



NTE1028 Integrated Circuit Module, Hybrid, Audio Power Amp 20W

Description:

The NTE1028 is a 20 Watt Audio Power Amplifier which requires 2 power supplies.

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

Maximum Supply Voltage, $V_{CC\max}$	$\pm 32\text{V}$
Operating Case Temperature, T_C	$+85^\circ\text{C}$
Storage Temperature Range, T_{stg}	$-30^\circ \text{ to } +100^\circ\text{C}$
Available Load Shorting Time, t_s ($V_{CC} = \pm 26\text{V}$, $f = 50\text{Hz}$, $V_O = 12.7\text{V}/R_L$)	2Sec

Recommended Operation Conditions: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Recommended Supply Voltage, V_{CC}	$\pm 22\text{V}$
Load Resistance, R_L	8Ω

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = \pm 22\text{V}$, $R_L = 8\Omega$, $V_G = 26.4\text{dB}$, $R_g = 600\Omega$, $f = 1\text{kHz}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Power	P_O	$f = 20\text{Hz to } 20\text{kHz}$, THD = 0.3%	20	—	—	—
		THD = 0.3%	—	23	—	W
		THD = 0.3%, $V_{CC} = \pm 26\text{V}$	—	30	—	—
Total Harmonic Distortion	THD	$f = 20\text{Hz to } 20\text{kHz}$, $P_O = 0.05$ to 20W	—	—	0.3	—
		$P_O = 1\text{W}$	—	0.03	—	%
High Level Cut-Off Frequency	f_{CH}	$P_O = 1\text{W}$, -1dB	100	—	—	kHz
Low Level Cut-Off Frequency	f_{CL}	$P_O = 1\text{W}$, -1dB	—	—	10	Hz
Input Resistance	r_i	$P_O = 1\text{W}$	—	52	—	k Ω
Output Noise Voltage	V_{NO}	$V_{CC} = \pm 26\text{V}$, $R_g = 10\text{k}\Omega$	—	0.3	0.5	m V_{rms}
Supply Current	I_{CCO}	$V_{CC} = \pm 26\text{V}$	10	—	50	mA
	ΔV_N	$V_{CC} = \pm 26\text{V}$	—50	—	+50	mV

Pin Connection Diagram
(Front View)

