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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°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°C), P_D 10W

Operating Ambient Temperature Range, T_{opr} . . . . . –30° to +75°C

Storage Temperature Range, T_{stg} . . . . . –40° to +150°C

Electrical Characteristics: (T_A = +25°C, V_{CC} = 13.2V, R_L = 4Ω, f = 1kHz 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 = 3mV	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 = 3mV	–	0.3	1.0	%
Output Noise Voltage	V_{no}	R_g = 10kΩ	–	1.5	3.0	mV
Input Impedance	Z_i		–	30	–	kΩ

Pin Connection Diagram
(Front View)