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## NTE1098 Integrated Circuit Audio Power Amplifier, 5W

**Features:**

- 4-Watt Power Output into 4Ω 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° to +75°C
Storage Temperature Range, $T_{stg}$ .....	-40° to +125°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	-	kΩ
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

- Pin1. GND
- 2. Input
- 3. Feedback
- 4. Inverting Input
- 5. Decouple Filter Cap
- 6. Equalization
- 7. Output
- 8. Feedback
- 9. -
- 10. V<sub>CC</sub>

