



ELECTRONICS, INC.  
 44 FARRAND STREET  
 BLOOMFIELD, NJ 07003  
 (973) 748-5089  
<http://www.nteinc.com>

## NTE1820 Integrated Circuit Module, Dual AF PO, 30W/Ch, Dual Power Supply

**Features:**

- Contains Emitter Follower Circuit for Upgrading
- Case Temperature +125°C is Guaranteed, Thereby Enabling Great Reduction of Heat Sink
- By Attaching Muting Circuit Externally, Pop Noise at Power ON/OFF can be Rejected

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

Maximum Supply Voltage, $V_{CCmax}$ .....	±43V
Thermal Resistance, Junction-to-Case, $R_{thJC}$ .....	2.2°C/W
Maximum Junction Temperature, $T_J$ .....	+150°C
Operating Case Temperature, $T_C$ .....	+125°C
Storage Temperature Range, $T_{stg}$ .....	-30° to +125°C
Available Time for Load Shorted ( $V_{CC} = \pm 27.5V$ , $R_L = 8\Omega$ , $P_O = 30W$ , $f = 50Hz$ ), $t_s$ .....	2sec

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

Recommended Supply Voltage, $V_{CC}$ .....	±27.5V
Load Resistance, $R_L$ .....	8Ω

**Operating Characteristics:** ( $T_A = +25^\circ\text{C}$ ,  $V_{CC} = \pm 27.5V$ ,  $R_L = 8\Omega$ ,  $R_g = 600\Omega$ ,  $V_G = 40dB$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	$I_{CCO}$	$V_{CC} = \pm 34V$	35	70	120	mA
Output Power	$P_{O(1)}$	THD = 0.02%, $f = 20Hz$ to 20kHz	30	-	-	W
	$P_{O(2)}$	$V_{CC} = \pm 23V$ , THD = 0.08%, $R_L = 4\Omega$ , $f = 1kHz$	30	-	-	W
Total Harmonic Distortion	THD	$P_O = 1W$ , $f = 20Hz$ to 20kHz	-	-	0.02	%
Frequency Response	$f_L, f_H$	$P_O = 1W$	10 to 100k		-	Hz
Input Resistance	$r_i$	$P_O = 1W$	-	90k	-	Ω
Output Noise Voltage	$V_{NO}$	$V_{CC} = \pm 34V$	-	-	1.2	mV <sub>rms</sub>
Midpoint Voltage	$V_N$	$V_{CC} = \pm 34V$	-70	-	+70	mV

