

KA2209B

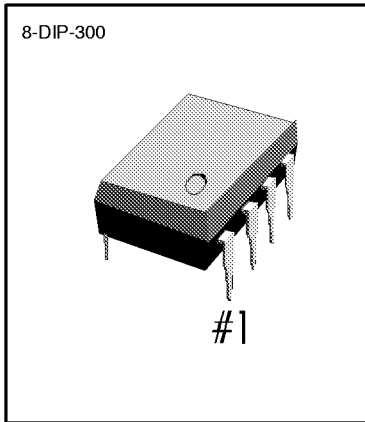
DUAL LOW VOLTAGE POWER AMP

INTRODUCTION

The KA2209B is a monolithic integrated audio amplifier in a 8-pin plastic dual in line package. It is designed for portable cassette player and radio.

FEATURES

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



ORDERING INFORMATION

Device	Package	Operating Temperature
KA2209B	8-DIP-300	-20°C ~ +70°C

BLOCK DIAGRAM

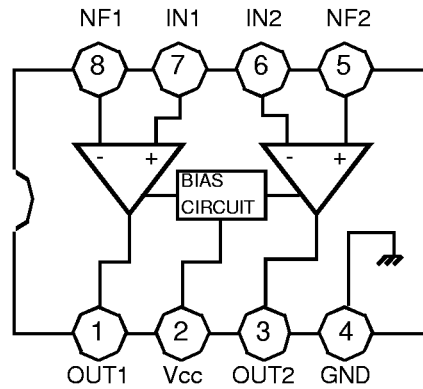


Fig. 1



Characteristic	Symbol	Value	Unit
Supply Voltage	V_{CC}	15	V
Output Peak Current	I_{PK}	1	A
Power Dissipation	P_D	at $T_{AMB} = 50^\circ C$ 1.0 at $T_{CASE} = 50^\circ C$ 1.4	W
Operating Temperature	T_{OPR}	-20 ~ +70	°C
Storage Temperature	T_{STG}	-40 ~ +150	°C

ABSOLUTE MAXIMUM RATINGS

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	C _B	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 = 100uF	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

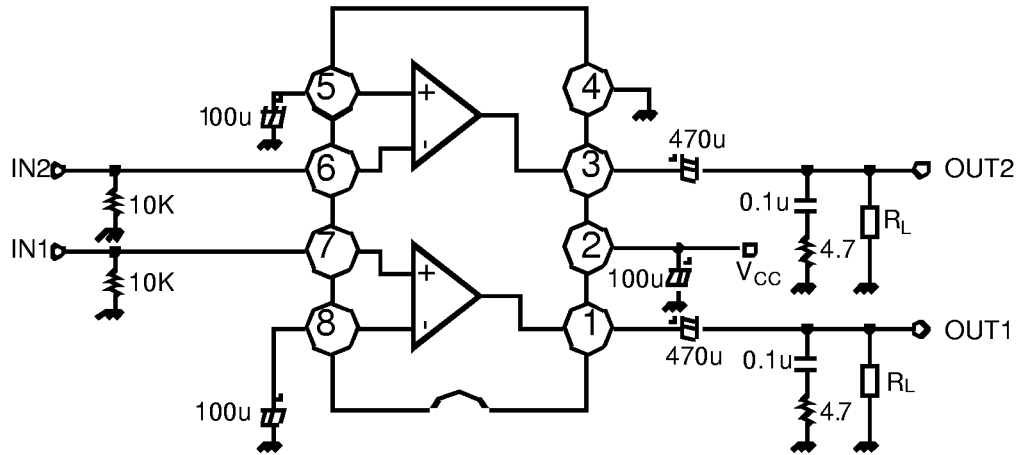


Fig. 2

2. BRIDGE

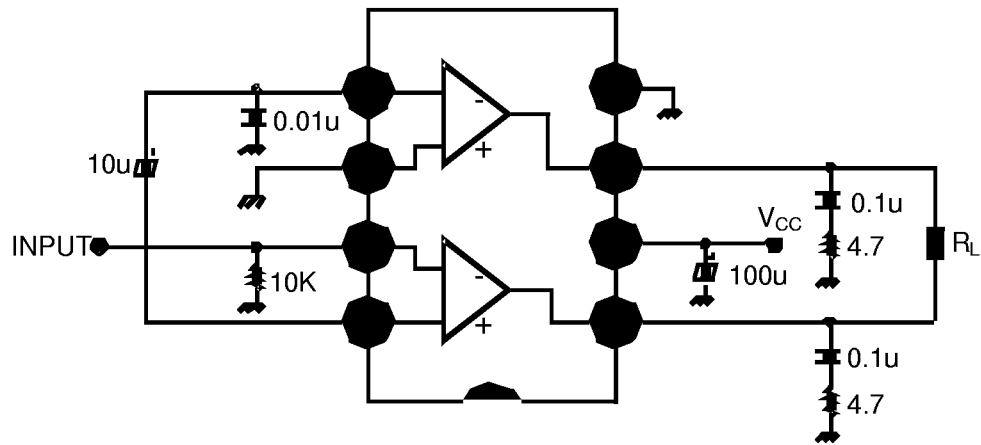
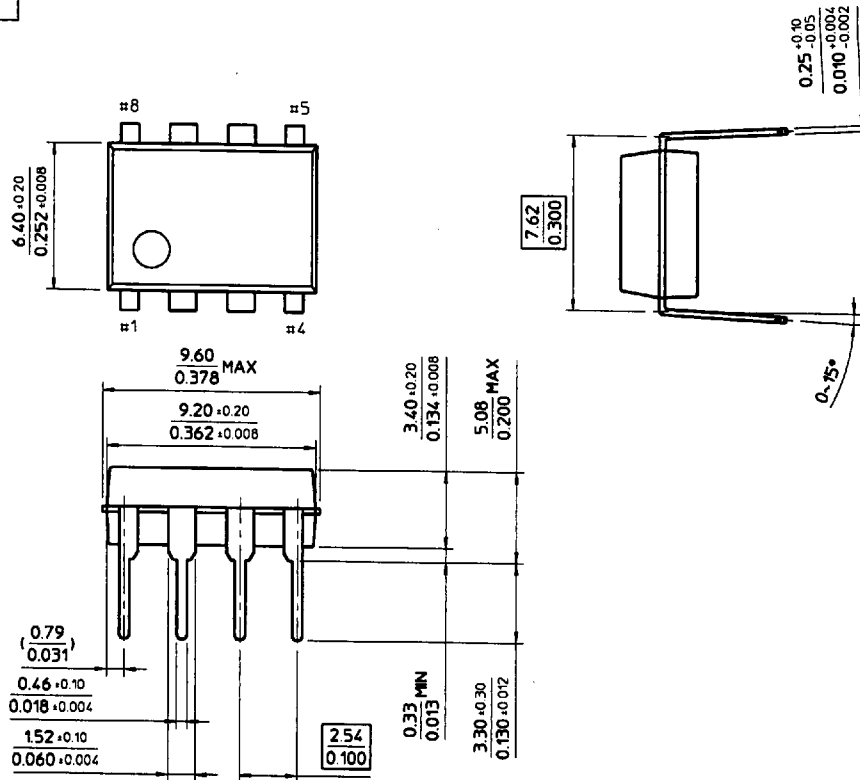


Fig. 3

8-DIP-300



12-DIPH-300

