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## NTE1098 Integrated Circuit Audio Power Amplifier, 5W

### **Features:**

- 4-Watt Power Output into  $4\Omega$  Load at  $V_{CC} = -14V$ , THD = 10%
- Low Distortion (0.4% typ. at  $f = 1kHz$ ,  $P_O = 2W$ )
- High Efficiency (60% at 4W)
- Transformerless in Input and Output Sides

### **Applications:**

- Car Stereo
- Car Radio

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

Maximum Supply Voltage, $V_{CC}$	18V
Output Current, $I_O$	1.5A
Power Dissipation, $P_D$	
At $T_A = +25^\circ C$ without heatsink	2W
At $T_A = +25^\circ C$ with heatsink	4W
Operation Temperature Range, $T_{opg}$	$-20^\circ$ to $+75^\circ C$
Storage Temperature Range, $T_{stg}$	$-40^\circ$ to $+125^\circ C$

### **Electrical Characteristics:** ( $T_A = +25^\circ C$ , $R_L = 4\Omega$ , $V_{CC} = 14V$ , unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Zero-Signal Circuit Current	$I_{CC}$		6	12	40	mA
Voltage Gain	$G_V$	$f = 1kHz$	37	39	41	dB
Total Harmonic Distortion	THD	$f = 1kHz$ , $P_O = 2W$	–	0.4	1	%
Max. Power Output	$P_{Omax}$	$f = 1kHz$ , THD = 10%	3.5	4	–	W
Efficiency	$\eta$		–	62	–	%
Input Impedance	$Z_i$	$f = 1kHz$	–	6.5	–	$k\Omega$
Bandwidth	BW	$P_O = 1W$	70 to 30k (Typ)			Hz
Noise Output	$N_O$	Relative to 4W, $R_g = 0\Omega$	–	–76	–	dB

## Pin Connection Diagram

