



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

## NTE1075A Integrated Circuit Audio Power Amplifier, 1W

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

Supply Voltage, $V_{CC}$ .....	20V
Collector Current, $I_{CC}$ .....	1A
Operating Temperature Range, $T_{opr}$ .....	$-20^\circ$ to $+75^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-40^\circ$ to $+125^\circ\text{C}$

**Electrical Characteristics:** ( $V_{CC} = 5V$ ,  $T_A = +25^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Max. Output Power	$P_{Omax}$	$R_f = 2k$ , $f = 1\text{KHz}$ , THD = 3%	1	1.5	-	W
Voltage Gain	$G_V$	$R_f = \infty$ , $f = 1\text{KHz}$	60	68	-	dB
		$R_f = 2k$ , $f = 1\text{KHz}$	37	42	-	dB
Efficiency	$\eta$	$P_O = 1W$	46.5	-	-	%
Total Harmonic Distortion	THD	$P_O = 1W$ , $R_f = 2K$ , $f = 1\text{KHz}$	-	0.5	2	%
		$P_O = 50mW$ , $R_f = 2k$ , $f = 1\text{KHz}$	-	0.1	1	%
Supply Current	$I_{CC}$		5	7.5	14	mA
Frequency Response	$f_c$	$P_O = 500mW$ , $\pm 3\text{dB}$	-	50	-	Hz
	$N_{OVc}$	$R_f = 2K$	-	0.5	-	mV
Input Impedance	$Z_i$	$f = 1\text{KHz}$ , $R_f = 2K$	-	60	-	K
Output Impedance	$Z_{out}$		-	0.12	-	K

### Pin Connection Diagram

