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NTE1315 Integrated Circuit Module – 2 Power, 2 Channel AF Power Amplifier, 35W Min

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

Maximum Supply Voltage, V_{CCmax}	$\pm 45\text{V}$
Operating Junction Temperature, T_j	$+150^\circ\text{C}$
Operating Case Temperature, T_C	$+125^\circ\text{C}$
Storage Temperature Range, T_{stg}	-30° to $+125^\circ\text{C}$
Allowable Load Shorting Time ($V_{CC} = \pm 30\text{V}$, $R_L = 8\Omega$, $f = 50\text{Hz}$, $P_O = 35\text{W}$), t_s	2sec
Thermal Resistance, Junction-to-Case, R_{thJC}	$+2.1^\circ\text{C/W}$

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

Recommended Supply Voltage, V_{CC}	$\pm 30\text{V}$
Load Resistance, R_L	8Ω

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = \pm 30\text{V}$, $R_L = 8\Omega$, $R_g = 600\Omega$, $V_G = 40\text{dB}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	I_{CCO}	$V_{CC} = \pm 36\text{V}$	20	40	100	mA
Output Power	$P_O (1)$	THD = 0.4%, $f = 20\text{Hz}$ to 20kHz	35	–	–	W
	$P_O (2)$	$V_{CC} = \pm 27\text{V}$, THD = 1.0%, $R_L = 4\Omega$, $f = 1\text{kHz}$	40	–	–	W
Total Harmonic Distortion	THD	$P_O = 1.0\text{W}$, $f = 1\text{kHz}$	–	–	0.3	%
Frequency Response	f_L, f_H	$P_O = 1.0\text{W}$, -3dB	20 to 50k			Hz
Input Resistance	r_i	$P_O = 1.0\text{W}$, $f = 1\text{kHz}$	–	55	–	$k\Omega$
Output Noise Voltage	V_{NO}	$V_{CC} = \pm 36\text{V}$, $R_g = 10k\Omega$	–	–	1.2	mV_{rms}
Output Center Voltage	V_N	$V_{CC} = \pm 36\text{V}$	–70	0	+70	mV
Muting Voltage	V_M		–2	–5	–10	V

Pin Connection Diagram (Front View)

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

