



ELECTRONICS, INC.

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## NTE1399 Integrated Circuit Dual, Audio Power Amp, 18W BTL

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

Supply Voltage, $V_{CC}$ .....	18V
Output Current, $I_{O(\text{Peak})}$ .....	4A
Power Dissipation, $P_T$ .....	15W
Operating Junction Temperature, $T_J$ .....	+150°C
Operating Temperature Range, $T_{opr}$ .....	-20° to +70°C
Storage Temperature Range, $T_{stg}$ .....	-55° to +125°C
Thermal Resistance, Junction-to-Case, $R_{thJC}$ .....	3°C/W

**Electrical Characteristics:** ( $V_{CC} = 13.2\text{V}$ ,  $f = 1\text{kHz}$ ,  $R_L = 4\Omega$ ,  $T_A = +25^\circ\text{C}$  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	$V_B$	$V_{in} = 0$	-	20	40	mV
Voltage Gain	$G_V$	$V_{in} = -55\text{dBm}$	53	55	57	dB
Output Power	$P_O$	THD = 10%, $R_L = 4\Omega$	15	18	-	W
		THD = 10%, $R_L = 8\Omega$	-	11	-	W
Total Harmonic Distortion	THD	$P_O = 1.5\text{W}$	-	0.2	1.0	%
Noise Output	$V_N$	$R_g = 10\text{k}\Omega$ , BW = 20Hz to 20kHz	-	1.0	2.0	mV
Supply Voltage Rejection Ratio	SVRR	$f = 500\text{Hz}$	33	44	-	dB
Input Resistance	$R_{in}$		20	30	40	k $\Omega$

**Pin Connection Diagram**  
(Front View)

