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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 $+75^\circ C$
Storage Temperature Range, T_{stg}	-40° 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	η		–	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

- Pin1. GND
 2. Input
 3. Feedback
 4. Inverting Input
 5. Decouple Filter Cap
 6. Equalization
 7. Output
 8. Feedback
 9. -
 10. V_{CC}

