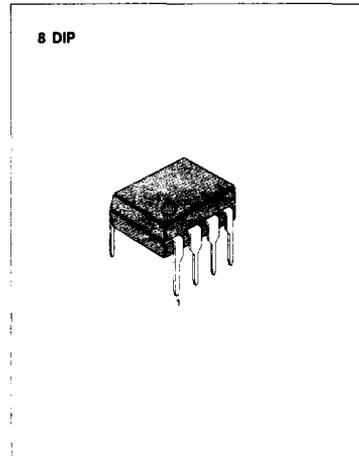


DUAL LOW VOLTAGE POWER AMPLIFIER

The KA2209 is a monolithic integrated audio amplifier in a 8-pin plastic dual in line package. It is designed for portable cassette players and radios.

FEATURES

- Wide operating supply voltage: $V_{CC} = 1.8V - 9V$
- Low crossover distortion
- Low quiescent circuit current
- Bridge/stereo configuration



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ORDERING INFORMATION

Device	Package	Operating Temperature
KA2209	8 DIP	-20°C ~ +70°C

BLOCK DIAGRAM

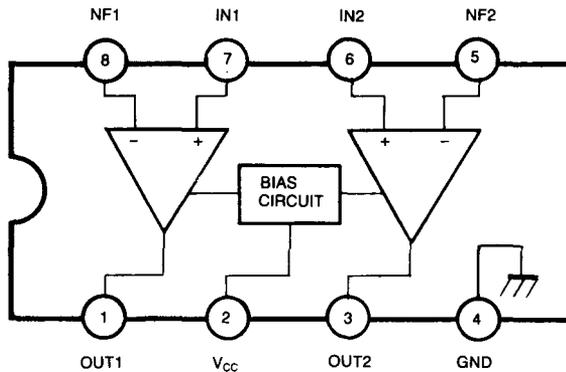


Fig. 1

ABSOLUTE MAXIMUM RATINGS (T_a = 25°C)

Characteristic	Symbol	Value	Unit
Supply Voltage	V _{CC}	15	V
Output Peak Current	I _{PK}	1	A
Power Dissipation	P _D	at T _{AMB} = 50°C 1.0 at T _{CASE} = 50°C 1.4	W
Operating Temperature	T _{OPR}	- 20 ~ + 70	°C
Storage Temperature	T _{STG}	- 40 ~ + 150	°C

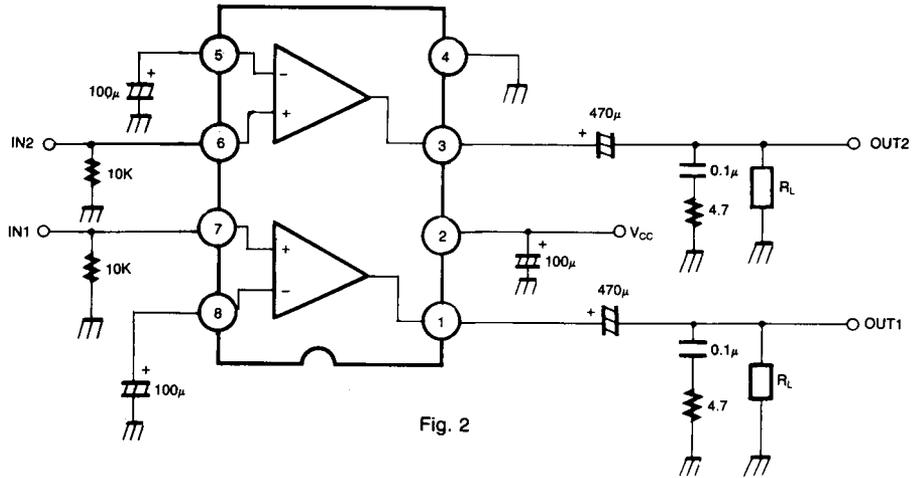
ELECTRICAL CHARACTERISTICS

(T_a = 25°C, V_{CC} = 6V, f = 1KHz, unless otherwise specified)

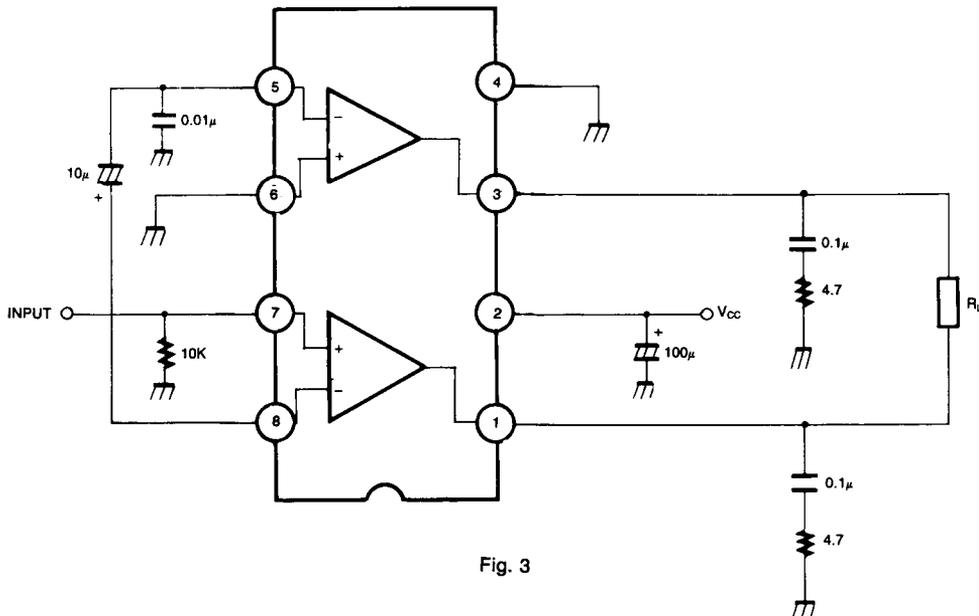
Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit	
Operating Voltage	V _{CC}		1.8		9	V	
Quiescent Circuit Current	I _{CCQ}	V _I = 0		9		mA	
Closed Loop Voltage Gain	G _{VC}	Stereo		40		dB	
		Bridge		40		dB	
Channel Balance	CB	Stereo	- 1	0	1	dB	
Output Power	P _O	Stereo	V _{CC} = 6V, R _L = 4Ω, THD = 10%	0.4	0.65		W
			V _{CC} = 3V, R _L = 4Ω, THD = 10%		0.11		W
		Bridge	V _{CC} = 6V, R _L = 8Ω, THD = 10%	0.9	1.35		W
			V _{CC} = 3V, R _L = 4Ω, THD = 10%		0.35		W
Total Harmonic Distortion	THD	Stereo, R _L = 8Ω, P _O = 0.2W		0.5		%	
		Bridge, R _L = 8Ω, P _O = 0.5W		0.5		%	
Ripple Rejection Ratio	RR	Stereo, f = 100Hz, C ₃ = 100μF	24	30		dB	
Output Noise Voltage	V _{NO}	Stereo, BW (-3dB) = 20Hz ~ 20KHz		0.5	2.0	mV	
Cross Talk	CT	Stereo, f = 1KHz		50		dB	
Input Resistance	R _I		100			KΩ	

APPLICATION CIRCUIT

1. STEREO



2. BRIDGE



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