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## 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,  $T_{opr}$  .....  $-20^\circ$  to  $+70^\circ\text{C}$   
 Storage Temperature Range,  $T_{stg}$  .....  $-55^\circ$  to  $+125^\circ\text{C}$

**Electrical Characteristics:** ( $V_{CC} = 12\text{V}$ ,  $f = 20\text{Hz}$  to  $20\text{kHz}$ ,  $T_A = +25^\circ\text{C}$ , 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)	$\pm 18.5$	20	21.5	dB
			-	0	-	
Total Harmonic Distortion	THD	$f = 1\text{kHz}$ 0dB 8, 9	-	0.08	0.3	%
Output Voltage	$V_{O(Max)}$	$f = 1\text{kHz}$ , 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 $20\text{kHz}$	-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	-	$\Omega$
			-	10	-	$\Omega$
			-	2.7	-	$\text{k}\Omega$

### Pin Connection Diagram

