



ELECTRONICS, INC.
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NTE1816 Integrated Circuit Module, Dual AF PO, 6W/Ch Dual Power Supplies Req'd

Features:

- Built-In Muting Circuit to Cut Off Various Kinds of Shock Noise.
- Greatly Reduced Heat Sink due to Case Temperature +125°C Guaranteed.

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

Maximum Supply Voltage, $V_{CC\max}$	$\pm 20.5\text{V}$
Junction Temperature, T_J	$+150^\circ\text{C}$
Operating Case Temperature, T_C	$+125^\circ\text{C}$
Storage Temperature, T_{stg}	$-30^\circ \text{ to } +125^\circ\text{C}$
Thermal Resistance, Junction-to-Case, R_{thJC}	5°C/W
Available Time for Load Shorted ($V_{CC} = \pm 13.2\text{V}$, $R_L = 8\Omega$, $f = 50\text{Hz}$, $P_O 6\text{W}$), t_s	2sec

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

Recommended Supply Voltage, V_{CC}	13.2V
Recommended Load Resistance, R_L	8Ω

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = \pm 13.2\text{V}$, $R_L = 8\Omega$, $R_g = 600\Omega$, $VG = 40\text{dB}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	I_{CC0}		20	40	100	mA
Output Power	$P_{O(1)}$	THD = 0.4%, $f = 20\text{Hz}$ to 20kHz	6	—	—	W
		$V_{CC} = \pm 12\text{V}$, THD = 1%, $R_L = 4\Omega$, $f = 1\text{kHz}$	6	—	—	W
Total Harmonic Distortion	THD	$P_O = 1\text{W}$, $f = 1\text{kHz}$	—	—	0.3	W
Frequency Characteristics	f_L, f_H	$P_O = 1\text{W}$, -3dB	20 to 50k			Hz
Input Resistance	r_i	$P_O = 1\text{W}$, $f = 1\text{kHz}$	—	55	—	k Ω
Output Noise Voltage	V_{NO}	$V_{CC} = \pm 17\text{V}$, $R_g = 10\text{k}\Omega$	—	—	1.2	mV _{rms}
Middle Point Voltage	V_N	$V_{CC} = \pm 17\text{V}$	-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 (-) |

