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## NTE1463 Integrated Circuit AF Power Amp for Tape Recorder

### **Features:**

- AF Output Power: 2.7W/3.2Ω, or 2.3W/4Ω
- Small op Noise by Muting CRT
- High Ripple Reduction
- Good Supply Voltage Characteristics
- No Switching Distortion at High Frequency

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

Supply Voltage,  $V_{CC}$

Quiescent ..... 13V

Operating ..... 11V

Allowable Power Distortion,  $P_{Dmax(1)}$  ..... 1.2W

Allowable Power Distortion (Note 1),  $P_{Dmax(2)}$  ..... 2.25W

Current at Pin 11 ( $R_L \geq 330\Omega$ ),  $I_{11}$  ..... 30mA

Operating Temperature Range,  $T_{opr}$  .....  $-20^\circ$  to  $+70^\circ\text{C}$

Storage Temperature Range,  $T_{stg}$  .....  $-40^\circ$  to  $+150^\circ\text{C}$

Note 1. 50 x 50 x 1.5mm<sup>3</sup> printed board used.

### **Recommended Operating Characteristics:** ( $T_A = +25^\circ\text{C}$ unless otherwise specified)

Supply Voltage,  $V_{CC}$  ..... 9V

Load Resistance,  $R_L$  ..... 3.2 to 8.0Ω

### **Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$ , $V_{CC} = 9\text{V}$ , $R_L = 3.2\Omega$ , $f = 1\text{kHz}$ , $R_g = 600\Omega$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	$I_{CCO}$		–	15	25	mA
Voltage Gain	$V_{G(1)}$	Open Loop	–	68	–	dB
	$V_{G(2)}$	Closed Loop	42	45	48	dB
Output Power	$P_O$	$R_L = 3.2\Omega$ , THD = 10%	2.1	2.7	–	W
		$R_L = 4\Omega$ , THD = 10%	1.7	2.3	–	W
Input Resistance	$r_i$		12	20	–	kΩ
Total Harmonic Distortion	THD	$P_O = 300\text{mW}$	–	–	2.0	%
Output Noise Voltage	$V_{NO(1)}$	$R_g = 10\text{k}\Omega$	–	–	2.5	mV
	$V_{NO(2)}$	$R_g = 0\Omega$	–	–	0.8	mV

# Pin Connection Diagram

