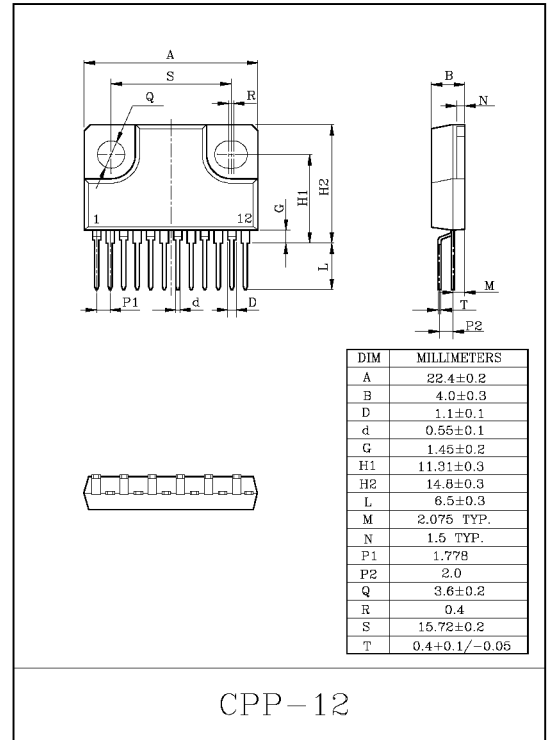


DUAL AUDIO POWER AMPLIFIER

The KIA8246H is dual power amplifier for consumer application. This IC provides an output power of 6 watts per channel (at $V_{CC}=20V$, $f=1kHz$, $THD=10\%$, $R_L=8\Omega$) It is suitable for power amplifier of TV and home stereo.

FEATURES :

- High Output Power : $P_{OUT}=6W$ (Typ.)
($V_{CC}=20V$, $f=1kHz$, $THD=10\%$, $R_L=8\Omega$)
- Built in audio muting circuit.
- NF terminal less
: Fixed gain($G_V=34dB$), needless external capacitor.
- Protectors
Thermal shut down protection circuit
Over voltage protection circuit..
- Low Popping Noise.
- Hi THD Ratio.
- Hi Input Dynamic Range.
- Operating Supply Voltage Range : $V_{CC(oper)}=10\sim 30V$.



MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V_{CC}	30	V
Output Current (Peak/ch)	$I_o(\text{Peak})$	2.0	A
Power Dissipation	P_D	25	W
Operating Temperature	T_{opr}	-20~75	°C
Storage Temperature	T_{stg}	-55~150	°C

