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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	-	kΩ
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.

