

NTE1704 Integrated Circuit Audio Power Amplifier, 1.2W

Features:

- Incorporating Automatic Operating Point Stabilizer
- Low Noise
- Variable Frequency Characteristics
- Few External Components Required

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

| | |
|--------------------------------------------------------------|-------------------------------------|
| Supply Voltage, V_{CC} | 18V |
| Supply Current, I_{CC} | 2A |
| Power Dissipation ($T_A = +30^\circ\text{C}$), P_D | 1.5W |
| Operating Ambient Temperature Range, T_{opr} | -20° to $+75^\circ\text{C}$ |
| Storage Temperature Range, T_{stg} | -40° to $+150^\circ\text{C}$ |

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = 9\text{V}$, $R_L = 8\Omega$, $f = 1\text{kHz}$ unless otherwise specified)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---------------------------|----------|----------------------------------------------------|-----|------|-----|------------------|
| Quiescent Circuit Current | I_{CQ} | $V_i = 0$ | 10 | 20 | 50 | mA |
| Voltage Gain | G_{VC} | $V_i = 5\text{mV}$ | 43 | 46 | 49 | dB |
| Output Power | P_O | THD = 10% | 0.8 | 1.2 | – | W |
| | | $V_{CC} = 6\text{V}$, $R_L = 8\Omega$, THD = 10% | – | 0.55 | – | W |
| | | $V_{CC} = 6\text{V}$, $R_L = 4\Omega$, THD = 10% | – | 0.9 | – | W |
| Total Harmonic Distortion | THD | $V_i = 5\text{mV}$ | – | 0.5 | 1.5 | % |
| Output Noise Voltage | V_{no} | $R_g = 10\text{k}\Omega$ | – | 0.5 | 1.2 | mV |
| Input Impedance | Z_i | | – | 25 | – | $\text{k}\Omega$ |

Pin Connection Diagram
(Front View)

