°C), P_D 12.5W
Operating Temperature Range, T_{opr} . . . . . –30° to +75°C
Storage Temperature Range, T_{stg} . . . . . –55° to +150°C

Electrical Characteristics: (T_A = +25°C, V_{CC} = 12.5V, R_L = 4Ω, R_g = 600Ω, f = 1kHz unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	I_{CCQ}		–	40	80	mA
		V_{CC} = 18V	–	45	100	mA
Output Power	P_{OUT}	THD = 10%	–	5.2	–	W
		V_{CC} = 13.2V, THD = 10%	5.0	5.8	–	W
		V_{CC} = 13.2V, R_L = 2Ω, THD = 10%	–	9.3	–	W
Maximum Output Power	P_{OM}	V_{CC} = 13.2V, V_{IN} = 100mV	–	9.0	–	W
Total Harmonic Distortion	THD	P_{OUT} = 1W	–	0.2	1.5	%
		P_{OUT} = 100mW	–	0.36	1.0	%
		P_{OUT} = 1W, R_L = 2Ω	–	0.5	–	%
Voltage Gain	G_V		51.5	53.0	54.5	dB
Input Resistance	R_{IN}		–	34	–	kΩ
Output Noise Voltage	V_{NO}	R_g = 10kΩ, BW = 50Hz to 20kHz	–	0.9	2.0	mV

Pin Connection Diagram
(Front View)