



ELECTRONICS, INC.

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NTE1395 Integrated Circuit Dual Audio Power Amplifier, 5.8W/Ch

Features:

- Very Low Distortion
- Easy to Mount
- Overvoltage Handling Capability up to 50V for 200ms
- Thermal Shut-Down Circuit Included
- Fewer Number of External Components Required

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

Operating Supply Voltage	18V
DC Supply Voltage (30sec)	26V
Peak Supply Voltage (Note 1)	50V
Output Current (Per Channel)	4A
Power Dissipation (Per Package)	15W
Operating Temperature Range, T_{opr}	-20° to $+70^\circ\text{C}$
Storage Temperature Range, T_{stg}	-55° to $+125^\circ\text{C}$
Junction Temperature, T_J	$+150^\circ\text{C}$
Thermal Resistance, Junction-to-Case, R_{thJC}	3°C/W

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	$V_{in} = 2.45\text{mV}$	45	47	49	dB	
Difference of Voltage Gain	ΔG_V	$V_{in} = 2.45\text{mV}$	–	–	± 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	$P_{out} = 1.5\text{W}$	–	0.08	0.5	%	
Noise Output	WBN	$R_g = 10\text{k}\Omega$, BW = 20Hz to 20kHz	–	0.4	1.0	mV	
Supply Voltage Rejection Ratio	SVR	$R_g = 600\Omega$, $f = 500\text{Hz}$	36	46	–	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	–	60	–	kHz
Crosstalk	CT	$f = 500\text{Hz}$, $R_g = 600\Omega$	40	60	–	dB	

Pin Connection Diagram
(Front View)

