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## NTE1398 Integrated Circuit Dual Audio Power Amplifier, 5.8W/Ch

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

Operating Supply Voltage .....	18V
DC Supply Voltage .....	26V
Peak Supply Voltage (Note 1) .....	50V
Output Current (Per Channel) .....	4A
Power Dissipation (Per Package) .....	15W
Operating Temperature Range, $T_{opr}$ .....	$-20^\circ$ to $+70^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-55^\circ$ to $+125^\circ\text{C}$
Junction Temperature, $T_J$ .....	$+150^\circ\text{C}$

Note 1. Pulse width = 200ms,  $T_{rise} \geq 1\text{ms}$

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$ ,  $V_{CC} = 13.2\text{V}$ ,  $f = 1\text{kHz}$ ,  $R_L = 4\Omega$ , One-Half Operation unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit	
Quiescent Current	$I_Q$	$V_{in} = 0$	40	80	160	mA	
Input Bias Voltage	$V_B$	$V_{in} = 0$	-	-	40	mV	
Voltage Gain	$G_V$	$V_{in} = 2.45\text{mV}$	53	55	57	dB	
Difference of Voltage Gain	$\Delta G_V$	$V_{in} = 2.45\text{mV}$	-	-	$\pm 1.5$	dB	
Output Power Per Channel	$P_{out}$	$R_L = 4\Omega$ , THD = 10%	$V_{CC} = 13.2\text{V}$	5.0	5.8	-	W
			$V_{CC} = 14.4\text{V}$	-	7.0	-	W
Total Harmonic Distortion	THD	$P_{out} = 0.5\text{W}$	-	0.15	1.0	%	
Noise Output	WBN	$R_g = 10\text{k}\Omega$ , BW = 20Hz to 20kHz	-	1.0	2.0	mV	
Supply Voltage Rejection Ratio	SVR	$R_g = 600\Omega$ , $f = 500\text{Hz}$	30	40	-	dB	
Input Resistance	$R_{in}$	$f = 1\text{kHz}$	-	30	-	$\text{k}\Omega$	
Rolloff Frequency	$f_l$	$G_V = 3\text{dB}$ from $f = 1\text{kHz}$ Ref	Low	-	40	-	Hz
	$f_h$		High	-	25	-	kHz
Crosstalk	CT	$f = 500\text{Hz}$ , $R_g = 600\Omega$	40	58	-	dB	

**Pin Connection Diagram**  
(Front View)

