

NTE1087 Integrated Circuit Low Noise Preamp

Description:

- General-Purpose Pre-Amplifier
- Voltage Amplifier Application
- Low Noise
- Operates from a Wide Range of Power Supplies
- High Voltage Gain

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

Supply Voltage, V_{CC} 15V
 Power Dissipation, P_D 200mW
 Derate Above 25°C 2mW/ $^\circ\text{C}$
 Operating Temperature Range, T_{opr} -30° to $+75^\circ\text{C}$
 Storage Temperature Range, T_{stg} -55 to $+125^\circ\text{C}$

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

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Current	I_{CC}	$V_{IN} = 0$	–	1.5	2.1	mA
Voltage Gain (Open Loop)	G_V	$f = 1\text{kHz}$	75	78	82	dB
Voltage Gain (Closed Loop)	G_V	$f = 1\text{kHz}$, $R_{NF} = 35\text{k}\Omega$	46.5	–	52.5	dB
Max. Output Voltage	V_{OM}	$f = 1\text{kHz}$, $KF = 1\%$	1.0	–	–	V_{rms}
Equivalent Input Noise	V_{NI}	$R_g = 2.2\text{k}\Omega$, NAB 1kHz Gain Converted with G_V (1kHz)	–	2.0	–	μV_{rms}

Pin Connection Diagram
(Front View)

