



ELECTRONICS, INC.
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NTE1185 Integrated Circuit Audio PreAmp

Features:

- Wide Range of Operating Supply Voltage
- High Gain, High Output Power
- Low Distortion and Noise
- Excellent Hum Rejection
- Extremely High Resistance to Damage from Short Circuit of a Load

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

Supply Voltage, V_{CC1}	27V
Supply Voltage (Note 1), V_{CC2}	14V
Supply Current, $I_{CC(\text{peak})}$	1.5A
Power Dissipation, P_D	7.8W
Operating Temperature Range (Note 1), T_{opt}	-20° to $+75^\circ\text{C}$
Storage Temperature Range, T_{stg}	-40° to $+150^\circ\text{C}$

Note 1. 100 x 100 x 1mm Al heat sink.

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = 18\text{V}$, $f = 1\text{kHz}$, $R_L = 8\Omega$, $A_V = 52\text{dB}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Current	I_{CC}	$V_1 = 0$	25	35	45	mA
Output Power	P_O	THD = 10%	3.0	3.5	–	W
Voltage Gain	A_V	$P_O = 0.5\text{W}$	49	–	56	dB
Output Current	I_{OUT}	$V_{CC} = 12\text{V}$	–	2.5	–	mA
Total Harmonic Disorder	THD	$P_O = 0.5\text{W}$	0.65	1.8	–	%
Input Resistance	R_{in}		–	20	–	k Ω
Noise Level	NL	$R_G = 0\Omega$	–	0.36	0.80	mV _{rms}
Voltage Switch ON	V_{ON}	$R_G = 0\Omega$, V_{CC} OFF – ON	–	0.4	–	V _{p-p}
Voltage Switch OFF	V_{OFF}	$R_G = 0\Omega$, V_{CC} ON – OFF	–	0.1	–	V _{p-p}

Pin Connection Diagram
(Front View)

