

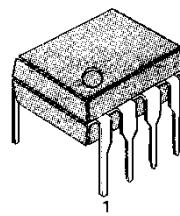
DUAL LOW VOLTAGE POWER AMPLIFIER

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: $V_{CC} = 1.8V \sim 9V$
- Low crossover distortion
- Low quiescent circuit current
- Bridge/stereo configuration

8 DIP



ORDERING INFORMATION

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

BLOCK DIAGRAM

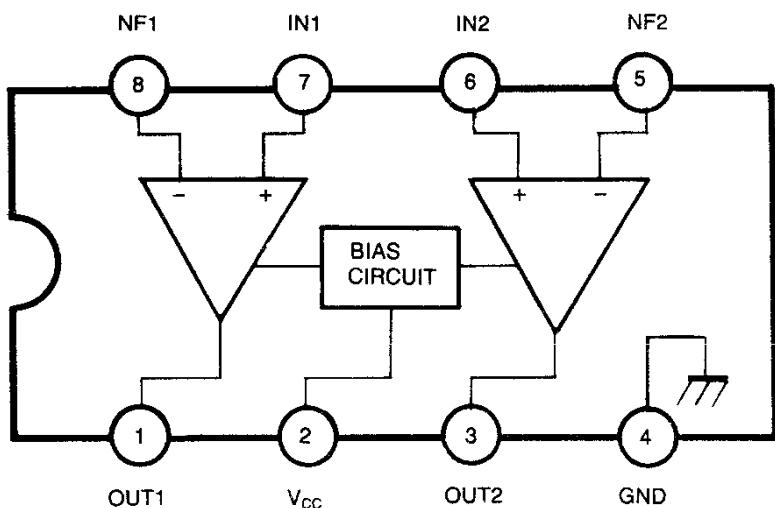


Fig. 1

ABSOLUTE MAXIMUM RATINGS (Ta=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

