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## NTE7032

### Integrated Circuit

### Module – AF Power Amp, Single Channel, 120W Min

#### **Features:**

- Built-In Muting Circuit Reduces Pop On Noises

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

Maximum Supply Voltage,  $V_{CC\text{max}}$  .....  $\pm 80\text{V}$   
Thermal Resistance, Junction-to-Case (Per Power Transistor),  $R_{thJC}$  .....  $1.4^\circ\text{C/W}$   
Junction Temperature,  $T_J$  .....  $+150^\circ\text{C}$   
Operating Case Temperature,  $T_C$  .....  $+125^\circ\text{C}$   
Storage Temperature Range,  $T_{stg}$  .....  $-30^\circ$  to  $+125^\circ\text{C}$

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

Operating Voltage,  $V_{CC}$  .....  $\pm 55.0\text{V}$   
Load Resistance,  $R_L$  .....  $8\Omega$

#### **Operating Characteristics:** ( $T_A = +25^\circ\text{C}$ , $V_{CC} = \pm 55.0\text{V}$ , $R_L = 8\Omega$ , $R_g = 600\Omega$ , $V_G = 40\text{dB}$ , $R_L$ : Non-Inductive Load unless otherwise specified)

| Parameter                 | Symbol    | Test Conditions                                     | Min       | Typ | Max   | Unit      |
|---------------------------|-----------|---|-----------|-----|-------|-----------|
| Quiescent Current         | $I_{CCO}$ | $V_{CC} = \pm 66\text{V}$                           | 15        | 40  | 120   | mA        |
| Output Power              | $P_O$     | THD = 0.008%, $f = 20\text{Hz}$ to $20\text{kHz}$   | 120       | –   | –     | W         |
| Total Harmonic Distortion | THD       | $P_O = 1.0\text{W}$ , $f = 1\text{kHz}$             | –         | –   | 0.008 | %         |
| Frequency Response        | $f$       | $P_O = 1.0\text{W}$ , $+0\text{dB}$ , $-3\text{dB}$ | 20 to 50k |     |       | Hz        |
| Input Resistance          | $r_i$     | $P_O = 1.0\text{W}$ , $f = 1\text{kHz}$             | –         | 55  | –     | $k\Omega$ |
| Output Noise Voltage      | $V_{NO}$  | $V_{CC} = \pm 66\text{V}$ , $R_g = 10k\Omega$       | –         | –   | 1.2   | mVrms     |
| Midpoint Voltage          | $V_N$     | $V_{CC} = \pm 66\text{V}$                           | -70       | 0   | +70   | mV        |

# Equivalent Circuit

