

NTE1317 Integrated Circuit Module, 2 Power, 2 Channel, AF Power Amplifier, 50W Min.

Features:

- Muting Circuit
- Reduced Heat Sink due to Case Temperature Dissipation up to +125°C

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

| | |
|--|----------------|
| Supply Voltage, V_{CCmax} | ±53.0V |
| Operating Junction Temperature, T_J | +150°C |
| Substrate Temperature, T_C | +125°C |
| Storage Temperature Range, T_{stg} | -30° to +125°C |
| Thermal Resistance, Junction-to-Case, R_{thJC} | 1.8°C/W |
| Turn-on Time ($V_{CC} = \pm 35V, R_L = 8\Omega, f = 50Hz, P_O = 50W$), t_s | 2sec |

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

| | |
|--------------------------------|------|
| Supply Voltage, V_{CC} | ±35V |
| Load Resistance, R_L | 8Ω |

Electrical Characteristics: ($T_A = 25^\circ\text{C}, V_{CC} = \pm 35V, R_L = 8\Omega, R_g = 600\Omega, V_G = 40\text{dB}$ unless otherwise specified)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---------------------------|------------|--|-----------|-----|------|-------------------|
| Idle Current | I_{CCO} | $V_{CC} = \pm 42.5V$ | 20 | 40 | 100 | mA |
| Power Out | P_O | THD = 0.8%, $f = 20\text{Hz}$ to 20kHz | 50 | - | - | W |
| | | $V_{CC} = \pm 32V, \text{THD} = 0.2\%, R_L = 4\Omega, f = 1\text{kHz}$ | 55 | - | - | W |
| Total Harmonic Distortion | THD | $P_O = 1.0W, f = 1\text{kHz}$ | - | - | 0.08 | % |
| Breakpoints | f_L, f_H | $P_O = 1.0W, +0 -3\text{dB}$ | 20 to 50k | | | Hz |
| Source Impedance | r_i | $P_O = 1.0W, f = 1\text{kHz}$ | - | 55 | - | kΩ |
| Input Noise Voltage | V_{NO} | $V_{CC} = \pm 42.5V, R_g = 10\text{k}\Omega$ | - | - | 1.2 | mV _{rms} |
| Transient Noise Voltage | V_N | $V_{CC} = \pm 42.5V$ | -70 | 0 | 70 | mV |
| Muting Voltage | V_M | | -2 | -5 | -10 | V |

Pin Connection Diagram
(Front View)

| | |
|-----------|---------------------|
| 18 | Rt Ch Input (-) |
| 17 | Rt Ch Input (+) |
| 16 | GND |
| 15 | Compensation |
| 14 | (-) V _{CC} |
| 13 | Rt Ch Output |
| 12 | Bypass |
| 11 | (+) V _{CC} |
| 10 | Lt Ch Output |
| 9 | (-) V _{CC} |
| 8 | Compensation |
| 7 | Compensation |
| 6 | Muting |
| 5 | Compensation |
| 4 | Compensation |
| 3 | Compensation |
| 2 | Lt Ch Input (+) |
| 1 | Lt Ch Input (-) |

