

## NTE1218 Integrated Circuit Module, Hybrid, Dual Audio Power Amp, 7W/Ch

**Absolute Maximum Ratings:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

|                                                                                                         |                                     |
|---------------------------------------------------------------------------------------------------------|-------------------------------------|
| Supply Voltage, $V_{CC\text{max}}$                                                                      | 39V                                 |
| Operating Junction Temperature, $T_J$                                                                   | $+150^\circ\text{C}$                |
| Operating Case Temperature, $T_C$                                                                       | $+125^\circ\text{C}$                |
| Storage Temperature Range, $T_{\text{stg}}$                                                             | $-30^\circ$ to $+125^\circ\text{C}$ |
| Thermal Resistance, Junction-to-Case, $R_{\text{thJC}}$                                                 | $7^\circ\text{C/W}$                 |
| Turn-On Time ( $V_{CC} = 27\text{V}$ , $R_L = 8\Omega$ , $P_O = 7\text{W}$ , $f = 50\text{Hz}$ ), $t_S$ | 2sec                                |

**Recommended Operating Conditions:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

|                          |           |
|--------------------------|-----------|
| Supply Voltage, $V_{CC}$ | 27V       |
| Load Resistance, $R_L$   | $8\Omega$ |

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$ ,  $V_{CC} = 27\text{V}$ ,  $R_L = 8\Omega$ ,  $R_g = 600\Omega$ ,  $V_G = 40\text{dB}$  unless otherwise specified)

| Parameter                 | Symbol     | Test Conditions                               | Min       | Typ | Max | Unit                     |
|---------------------------|------------|-----------------------------------------------|-----------|-----|-----|--------------------------|
| Idle Current              | $I_{CCO}$  | $V_{CC} = 33\text{V}$                         | 20        | 60  | 120 | mA                       |
| Power Output              | $P_O$      | THD = 1%, $f = 1\text{kHz}$                   | 7.0       | —   | —   | W                        |
|                           |            | THD = 1%, $f = 40\text{Hz}$ to $20\text{kHz}$ | 28        | —   | —   | W                        |
| Total Harmonic Distortion | THD        | $P_O = 0.1\text{W}$ , $f = 1\text{kHz}$       | —         | —   | 0.5 | %                        |
| Frequency Range           | $f_L, f_H$ | $P_O = 0.1\text{W}$ , $V_G = -3\text{dB}$     | 40 to 50k |     |     | Hz                       |
| Input Resistance          | $r_i$      | $P_O = 0.1\text{W}$ , $f = 1\text{kHz}$       | —         | 110 | —   | $k\Omega$                |
| Noise Voltage             | $V_{NO}$   | $V_{CC} = 33\text{V}$ , $R_g = 10k\Omega$     | —         | —   | 0.8 | $\text{mV}_{\text{rms}}$ |

### Pin Connection Diagram (Front View)

|    |                 |
|----|-----------------|
| 15 | Input Rt Ch     |
| 14 | Feedback        |
| 13 | GND             |
| 12 | GND             |
| 11 | Output Rt Ch    |
| 10 | Feedback        |
| 9  | V <sub>CC</sub> |
| 8  | GND             |
| 7  | V <sub>CC</sub> |
| 6  | Feedback        |
| 5  | Output Lt Ch    |
| 4  | GND             |
| 3  | GND             |
| 2  | Feedback        |
| 1  | Input Lt Ch     |

