



ELECTRONICS, INC.
 44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089

NTE1877 Integrated Circuit Module, Dual AF PO, 28W/Ch, Dual Power Supply

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

| | |
|--|-------------------------------------|
| Supply Voltage, V_{CCmax} | 52.5V |
| Maximum Output Power ($V_{CC} = 45\text{V}$, $f = 1\text{kHz}$, $R_L = 4\Omega$), P_{Omax} | 50W |
| Operating Junction Temperature, T_J | $+150^\circ\text{C}$ |
| Operating Case Temperature, T_C | $+125^\circ\text{C}$ |
| Storage Temperature Range, T_{stg} | -30° to $+125^\circ\text{C}$ |
| Thermal Resistance, Junction-to-Case, R_{thJC} | 3.5°C/W |
| Turn-On Time ($V_{CC} = 35\text{V}$, $R_L = 4\Omega$, $P_O = 28\text{W}$, $f = 1\text{kHz}$), t_S | 2sec |

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

| | |
|--------------------------------|-----------|
| Supply Voltage, V_{CC} | 35V |
| Load Resistance, R_L | 4Ω |

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = 35\text{V}$, $R_L = 4\Omega$, $R_g = 600\Omega$, $V_G = 40\text{dB}$ unless otherwise specified)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---------------------------|------------|---|-----------|-----|-----|-------------------|
| Idle Current | I_{CCO} | $V_{CC} = 45\text{V}$ | – | – | 175 | mA |
| Power Output | P_O | $V_{CC} = 13.2\text{V}$, THD = 10%, $f = 1\text{kHz}$ | 4.8 | – | – | W |
| | | THD = 10%, $f = 1\text{kHz}$ | 28 | – | – | W |
| | | THD = 1%, $f = 70\text{Hz}$ to 15kHz | 18 | 21 | – | W |
| Total Harmonic Distortion | THD | $V_{CC} = 8\text{V}$, $P_O = 1\text{W}$, $f = 1\text{kHz}$ | – | 0.4 | 1.0 | % |
| | | $V_{CC} = 45\text{V}$, $P_O = 1\text{W}$, $f = 1\text{kHz}$ | – | – | 0.5 | % |
| Frequency Range | f_L, f_H | $P_O = 1\text{W}$, $V_G = -3\text{dB}$ | 40 to 50k | | | Hz |
| Input Resistance | r_i | $P_O = 1\text{W}$, $R_g = 10\text{k}\Omega$ | – | 21 | – | $\text{k}\Omega$ |
| Noise Voltage | V_{NO} | $V_{CC} = 45\text{V}$, $R_g = 10\text{k}\Omega$ | – | – | 0.8 | mV_{rms} |

