

NTE1228 Integrated Circuit Audio Power Amp, 2.1W

Features:

- AF Output Power
- Sufficient Regulation Under Dry Battery Operation

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

Maximum Supply Voltage, $V_{CC\text{max}}$	13V
Allowable Power Dissipation, $P_{d\text{max}}$	1.2W
Allowable Power Dissipation (Note 1), $P_{d\text{max}}$	2.25W
Operating Temperature Range, T_{opr}	-20° to $+70^\circ\text{C}$
Storage Temperature Range, T_{stg}	-40° to $+150^\circ\text{C}$

Note 1. With $50 \times 50\text{mm}^2$ printed board for radiator.

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

Recommended Supply Voltage, V_{CC}	9V
Load Resistance, R_L	4.8Ω

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = 9\text{V}$, $R_L = 4\Omega$, $f = 1\text{kHz}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	I_{CCO}		–	15	25	mA
Voltage Gain	VG	Open Loop	–	70	–	dB
		At Appointed Circuit	42	45	48	dB
Output Power	P_O	THD = 10%, $R_L = 4\Omega$	1.3	2.1	–	W
		THD = 10%, $R_L = 8\Omega$	–	1.4	–	W
Total Harmonic Distortion	THD	$P_O = 250\text{mW}$	–	0.5	1.5	%
Input Resistance	r_i		12k	20k	–	Ω
Output Noise Voltage	V_{NO}	$R_g = 10\text{k}\Omega$	–	–	3	mV
		$R_g = 0$	–	–	1.0	mV

Pin Connection Diagram

