

NTE1195 Integrated Circuit Low Noise, High Gain Preamp

Description:

The NTE1195 is a low noise, high gain 2 stage preamplifier with high input impedance in a 7-Lead SIP type package suitable for use with car stereos, cassette tape recorders, and home stereo systems.

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

Supply Voltage, V_{CC} 15V
 Power Dissipation, P_D 200mW
 Operating Temperature Range, T_{opr} -20° to $+75^\circ\text{C}$
 Storage Temperature Range, T_{stg} -40° to $+125^\circ\text{C}$

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = 8\text{V}$, $f = 1\text{kHz}$, $R_L = 5.1\text{k}\Omega$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Voltage	V_{CC}		5	–	13	V
Supply Current	I_{CC}	$V_{in} = 0$	0.7	1.3	1.9	mA
Open Loop Voltage Gain	A_{VO}	$V_O = 0.3\text{V}$	75	79	83	dB
Voltage Gain	A_V	$V_O = 0.3\text{V}$, $R_{NF} = 35\text{k}\Omega$	46.5	49.5	52.5	dB
Maximum Voltage	V_{OM}	T.H.D. = 1%, $R_{NF} = 35\text{k}\Omega$	1.0	1.3	–	V_{RMS}
Total Harmonic Distortion	THD	$V_O = 0.3\text{V}$, NAB (35dB)	–	0.05	0.1	%
		$V_O = 0.3\text{V}$, NAB (51dB)	–	0.17	–	%
Input Resistance	R_i		70	200	–	$\text{k}\Omega$
Equivalent Input Noise Voltage	V_{nin}	$R_G = 2.2\text{k}\Omega$, NAB (35dB)	–	1.5	2.0	μV_{RMS}
		$R_G = 2.2\text{k}\Omega$, NAB (51dB)	–	1.2	–	μV_{RMS}
Output Power	P_O	$R_L = 8\Omega$, $V_{CC} = 13\text{V}$	–	3	–	W

Pin Connection Diagram
(Front View)

