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NTE1566 **Integrated Circuit** **Audio Power Output, 4W**

Features:

- Possibility for Increasing the Input Impedance
- Single In-Line (SIP) Package for Easy Mounting
- Extremely Low Number of External Components
- Thermal Protection
- Well-Defined Open-Loop Gain Circuitry with Simple Quiescent Current Setting and Fixed Integrated Closed-Loop Gain

Applications:

- TV
- Radio
- Record Player
- Communication Receiver
- Alarms

Absolute Maximum Ratings:

Supply Voltage, V_{CC} 35V
Non-Repetitive Peak Output Current, I_{OSM} 3A
Repetitive Peak Output Current, I_{ORM} 1.5A
Storage Temperature Range, T_{stg} -65° to +150°C
Operating Ambient Temperature Range, T_A -25° to +150°C

DC Electrical Characteristics:

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Voltage Range	V_{CC}		6	–	35	V
Repetitive Peak Output Current	I_{ORM}		–	–	1.5	A
Total Quiescent Current	I_{TOT}	$V_{CC} = 18V$	–	–	1.5	A

AC Electrical Characteristics: ($V_{CC} = 18V$, $R_L = 8\Omega$, $f = 1kHz$, $T_A = +25^\circ C$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
AF Output Power	P_O	$d_{TOT} = 10\%$	4.0	–	–	W
		$V_{CC} = 8.3V$, $R_L = 8\Omega$	–	0.65	–	W
		$V_{CC} = 12V$, $R_L = 8\Omega$	–	1.7	–	W
		$V_{CC} = 18V$, $R_L = 8\Omega$	–	4.5	–	W
		$V_{CC} = 20V$, $R_L = 8\Omega$	–	6.0	–	W
		$V_{CC} = 25V$, $R_L = 8\Omega$	–	5.0	–	W
Total Harmonic Distortion	d_{TOT}		1.0	0.3	–	%
Frequency Response			15	–	–	kHz
Input Impedance	$ Z_i $		–	45	–	k Ω
Noise Output Voltage	V_N	$R_S = 5k\Omega$	–	0.2	0.5	mV
Sensitivity		$P_O = 2.5W$	44	55	66	mW

Note 1. Input impedance can be increased by applying C and R between Pin5 and Pin9.

Pin Connection Diagram
(Front View)

