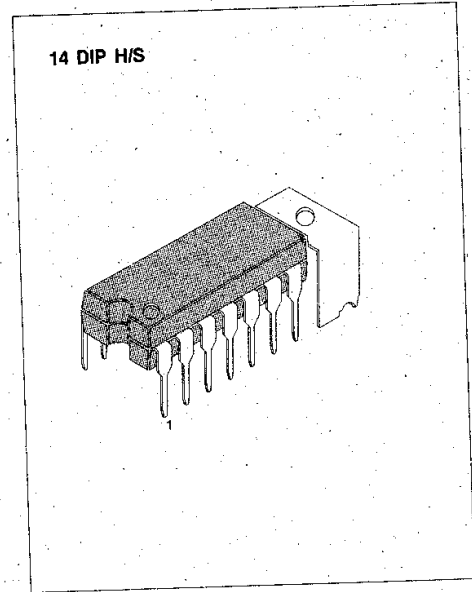


1W DUAL POWER AMPLIFIER

The KA2214 is a dual audio power amplifier in a 14 pin dual in line package. It is designed for portable audio sets.

FEATURES

- Wide operating voltage; $V_{CC} = 3V \sim 13V$
- High output power; $P_o = 2W$ at $12V/8\Omega/THD = 10\%$
 $P_o = 1.6W$ at $9V/4\Omega/THD = 10\%$
 $P_o = 1.2W$ at $9V/8\Omega/THD = 10\%$
 $P_o = 0.7W$ at $6V/4\Omega/THD = 10\%$
 $P_o = 0.5W$ at $6V/8\Omega/THD = 10\%$
 $P_o = 50mW$ at $4.5V/32\Omega/THD = 10\%$
- High ripple rejection ratio; 50dB (Typ)
- Low quiescent current; 10mA ($V_{CC} = 9V$)
- Easy assembly so that two power amplifiers are built in a package.



BLOCK DIAGRAM

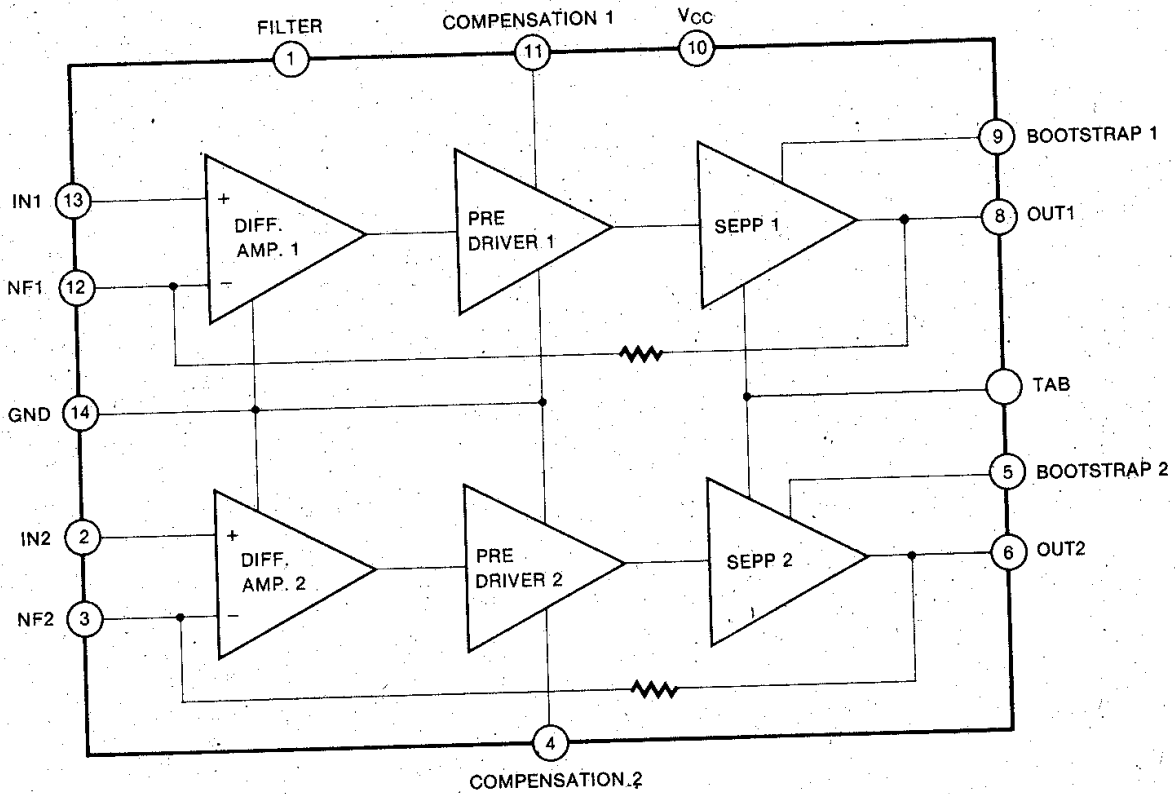


Fig. 1

ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

Characteristic	Symbol	Value	Unit
Supply Voltage (No Signal)	V _{CC}	18	V
Supply Voltage (Operating)	V _{CC}	16	V
Power Dissipation	P _d	2.4	W
Operating Temperature	T _{opr}	-20 ~ +70	°C
Storage Temperature	T _{stg}	-40 ~ +150	°C

ELECTRICAL CHARACTERISTICS

(Ta = 25°C, V_{CC} = 9V, R_f = 33Ω, f = 1KHz, R_L = 8Ω, R_g = 600Ω, unless otherwise specified)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Circuit Current	I _{CC}	V _i = 0		10		mA
Voltage Gain	A _{V1}	P _o = 0.25W, R _f = 33Ω		44		dB
	A _{V2}	P _o = 0.25W, R _f = 120Ω		34		dB
Output Power	P _{o1}	V _{CC} = 12V, R _L = 8Ω, THD = 10%		2		W
	P _{o2}	V _{CC} = 9V, R _L = 4Ω, THD = 10%		1.6		W
	P _{o3}	V _{CC} = 9V, R _L = 8Ω, THD = 10%	0.9	1.2		W
	P _{o4}	V _{CC} = 6V, R _L = 4Ω, THD = 10%		0.7		W
	P _{o5}	V _{CC} = 6V, R _L = 8Ω, THD = 10%		0.5		W
	P _{o6}	V _{CC} = 4.5V, R _L = 32Ω, THD = 10%		50		mW
Total Harmonic Distortion	THD1	P _o = 0.5W, R _f = 33Ω		0.8		%
	THD2	P _o = 0.5W, R _f = 120Ω		0.4		%
Output Noise Voltage	V _{NO}	R _g = 10KΩ, BW(-3dB) = 20Hz ~ 20KHz		0.6		mV
Ripple Rejection Ratio	RR	R _g = 0, f = 120Hz, V _r = 0.3V		50		dB
Cross Talk	CT	R _g = 0, P _o = 0.25W		55		dB
Channel Balance	CB	P _o = 0.25W	-2	0	2	dB
Input Resistance	R _i			5		MΩ