



ELECTRONICS, INC.  
 44 FARRAND STREET  
 BLOOMFIELD, NJ 07003  
 (973) 748-5089  
<http://www.nteinc.com>

## NTE1180 Integrated Circuit Audio Power Amplifier, 1.5W

**Description:**

The NTE1180 is a linear integrated circuit with attached heat sink pin. The device is a 1.5W AF power amplifier. The device is suitable for FM/AM radio, cassette tape recorder, portable player or inter-  
 phone use.

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

Supply Voltage,  $V_{CC}$  ..... 11V  
 Power Dissipation,  $P_D$  ..... 1.2W  
 Operating Temperature Range,  $T_{opr}$  .....  $-20$  to  $+70^\circ\text{C}$   
 Storage Temperature Range,  $T_{stg}$  .....  $-40$  to  $+150^\circ\text{C}$

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$ ,  $V_{CC} = 7.5\text{V}$ ,  $R_L = 4\Omega$ ,  $f = 1\text{kHz}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Circuit Current	$I_{CCO}$		-	15	25	mA
Voltage Gain	$V_G$		42	45	48	dB
Output Power	$P_O$	THD = 10%	0.95	1.5	-	W
Total Harmonic Distortion	THD	$P_O = 250\text{mW}$	-	0.5	1.5	%
Input Resistance	$R_i$		12	20	-	$k\Omega$
Noise Output Voltage	$V_{NO}$	$R_g = 10k$	-	-	3	mV
		$R_g = 0$	-	-	1.0	mV

**Pin Connection Diagram**  
(Front View)

