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NTE1273
Integrated Circuit
Dual, Audio Power Amp, 5W/Ch

Description:
The NTE1273 is a bipolar monolithic integrated circuit in a 20–Lead DIP type package. This 2 channel audio power amplifier is ideal for use in high power car radio applications.

Features:
- Low Distortion
- Self centering Bias
- High Peak Output Current
- Dual Channel/BTL Amp Use
- Low Offset Voltage (Between Ch1 and Ch2 DC Voltage)

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)
Supply Voltage, V_{CC} 18V
Output Peak Current (Per Channel), $I_{O(Peak)}$ 4A
Power Dissipation, P_D 20W
Operating Temperature Range, T_{opr} . . . . . –20° to +75°C
Storage Temperature Range, T_{stg} . . . . . –55° to +150°C

Electrical Characteristics: (T_A = +25°C, V_{CC} = 13.2V, R_L = 4Ω, R_g = 600Ω, R_f = 68Ω, f = 1kHz, Dual channel operation, G_V = 54dB unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	I_{CCQ}		20	36	70	mA
Output Power	P_O	THD = 10%, Note 1	4.2	4.8	–	W
		BTL, THD = 10%, Note 1	–	15	–	W
		THD = 10%, R_L = 2Ω	–	7.5	–	W
Maximum Output Power	P_{OM}	Dual	–	6	–	W
		BTL	–	20	–	W
Total Harmonic Distortion	THD	Dual, P_O = 1W	–	0.2	0.8	%
Output Noise Voltage	V_{NO}	R_g = 10kΩ	–	1.2	3.0	mV
		BW = 50Hz to 20kHz	–	1.2	3.0	mV

Note 1. $G_V = 47k\Omega/R_f$ ($G_V$max = 70dB)

Electrical Characteristics (Cont'd): (T_A = +25°C, V_{CC} = 13.2V, R_L = 4Ω, R_g = 600Ω, R_f = 68Ω, f = 1kHz, Dual channel operation, G_V = 54dB unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Channel Separation	CSR	R_g = 10kΩ, P_O = +10dBm	–	–58	–	dB
Ripple Rejection	RR	V_{IN} = 0dBm, 100Hz, R_g = 0Ω	–	–48	–	dB
Input Resistance	R_{IN}		–	40	–	kΩ
Voltage Gain	G_{VO}	R_f = 0Ω	70	75	–	dB
		V_{IN} = –.245mV_{rms}	70	75	–	dB

Pin Connection Diagram