

NTE1877 Integrated Circuit Module, Dual AF PO, 28W/Ch, Dual Power Supply

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

Supply Voltage, $V_{CC\text{max}}$	52.5V
Maximum Output Power ($V_{CC} = 45\text{V}$, $f = 1\text{kHz}$, $R_L = 4\Omega$), $P_{O\text{max}}$	50W
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 $+125^\circ\text{C}$
Thermal Resistance, Junction-to-Case, R_{thJC}	3.5°C/W
Turn-On Time ($V_{CC} = 35\text{V}$, $R_L = 4\Omega$, $P_O = 28\text{W}$, $f = 1\text{kHz}$), t_S	2sec

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

Supply Voltage, V_{CC}	35V
Load Resistance, R_L	4Ω

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = 35\text{V}$, $R_L = 4\Omega$, $R_g = 600\Omega$, $V_G = 40\text{dB}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Idle Current	I_{CCO}	$V_{CC} = 45\text{V}$	—	—	175	mA
Power Output	P_O	$V_{CC} = 13.2\text{V}$, THD = 10%, $f = 1\text{kHz}$	4.8	—	—	W
		THD = 10%, $f = 1\text{kHz}$	28	—	—	W
		THD = 1%, $f = 70\text{Hz}$ to 15kHz	18	21	—	W
Total Harmonic Distortion	THD	$V_{CC} = 8\text{V}$, $P_O = 1\text{W}$, $f = 1\text{kHz}$	—	0.4	1.0	%
		$V_{CC} = 45\text{V}$, $P_O = 1\text{W}$, $f = 1\text{kHz}$	—	—	0.5	%
Frequency Range	f_L, f_H	$P_O = 1\text{W}$, $V_G = -3\text{dB}$	40 to 50k			Hz
Input Resistance	r_i	$P_O = 1\text{W}$, $R_g = 10\text{k}\Omega$	—	21	—	$\text{k}\Omega$
Noise Voltage	V_{NO}	$V_{CC} = 45\text{V}$, $R_g = 10\text{k}\Omega$	—	—	0.8	mV_{rms}

Pin Connection Diagram (Front View)

18	N.C.
17	Mute Output
16	Mute t Cap
15	Input 2
14	NFB 2
13	GND 2
12	Power GND 2
11	Output 2
10	Feedback 2
9	Bootstrap
8	Substrate
7	V (+)
6	Feedback 1
5	Output 1
4	Power GND 1
3	GND 1
2	NFB 1
1	Input 1

