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## NTE1462 Integrated Circuit Audio Preamp

**Features:**

- Low Noise:  $V_{NI} = 0.8\mu V_{rms}$  (Typ.)
- High Open Loop Voltage Gain:  $G_{VO} = 92dB$  (Typ.)
- Low Distortion: THD = 0.1% (Max.) at  $V_{OUT} = 7V_{rms}$ ,  $G_V = 40dB$ ,  $f = 1kHz$

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

Supply Voltage, $V_{CC}$ .....	42V
Power Dissipation (note 1), $P_D$ .....	400mW
Operating Ambient Temperature Range, $T_{opr}$ .....	$-30^\circ$ to $+75^\circ C$
Storage Temperature Range, $T_{stg}$ .....	$-55^\circ$ to $+125^\circ C$

Note 1. Derated above  $T_A = +25^\circ C$  in the proportion of  $4mW/^\circ C$ .

**Electrical Characteristics:** ( $T_A = +25^\circ C$ ,  $V_{CC} = 35V$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Current	$I_{CC}$	$V_{IN} = 0$	-	3.5	4.7	mA
Voltage Gain (Open Loop)	$G_{VO}$	$V_{IN} = -85dBm$ , $f = 1kHz$	87	92	-	dB
Max. Output Voltage	$V_{OM}$	$f = 1kHz$ , THD = 0.1%	7.0	9.0	-	$V_{rms}$
Equivalent Input Noise Voltage	$V_{NI}$	RIAA Equalizer $R_g = 2k\Omega$ , $f = 1kHz$	-	0.8	1.5	$\mu V_{rms}$