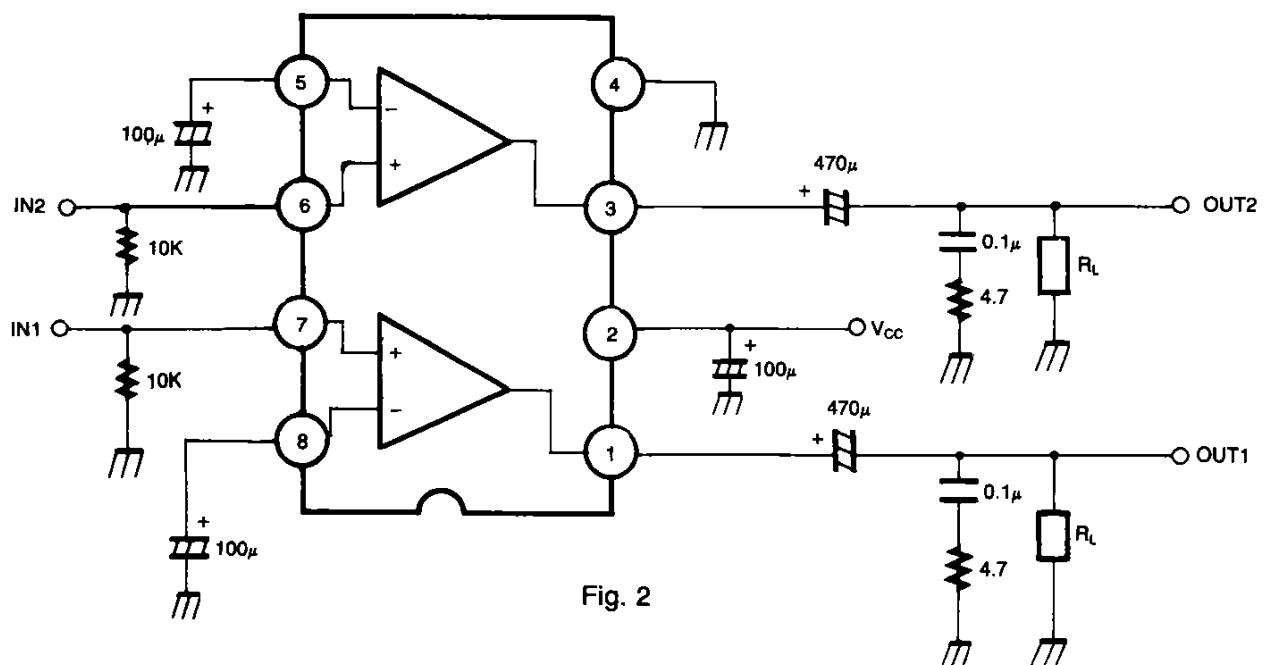


Fig. 2

2. BRIDGE

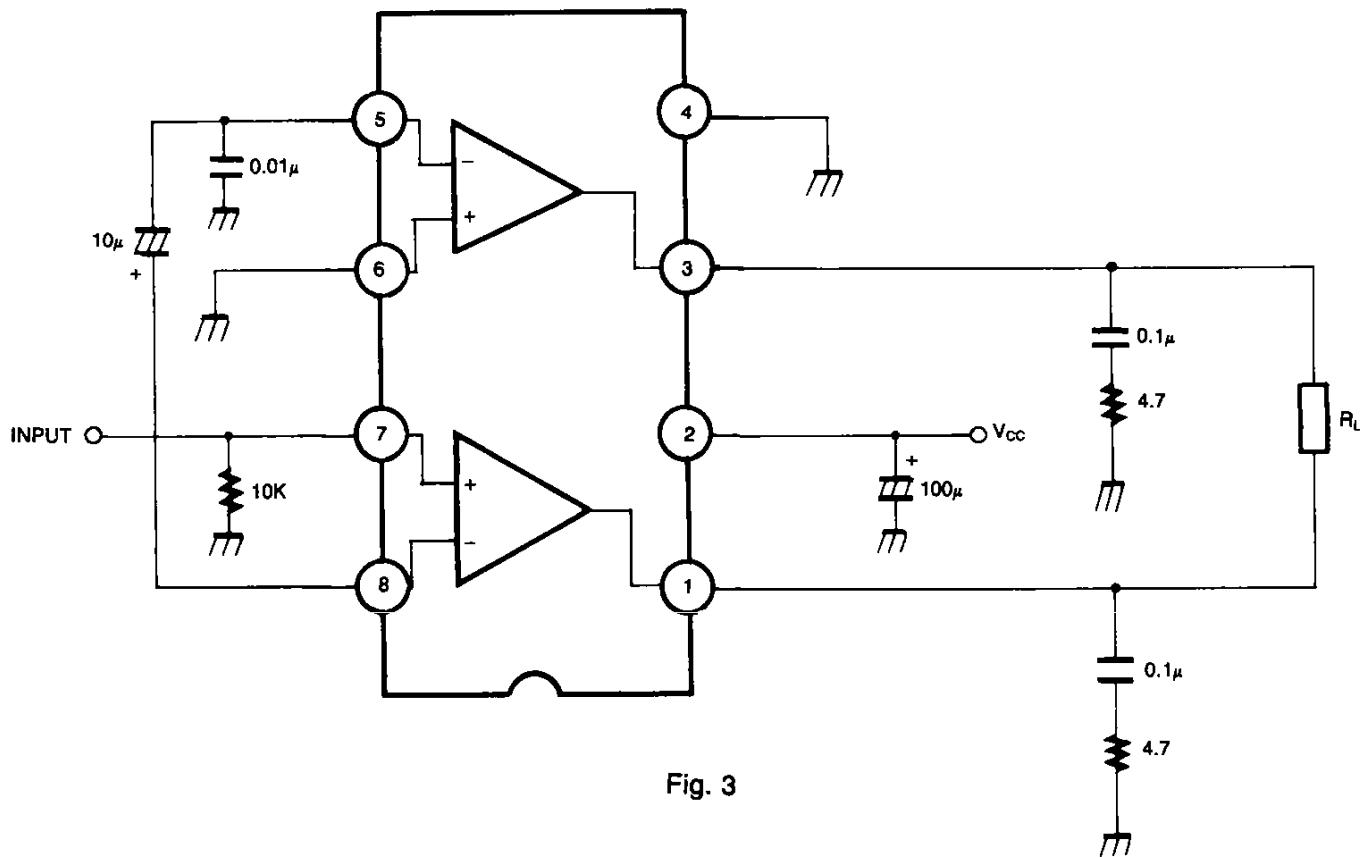


Fig. 3