



ELECTRONICS, INC.
44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748-5089

NTE1043 Integrated Circuit Audio Amplifier for Tape Recorder

Features:

- No Transformer Required thanks to Complementary Output Circuit
- Excellent Equalizer Characteristics
- Low-Distortion Recording even if Volumeless because of AGC Circuit Wide Dynamic Range
- Wide Supply Voltage Range: $V_{CC} \geq 4V$

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

Supply Voltage, V_{CC}	12V
Power Dissipation, P_T	400mW
Pin9 Current (Note 1), I_9	30mA
Operating Temperature Range, T_{opr}	-10° to $+70^\circ\text{C}$
Storage Temperature Range, T_{stg}	-55° to $+125^\circ\text{C}$

Note 1. I_9 is the current to flow into Pin9.

Electrical Characteristics: ($V_{CC} = 6V$, $R_L = 4\Omega$, $f = 1\text{kHz}$, $T_A = +25^\circ\text{C}$, with output transistors, unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	I_O		10	15	20	mA
Output Power	P_{Omax}	THD = 10% (Play)	0.8	1.0	—	W
Voltage Gain	G_v	(Play)	—	85	—	dB
Total Harmonic Distortion	THD	$P_{out} = 100\text{mW}$ (Play)	—	0.5	1.8	%
Output Noise Voltage	V_n	$R_g = 0$ (Play)	—	17	30	mV
Input Resistance	Preamp	R_{in} (Play)	10	20	—	$k\Omega$
	Drive Amp		10	35	—	$k\Omega$
AGC Ratio	Ratio AGC	$V_{in} = -70\text{dBm} \rightarrow -30\text{dBm}$	—	30	—	dB
AGC Total Harmonic Distortion	THD AGC	$V_{in} = -30\text{dBm}$ (Rec)	—	1	—	%
Minimum Operating Voltage	V_{CCmin}	(Play)	4	—	—	V



Pin Connection Diagram

