

**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, $V_{CCmax}$ .....	52.5V
Maximum Output Power ( $V_{CC} = 45\text{V}$ , $f = 1\text{kHz}$ , $R_L = 4\Omega$ ), $P_{Omax}$ .....	50W
Operating Junction Temperature, $T_J$ .....	+150°C
Operating Case Temperature, $T_C$ .....	+125°C
Storage Temperature Range, $T_{stg}$ .....	-30° to +125°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	-	kΩ
Noise Voltage	$V_{NO}$	$V_{CC} = 45\text{V}$ , $R_g = 10\text{k}\Omega$	-	-	0.8	mV <sub>rms</sub>

**Pin Connection Diagram**  
(Front View)

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

