



ELECTRONICS, INC.

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

NTE1365 Integrated Circuit Audio Power Amplifier, 5W

Description:

The NTE1365 is an integrated circuit in a 9-Lead SIP type package designed for low power amplifier applications such as portable radios, radio cassette tape recorders, and car radios.

Features:

- High Gain, Low Distortion, Low Noise
- Few External Components
- Built-In Thermal Protection Circuit
- Built-In Overvoltage Protection Circuit
- Low Shock Noise When Power is Switched ON/OFF

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

Supply Voltage (V_{9-2}), V_{CC}	
Operation	20V
No Signal	24V
Supply Current, I_{CC}	4A
Power Dissipation ($T_A = +30^\circ\text{C}$), P_D	10W
Operating Ambient Temperature Range, T_{opr}	-30° to $+75^\circ\text{C}$
Storage Temperature Range, T_{stg}	-40° to $+150^\circ\text{C}$

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = 13.2\text{V}$, $R_L = 4\Omega$, $f = 1\text{kHz}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Circuit Current	I_{CQ}	$V_i = 0$	7	20	45	mA
Voltage Gain	G_V	$V_i = 3\text{mV}$	51.5	53.5	55.5	mA
Output Power	$P_{O(max)}$	THD = 10%	4.5	5.0	–	W
Total Harmonic Distortion	THD	$V_i = 3\text{mV}$	–	0.3	1.0	%
Output Noise Voltage	V_{no}	$R_g = 10\text{k}\Omega$	–	1.5	3.0	mV
Input Impedance	Z_i		–	30	–	$\text{k}\Omega$

Pin Connection Diagram
(Front View)

