NTE1398
Integrated Circuit
Dual Audio Power Amplifier, 5.8W/Ch

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)
Operating Supply Voltage 18V
DC Supply Voltage 26V
Peak Supply Voltage (Note 1) 50V
Output Current (Per Channel) 4A
Power Dissipation (Per Package) 15W
Operating Temperature Range, T_{opr} . . . . –20° to +70°C
Storage Temperature Range, T_{stg} . . . . –55° to +125°C
Junction Temperature, T_J . . . . +150°C

Note 1. Pulse width = 200ms, $T_{rise} \geq$ 1ms

Electrical Characteristics: (T_A = +25°C, V_{CC} = 13.2V, f = 1kHz, R_L = 4Ω, One–Half Operation unless otherwise specified)

Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Quiescent Current	I_Q	V_{in} = 0		40	80	160	mA
Input Bias Voltage	V_B	V_{in} = 0		–	–	40	mV
Voltage Gain	G_V	V_{in} = 2.45mV		53	55	57	dB
Difference of Voltage Gain	ΔG_V	V_{in} = 2.45mV		–	–	±1.5	dB
Output Power Per Channel	P_{out}	R_L = 4Ω, THD = 10%	V_{CC} = 13.2V	5.0	5.8	–	W
			V_{CC} = 14.4V	–	7.0	–	W
Total Harmonic Distortion	THD	P_{out} = 0.5W		–	0.15	1.0	%
Noise Output	WBN	R_g = 10kΩ, BW = 20Hz to 20kHz		–	1.0	2.0	mV
Supply Voltage Rejection Ratio	SVR	R_g = 600Ω, f = 500Hz		30	40	–	dB
Input Resistance	R_{in}	f = 1kHz		–	30	–	kΩ
Rolloff Frequency	f_l	G_V = 3dB from f = 1kHz Ref	Low	–	40	–	Hz
	f_h		High	–	25	–	kHz
Crosstalk	CT	f = 500Hz, R_g = 600Ω		40	58	–	dB

Pin Connection Diagram
(Front View)

Pin	Name
12	Output 1
11	Feedback Cap
10	V_{CC}
9	GND
8	Feedback Cap
7	Output 2
6	Feedback Ch 2
5	Input 2
4	GND
3	Bypass
2	Input 1
1	Feedback Ch 1

GND

1.230 (31.2)

1.100 (28.0)

.787 (20.0)

.161 (4.1) Dia

.142 (3.6) Dia

.059 (1.5) Max

.630 (16.0) Max

1

12

.276 (7.0) Min

.100 (2.54)

.150 (3.81) Max