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## 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),  $T_{opr}$  .....  $-30^\circ$  to  $+70^\circ\text{C}$   
 Storage Temperature Range,  $T_{stg}$  .....  $-55^\circ$  to  $+125^\circ\text{C}$

Note 1. Value when attached to the heat sink plate ( $\Theta_f$ ) = 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 $\Omega$

### Pin Connection Diagram

