

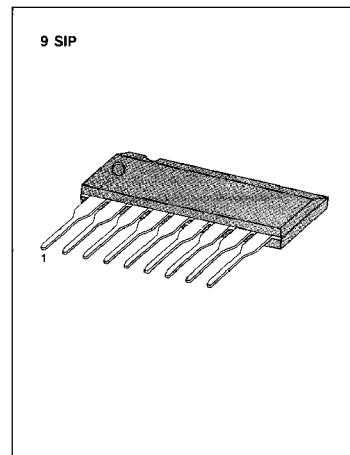
KA2212 datasheet

0.5W AUDIO POWER AMPLIFIER

The KA2212 is a monolithic integrated audio power amplifier in a 9-pin plastic single in line package, designed for audio frequency class B amplifiers.

FEATURES

- Suitable for portable radios, cassette tape recorders.
- Medium output power.
 $P_o = 0.5W$ (Typ) at $V_{cc} = 6V$, $R_L = 8\Omega$, THD=10%.
- Wide operating supply voltage range: $V_{cc} = 3.5V \sim 12V$
- Low quiescent circuit current.
- Excellent thermal stability.



ORDERING INFORMATION

Device	Package	Operating Temperature
KA2212	9 SIP	-20°C ~ +70°C

BLOCK DIAGRAM

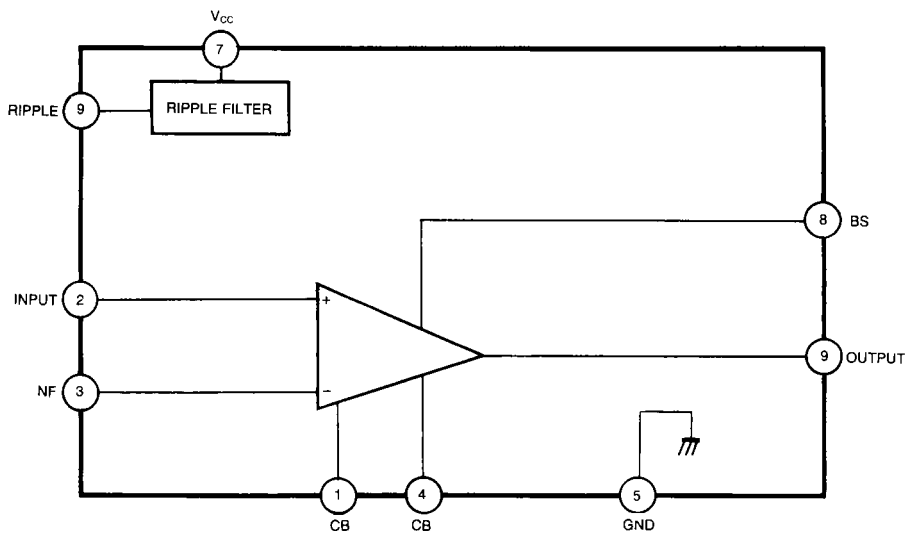


Fig. 1

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ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

Characteristic	Symbol	Value	Unit
Supply Voltage	V_{CC}	14	V
Power Dissipation	P_D	750	mW
Operating Temperature	T_{OPR}	-20 ~ +70	$^\circ\text{C}$
Storage Temperature	T_{STG}	-40 ~ +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

($T_a = 25^\circ\text{C}$, $V_{CC} = 6\text{V}$, $R_L = 8\Omega$, $R_G = 600\Omega$, $R_F = 68\Omega$, $f = 1\text{KHz}$, unless otherwise specified)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Circuit Current	I_{CCQ}	$V_i = 0$		14		mA
Open Loop Voltage Gain	G_{VO}	$R_F = 0\Omega$	60	75		dB
Closed Loop Voltage Gain	G_{VC}	$R_F = 68\Omega$	47	50	52	dB
Output Power	P_O	THD=10%	0.45	0.5		W
Total Harmonic Distortion	THD	$P_O = 100\text{mW}$		0.3	1.0	%
Input Resistance	R_i			15		$\text{K}\Omega$
Output Noise Voltage	V_{NO}	$R_G = 10\text{K}\Omega$ BW (-3dB)=50Hz ~ 20KHz		0.4	1.0	mV

