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## NTE1023 Integrated Circuit Audio power Output, 4W

**Features:**

- 4W Typical at 13.2V
- High Gain

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

Power Supply Voltage, $V_{CC}$ .....	16V
Power Supply Current, $I_{CC}$ .....	1A
Power Dissipation (Note 1), $P_D$ .....	3.5W
Tab Temperature Range, $T_{tab}$ .....	$-30^\circ$ to $+125^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-55^\circ$ to $+150^\circ\text{C}$

Note 1. Tab Temperature  $90^\circ\text{C}$  (Derating of  $10^\circ\text{C}/\text{W}$  at  $90^\circ\text{C}$  over)

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$ ,  $V_{CC} = 30\text{V}$ ,  $R_S = 1.5\text{k}\Omega$ , unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Idle Current	$I_{idle}$	$V_{CC} = 12.5\text{V}$	-	-	50	mA
Output Power	$P_{OUT}$	$V_{CC} = 13.2\text{V}$ , $R_L = 4\Omega$ , $R_F = 68\Omega$ , $f = 1\text{kHz}$ , $KF = 10\%$	3	4	-	W
Voltage Gain	$G_V$	$V_{CC} = 12.5\text{V}$ , $R_L = 4\Omega$ , $R_F = 68\Omega$ , $f = 1\text{kHz}$	40.5	43	47.5	dB
Distortion	KF	$V_{CC} = 12.5\text{V}$ , $R_L = 4\Omega$ , $R_F = 68\Omega$ , $f = 1\text{kHz}$ , $P_{OUT} = 1\text{W}$	-	-	1.5	%
Output Noise Voltage	$V_{NO}$	$V_{CC} = 12.5\text{V}$ , $R_L = 4\Omega$ , $R_F = 68\Omega$	-	-	4.5	mV

### Pin Connection Diagram

