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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,  $V_{CCmax}$  .....  $\pm 20.5\text{V}$   
 Junction Temperature,  $T_J$  .....  $+150^\circ\text{C}$   
 Operating Case Temperature,  $T_C$  .....  $+125^\circ\text{C}$   
 Storage Temperature,  $T_{stg}$  .....  $-30^\circ$  to  $+125^\circ\text{C}$   
 Thermal Resistance, Junction-to-Case,  $R_{thJC}$  .....  $5^\circ\text{C/W}$   
 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,  $R_L$  .....  $8\Omega$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	$I_{CCO}$		20	40	100	mA
Output Power	$P_{O(1)}$	THD = 0.4%, $f = 20\text{Hz}$ to $20\text{kHz}$	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	$f_L$ , $f_H$	$P_O = 1\text{W}$ , $-3\text{dB}$	20 to 50k			Hz
Input Resistance	$r_i$	$P_O = 1\text{W}$ , $f = 1\text{kHz}$	–	55	–	$k\Omega$
Output Noise Voltage	$V_{NO}$	$V_{CC} = \pm 17\text{V}$ , $R_g = 10k\Omega$	–	–	1.2	$\text{mV}_{rms}$
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)