TEST CIRCUIT

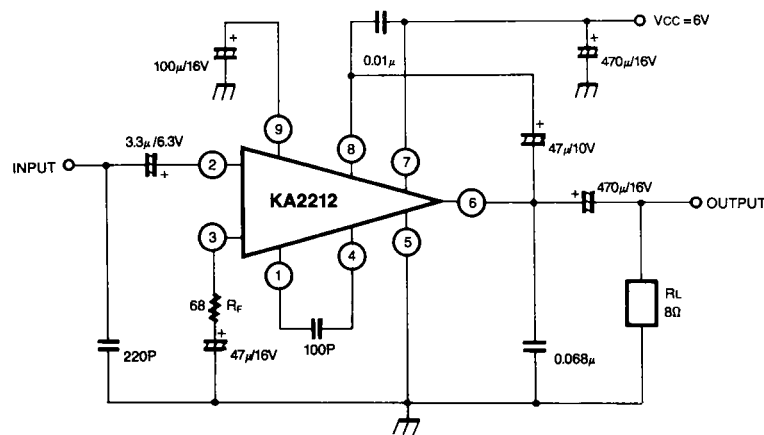
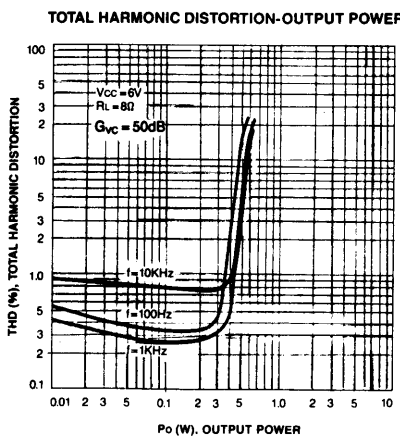
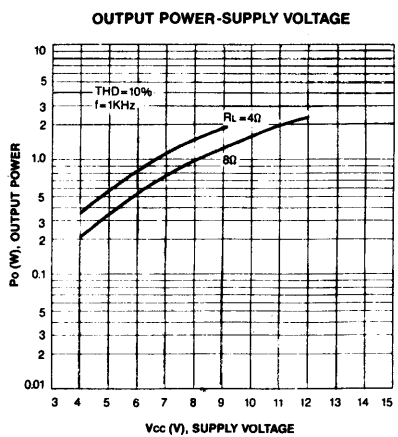
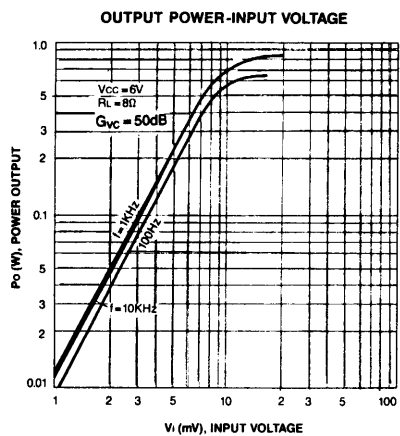
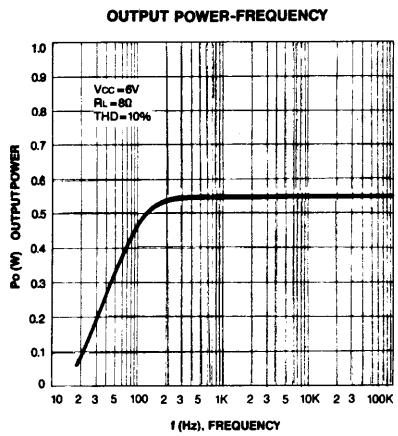
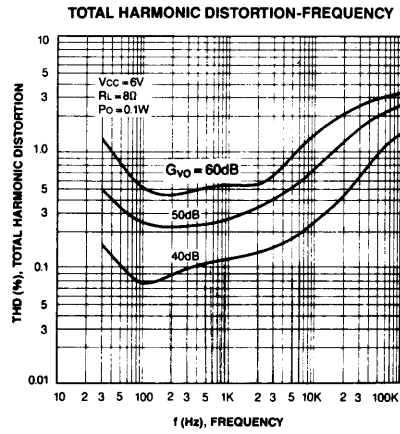
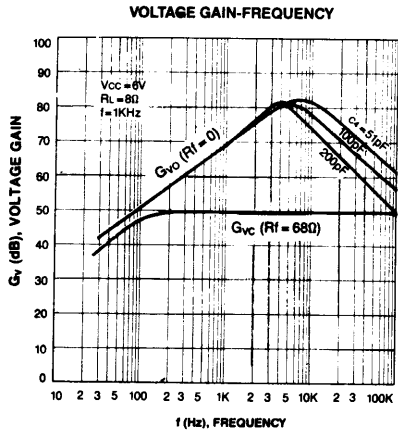


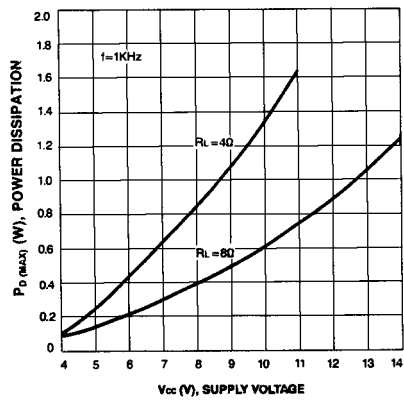
Fig. 2

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POWER DISSIPATION-SUPPLY VOLTAGE



QUIESCENT CIRCUIT CURRENT-SUPPLY VOLTAGE

