

NTE1634 Integrated Circuit Dual Preamp ^w/ALC

Description:

The NTE1634 is a monolithic integrated circuit in a 14-Lead DIP type package consisting of a dual equalizer amplifier with automatic level control (ALC) and is suitable for stereo radio cassette applications.

Features:

- Dual Equalizer Amplifier with Built-In ALC Circuit.
- Recording Amp Available Because of High Gain Characteristic (Variable Monitor Possible).
- Good Channel Separation (Sep = 50dB Typ)
- Capable of Direct Meter Driving and ALS Transistor.
- Good ALC Response Balance Between Channels.
- Wider Operating Supply Voltage Range (4V to 13V)

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

Supply Voltage, V_{CC} 14V
 Power Dissipation, PD 600mW
 Operating Temperature Range, T_{opr} -20° to $+70^\circ\text{C}$
 Storage Temperature Range, T_{stg} -40° to $+125^\circ\text{C}$
 ALC TR Maximum Current 3.5mA

Electrical Characteristic: ($T_A = +25^\circ\text{C}$, $V_{CC} = 5\text{V}$, $R_L = 10\text{k}\Omega$: Playback, $R_L = 680\Omega$: Recording unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Circuit Current	I_{CC}	$V_i = 0$	—	4.5	10	mA
Voltage Gain (Open Loop)	A_{VO}		—	85	—	dB
Voltage Gain (Closed Loop)	A_{V1}	Play	—	40	—	dB
	A_{V2}	Record	—	58	—	dB
Output Voltage	V_O	THD = 1%, Play	0.9	1.2	—	V
Total Harmonic Distortion	THD	$V_O = 0.5\text{V}$, Play	—	0.1	1.0	%
Input Resistance	R_i		21	30	—	$\text{k}\Omega$
Equivalent Input Noise Voltage	V_{NI}	BW(–3dB)=20Hz to 20kHz	—	1.0	2.0	μV
Cross Talk	CT	$R_g = 2.2\text{k}\Omega$	40	50	—	dB
ALC Range		$V_i = -60\text{dBm}$, Record	35	45	—	dB
ALC Balance		$V_i = -20\text{dBm}$, Record	—	0	2.0	dB
ALC Distortion		$V_i = -20\text{dBm}$, Record	—	0.5	2.0	%

Pin Connection Diagram

