

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: $T_A = +25^\circ C$ unless otherwise specified)

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

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

Electrical Characteristics: ($V_{CC} = 6V$, $R_L = 4\Omega$, $f = 1kHz$, $T_A = +25^\circ C$, 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	$P_{out} = 100mW$ (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 Ω
	Drive Amp		10	35	–	k Ω
AGC Ratio	Ratio AGC	$V_{in} = -70dBm \rightarrow -30dBm$	–	30	–	dB
AGC Total Harminic Distortion	THD AGC	$V_{in} = -30dBm$ (Rec)	–	1	–	%
Minimum Operating Voltage	V_{CCmin}	(Play)	4	–	–	V

Pin Connection Diagram

