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## NTE1359 Integrated Circuit Module, Hybrid, Dual Audio Power Amp, 22W/Ch

**Applications:**

- Designed for Outdoor Stereo and Radio Cassette Tape Recorder Use.

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

Supply Voltage,  $V_{CCmax}$  ..... 50V  
 Operating Case Temperature,  $T_C$  .....  $-20^\circ$  to  $+105^\circ\text{C}$   
 Storage Temperature Range,  $T_{stg}$  .....  $-20^\circ$  to  $+125^\circ\text{C}$   
 Turn-On Time ( $V_{CC} = 31\text{V}$ ,  $R_L = 4\Omega$ ,  $P_O = 22\text{W}$ ,  $f = 1\text{kHz}$ ),  $t_s$  ..... 2sec

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

Supply Voltage,  $V_{CC}$  ..... 31V  
 Load Resistance,  $R_L$  .....  $4\Omega$

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$ ,  $V_{CC} = 31\text{V}$ ,  $R_L = 4\Omega$ ,  $R_g = 600\Omega$ ,  $V_G = 40\text{dB}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Idle Current	$I_{CCO}$	$V_{CC} = 36\text{V}$	–	60	120	mA
Power Output	$P_O$	$V_{CC} = 13.2\text{V}$ , THD = 10%, $f = 1\text{kHz}$	5.0	5.5	–	W
		THD = 10%, $f = 1\text{kHz}$	22	25	–	W
		THD = 1%, $f = 70\text{Hz}$ to $15\text{kHz}$	–	20	–	W
Total Harmonic Distortion	THD	$V_{CC} = 9\text{V}$ , $P_O = 0.1\text{W}$ , $f = 1\text{kHz}$	–	0.5	0.8	%
		$P_O = 0.1\text{W}$ , $f = 1\text{kHz}$	–	0.07	–	%
Frequency Range	$f_L, f_H$	$V_{CC} = 26.4\text{V}$ , $P_O = 0.1\text{W}$ , +0dB	40 to 50k			Hz
Input Resistance	$r_i$	$V_{CC} = 26.4\text{V}$ , $P_O = 0.1\text{W}$	–	21	–	$k\Omega$
Noise Voltage	$V_{NO}$	$V_{CC} = 36\text{V}$	–	–	0.8	$\text{mV}_{rms}$

**Pin Connection Diagram**  
(Front View)

15	Input Rt Ch
14	Decouple
13	GND
12	GND
11	Output Rt Ch
10	Feedback Rt Ch
9	Ripple Filter
8	GND
7	V <sub>CC</sub>
6	Feedback Lt Ch
5	Output Lt Ch
4	GND
3	GND
2	Decouple
1	Input Lt Ch

