



ELECTRONICS, INC.
 44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089
<http://www.nteinc.com>

NTE1029 Integrated Circuit Audio Power Amplifier, 3.5W

Features:

- SRPP Circuit (Shunt-Regulated Push-Pull Circuit) High Operating Stability on DC and AC
- High Voltage Gain: 44dB (Typ)
- Low Thermal Resistance: 10°C/W (Max)

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

Supply Voltage, V_{CC} 18V
 Power Dissipation ($T_C = +65^\circ\text{C}$), P_T 6W
 Output Current, $I_{O(PEAK)}$ 2.25A
 Operating Temperature Range (Note 1), T_{opr} -30° to $+70^\circ\text{C}$
 Storage Temperature Range, T_{stg} -55° to $+125^\circ\text{C}$

Note 1. Value when attached to the heat sink plate (Θ_f) = 10°C/W at $P_T = 2.7\text{W}$.

Electrical Characteristics: ($V_{CC} = 13.2\text{V}$, $R_L = 4\Omega$, $f = 1\text{kHz}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Voltage Gain	G_v		-	44	-	dB
Output Power	P_{out}	THD = 10%	3.0	3.5	-	W
Total Harmonic Distortion	THD	$P_{out} = 500\text{mW}$	-	0.25	0.6	%
Signal-to-Noise Ratio	S/N	$R_g = 0$, $P_{out} = 3.5\text{W}$	-	85	-	dB
Input Impedance	R_{in}		11	15	-	k Ω

Pin Connection Diagram

