



ELECTRONICS, INC.
 44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089
<http://www.nteinc.com>

NTE2000 Integrated Circuit Dolby B Type Noise Reduction System

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

Supply Voltage, V_{CC} 16V

Total Power Dissipation, P_T 600mW

Operating Temperature Range, T_{opr} -20° to $+70^\circ\text{C}$

Storage Temperature Range, T_{stg} -55° to $+125^\circ\text{C}$

Electrical Characteristics: ($V_{CC} = 12\text{V}$, $f = 20\text{Hz}$ to 20kHz , $T_A = +25^\circ\text{C}$, unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Operating Voltage	V_{opr}		10	–	15	V
Supply Current	I_{CC}		–	20	30	mA
Voltage Gain	G_V	$f = 1\text{kHz}$ (2 ~ 5, 15 ~ 12) (5 ~ 8, 12 ~ 9)	± 18.5	20	21.5	dB
			–	0	–	
Total Harmonic Distortion	THD	$f = 1\text{kHz}$ 0dB 8, 9	–	0.08	0.3	%
Output Voltage	$V_{O(\text{Max})}$	$f = 1\text{kHz}$, THD $\leq 1.0\%$, $R_L = 1\text{k}\Omega$ 8, 9	2.5	3.1	–	V_{rms}
Signal-to-Noise Ratio	S/N	$R_g = 3.3\text{k}\Omega$ Encode 2, 15 Decode	73	80	0	dB
			–	90	–	
Back to Back Frequency Response	BB	$f = 20\text{Hz}$ to 20kHz	–1.5	0	+1.5	dB
Crosstalk	CT	$f = 1\text{kHz}$	–	63	–	dB
	RRR	$f = 100/120\text{Hz}$	–	40	–	dB
Output Resistance	R_{out}		–	10	–	Ω
			–	10	–	Ω
			–	2.7	–	$\text{k}\Omega$

Pin Connection Diagram

