

NTE1317
Integrated Circuit
Module, 2 Power, 2 Channel,
AF Power Amplifier, 50W Min.

Features:

- Muting Circuit
- Reduced Heat Sink due to Case Temperature Dissipation up to +125°C

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

Supply Voltage, V_{CCmax}	±53.0V
Operating Junction Temperature, T_J	+150°C
Substrate Temperature, T_C	+125°C
Storage Temperature Range, T_{stg}	-30° to +125°C
Thermal Resistance, Junction-to-Case, R_{thJC}	1.8°C/W
Turn-on Time ($V_{CC} = \pm 35V, R_L = 8\Omega, f = 50Hz, P_O = 50W$), t_s	2sec

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

Supply Voltage, V_{CC}	±35V
Load Resistance, R_L	8Ω

Electrical Characteristics: ($T_A = 25^\circ\text{C}, V_{CC} = \pm 35V, R_L = 8\Omega, R_g = 600\Omega, V_G = 40\text{dB}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Idle Current	I_{CCO}	$V_{CC} = \pm 42.5V$	20	40	100	mA
Power Out	P_O	THD = 0.8%, $f = 20\text{Hz}$ to 20kHz	50	-	-	W
		$V_{CC} = \pm 32V, \text{THD} = 0.2\%, R_L = 4\Omega, f = 1\text{kHz}$	55	-	-	W
Total Harmonic Distortion	THD	$P_O = 1.0W, f = 1\text{kHz}$	-	-	0.08	%
Breakpoints	f_L, f_H	$P_O = 1.0W, +0 -3\text{dB}$	20 to 50k			Hz
Source Impedance	r_i	$P_O = 1.0W, f = 1\text{kHz}$	-	55	-	kΩ
Input Noise Voltage	V_{NO}	$V_{CC} = \pm 42.5V, R_g = 10\text{k}\Omega$	-	-	1.2	mV_{rms}
Transient Noise Voltage	V_N	$V_{CC} = \pm 42.5V$	-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 (-)

