

NTE1433 Integrated Circuit Audio Preamp

Description:

The NTE1433 is a linear integrated circuit in a 7-Lead SIP type package designed for use in high voltage preamplification applications.

Features:

- Power Supply with Wide Working Voltage Range (20–42 Volts)
- High Open Loop Gain
- Extremely Low Distortion
- Low Noise
- High Input Impedance and Low Output Impedance
- Low Current Dissipation

Application:

- Stereos Radios & Tape Recorders

Absolute Maximum Ratings:

Supply Voltage, V_{CC} 42V
 Supply Current, I_{CC} 5mA
 Operating Temperature Range, T_{opr} -25° to $+75^{\circ}\text{C}$
 Storage Temperature Range, T_{stg} -55° to $+125^{\circ}\text{C}$

Electrical Characteristics:

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Open Loop Voltage Gain	G_{VO}		82	90	–	dB
Max Output Voltage	V_{om}	$KF = 0.1\%$, R_{IAA}	7.5	9.0	–	V_{rms}
Supply Current	I_{CC}	$V_{OUT} = 0$	–	3.5	–	mA
Output Noise Voltage	V_{NO}	$R_g = 2.2k\Omega$, R_{IAA}	–	100	150	μV_{rms}
Input Noise Voltage	V_{NI}	$R_g = 2.2k$, R_{IAA}	–	1.0	1.5	μV_{RMS}
Total Harmonic Distortion	THD	$V_{OUT} = 5V_{rms}$, R_{IAA}	–	0.03	–	%
Input Impedance	Z_{in}	$G_{VC} = 40dB$, R_{IAA}	–	130	–	$k\Omega$
Output Impedance	Z_{out}	$G_{VC} = 40dB$, R_{IAA}	–	12	–	Ω

Pin Connection Diagram
(Front View)

