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# 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, $T_{rise} \geq 1$ms

**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 | $\Delta G_V$ | $V_{in}$ = 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)