

NTE1477 Integrated Circuit 2 Channel Amplifier for Headphone Use

Description:

The NTE1477 is a integrated circuit in a 14-Lead DIP type package suitable for use as a headphone driving amplifier in the output amplifier of a tape deck or a tuner.

Features:

- Wide Operating Voltage Range
- Small Pop Noise by Means of Emitter Feedback
- Dual Amplifier Involved—Few Peripheral Parts
- Small Output Noise Voltage

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

Maximum Supply Voltage, $V_{CC\text{max}}$ 22V
Maximum Supply Current (only Pin2: flow-in; Pin7, 8: flow-out), I_{CP} 0.5A
Allowable Power Dissipation, $P_{D\text{max}}$ 1.05W
Operating Temperature Range, T_{opr} -20° to $+70^\circ\text{C}$
Storage Temperature Range, T_{stg} -40° to $+150^\circ\text{C}$

Recommended Operating Condition: ($T_A = 25^\circ\pm\text{C}$)

Recommended Supply Voltage, V_{CC} 14V
Load Resistance, R_L 8Ω or 200Ω

Operating 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}		6	8	15	mA
Voltage Gain	V_G	$V_O = 77.5\text{mV}$	7	9	11	dB
Output Voltage	V_O	THD = 10%	0.58	0.68	—	V
Total Harmonic Distortion	THD	$V_O = 0.1\text{V}$	—	0.5	1.0	%
Input Resistance	r_i	$V_O = 0.2\text{V}$	20k	30k	40k	Ω
Output Noise Voltage	V_{NO}	$R_g = 1\text{k}\Omega$, filter: 15 to 30kHz	—	6	18	μV
Channel Separation		$R_g = 1\text{k}\Omega$	-50	-68	—	dB
Gain Difference			—	—	1	dB

Pin Connection Diagram

