

NTE1330
Integrated Circuit
Module – Hybrid, Dual, Audio Power Amplifier,
15W/Ch, 2 Power Supplies Required

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

Maximum Supply Voltage, V_{CCmax} $\pm 31\text{V}$
 Operating Case Temperature, T_C $+105^\circ\text{C}$
 Storage Temperature Range, T_{stg} -30° to $+105^\circ\text{C}$
 Allowable Load Shorting Time ($V_{CC} = \pm 21\text{V}$, $P_O = 15\text{W}$, $R_L = 8\Omega$, $f = 50\text{Hz}$), t_s 2sec

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

Recommended Supply Voltage, V_{CC} $\pm 21\text{V}$
 Load Resistance, R_L 8Ω

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = \pm 21\text{V}$, $R_L = 8\Omega$, $R_g = 600\Omega$, $V_G = 40\text{dB}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	I_{CCO}	$V_{CC} = \pm 24\text{V}$	20	40	120	mA
Output Power	P_O	$f = 20\text{Hz}$ to 20kHz , $\text{THD} = 0.08\%$	15	–	–	W
		$V_{CC} = \pm 19\text{V}$, $f = 1\text{kHz}$, $\text{THD} = 0.2\%$, $R_L = 4\Omega$	20	–	–	W
Total Harmonic Distortion	THD	$f = 20\text{Hz}$ to 20kHz , $P_O = 1\text{W}$	–	–	0.08	%
Frequency Response	f_L, f_H	$+0, -3\text{dB}$, $P_O = 1\text{W}$, $f = 1\text{kHz}$	10 to 100k			Hz
Input Resistance	r_i	$f = 1\text{kHz}$, $P_O = 1\text{W}$	–	32	–	k Ω
Output Noise Voltage	V_{NO}	$V_{CC} = \pm 24\text{V}$, $R_g = 10\text{k}\Omega$	–	–	1.2	mV _{rms}
Midpoint Voltage	V_N	$V_{CC} = \pm 24\text{V}$	-70	–	+70	mV

Pin Connection Diagram
(Front View)

16	Rt Ch Input
15	Rt Ch Feedback
14	GND
13	Rt Ch Bias
12	(-) V _{CC} 2
11	Rt Ch Feedback
10	Rt Ch Output
9	(+) V _{CC} 2
8	(+) V _{CC} 1
7	Lt Ch Output
6	Lt Ch Feedback
5	(-) V _{CC} 1
4	Lt Ch Bias
3	GND
2	Lt Ch Feedback
1	Lt Ch Input

