

NTE1470 Integrated Circuit Audio Power Amp, 2.5W for Table Top Stereo

Features:

- High Gain 50dB
- Low Distortion, Low Noise
- Wide Range of Operation Voltage.

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

Maximum Supply Voltage, V_{CCmax}	20V
Allowable Power Dissipation, P_{dmax}	2.5W
With Additional Heat Sink	3.0W
Operating Temperature Range, T_{opg}	-20° to $+75^\circ\text{C}$
Storage Temperature Range, T_{stg}	-40° to $+150^\circ\text{C}$

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

Recommended Supply Voltage, V_{CC}	14V
Load Resistance, R_L	8Ω

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = 14\text{V}$, $R_L = 8\Omega$, $f = 1\text{kHz}$, $R_g = 600\Omega$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	I_{CCO}		—	20	—	mA
Voltage Gain	VG	Closed Loop	—	50	—	dB
Output Power	P_O	THD = 10%	2.0	2.5	—	W
Total Harmonic Distortion	THD	$P_O = 0.5\text{W}$	—	0.3	1.0	%
Input Resistance	r_i		—	100k	—	Ω
Output Noise Voltage	V_{NO}	$R_g = 10\text{k ohm}$	—	1	3	mV

Pin Connection Diagram

Tab	
V _{CC}	1
Decouple	2
Bypass	3
20pF Cap	4
20pF Cap	5
Bias	6
Feedback	7
14	Output
13	N.C.
12	GND
11	DO NOT USE
10	N.C.
9	Input
8	N.C.

