ELECTRONICS, INC.
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NTE1667
Integrated Circuit
2 Channel Amp, 2.3W/Ch (4.7W BTL)

Features:

- Has Two Channels that can be used for Either Stereo or Bridge Amplifier
- High Outputs:
  2 Channel (2.3W/Ch @ V_{CC} = 9V, R_L = 4Ω)
  Bridge Amp (4.7W @ V_{CC} = 9V, R_L = 8Ω)
- Voltage Gain is Variable by Externally Connected Feedback Resistors:
  2 Channel (R_{NF} = 27Ω, VG = 50dB)
  Bridge Amp (R_{NF} = 51Ω, VG = 51dB)
- Switching Distortions in Higher Frequencies have been Held Low
- The Built–In Muting Circuit Keeps Noise caused by Turning Power ON and OFF at Low Levels
- The Built–In Ripple Filter Provides Good Ripple Rejection Factors
- Excels in Channel Separation

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Maximum Power Supply Voltage, V_{CC}max
- With Signals 11V
- With No Signal 15V

Allowable Power Dissipation, $P_D$max 4W

Operating Ambient Temperature Range, T_{opr} . . . . . –20° to +75°C

Storage Ambient Temperature Range, T_{stg} . . . . . –55° to +150°C

Recommended Operating Conditions: (T_A = +25°C unless otherwise specified)

Recommended Power Supply Voltage, V_{CC} 9V

Load Resistance, R_L
- 2 Channel . . . . . 4 to 8Ω
- Bridge Amp 8Ω

Electrical Characteristics: (T_A = +25°C, V_{CC} = 9V, f = 1kHz, R_g = 600Ω unless otherwise specified

Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Quiescent Current	I_{CCO}	2 Channel, R_L = 4Ω	6V	–	35	55	mA
			7.5V	–	40	–	mA
Voltage Gain 2 Channel	VG	Closed Loop, R_{NF} = 27Ω, V_{IN} = –51dBm	R_L = 4Ω	48	50	52	dB
Bridge Amp			R_L = 8Ω	49	51	53	dB
Voltage Gain Imbalance	ΔVG	2 Channel, R_L = 4Ω		–	–	2	dB
Power Output 2 Channel	P_O	THD = 10%	R_L = 4Ω	1.7	2.3	–	W
			R_L = 8Ω	–	1.3	–	W
Bridge Amp				–	4.7	–	W
Total Harmonic Distortion	THD	2 Channel, P_O = 250mW, R_L = 4Ω		–	0.5	2.0	%
Input Resistance	r_i	R_L = 4Ω		21	30	–	kΩ
Output Noise Voltage	V_{NO}	2 Channel, R_L = 4Ω	R_g = 0	–	0.5	1.3	mV
			R_g = 10kΩ	–	0.8	2.5	mV
Ripple Rejection	R_r	2 Channel, R_g = 0, V_R = 150mV, R_L = 4Ω		–	46	–	dB
Channel Separation	CH sep	2 Channel, R_g = 10kΩ, v_o = 0dBm, R_L = 4Ω		40	55	–	dB

Pin Connection Diagram