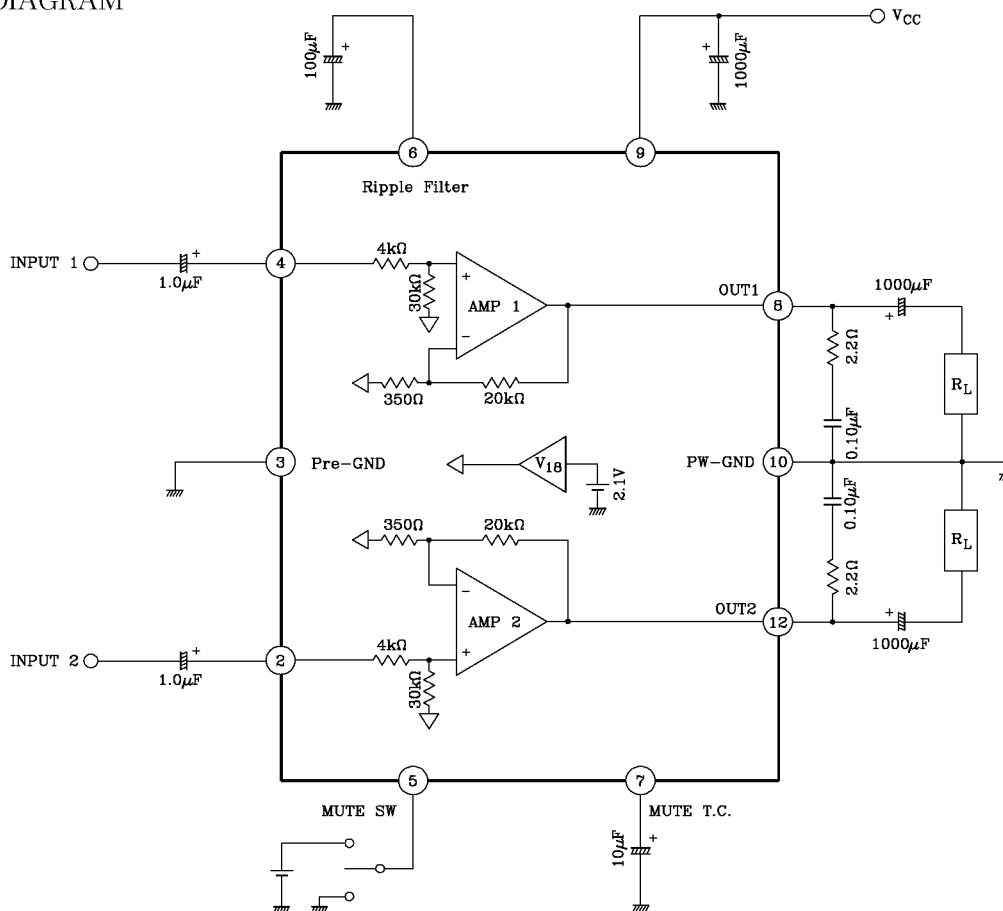
KIA8246H

ELECTRICAL CHARACTERISTICS

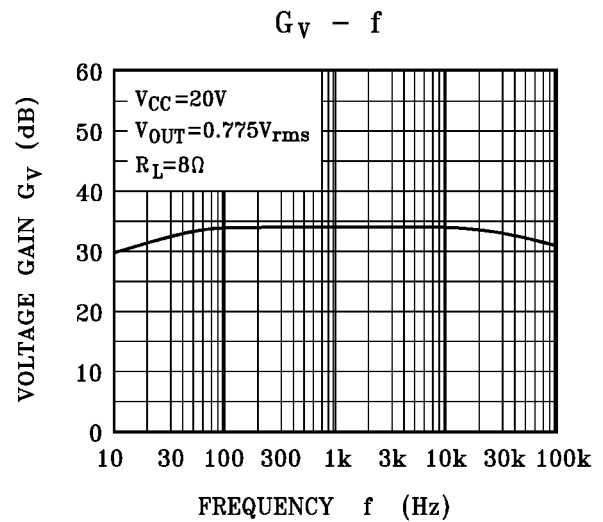
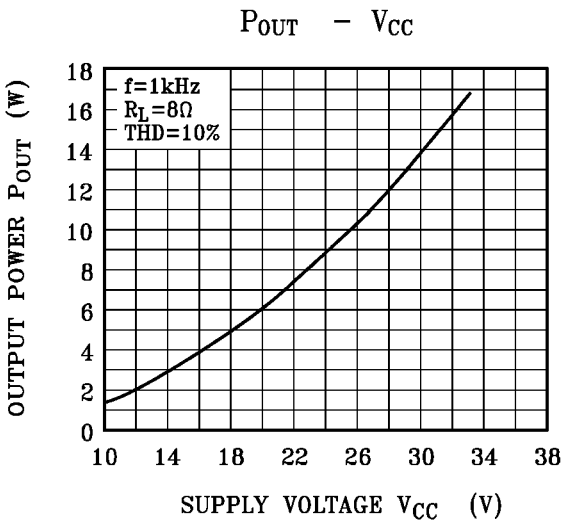
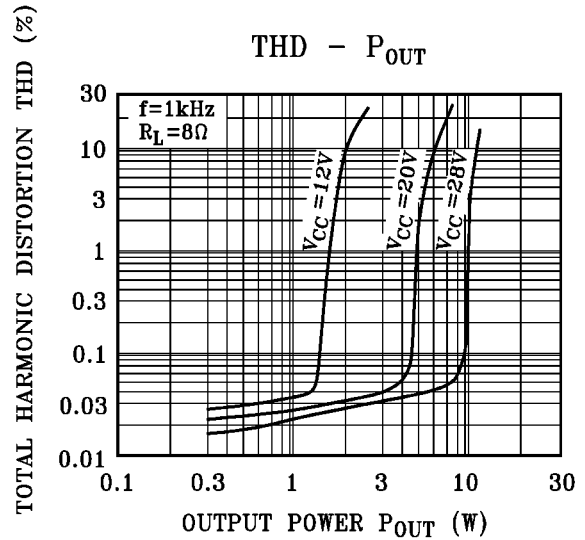
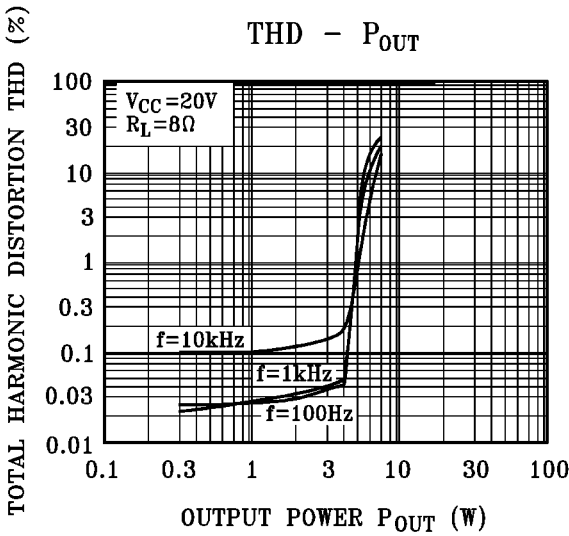
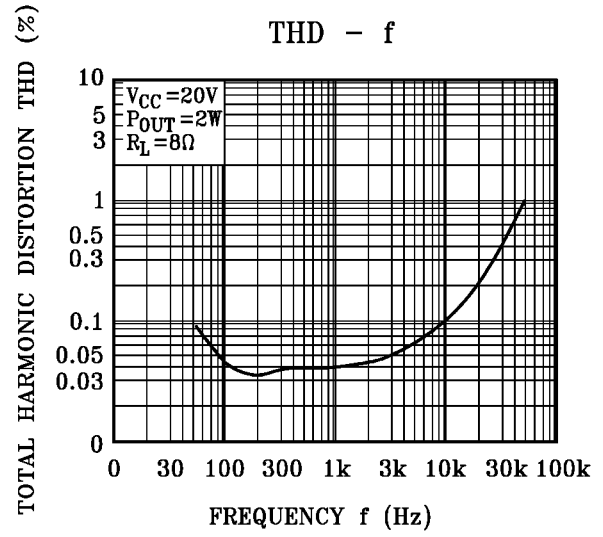
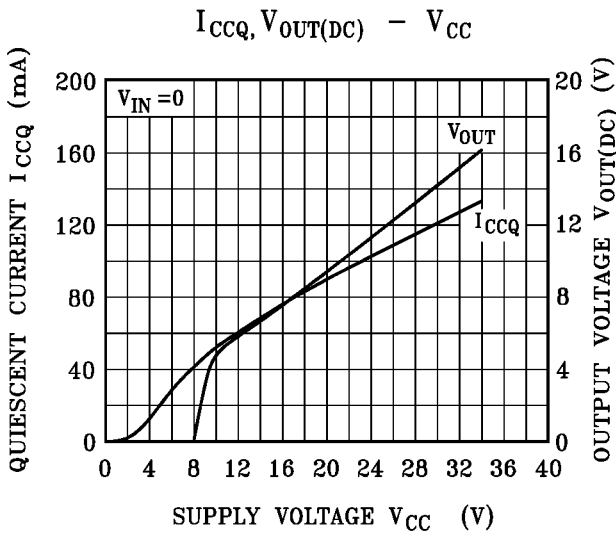
(Unless otherwise specified, $V_{CC}=20V$, $R_g=620\Omega$, $R_L=8\Omega$, $f=1kHz$, $T_a=25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Quiescent Current	I_{CCQ}	-	$V_{IN}=0$	50	85	130	mA
Output Power	$P_{OUT(1)}$	-	THD=10%	5.0	6.0	-	W
	$P_{OUT(2)}$	-	THD=1%	-	4.5	-	
Total Harmonic Distortion	THD(1)	-	$P_{OUT}=2W$	-	0.04	0.1	W
	THD(2)	-	$P_{OUT}=2W$, $f=10kHz$	-	0.1	0.6	
Voltage Gain	G_V	-	$V_{OUT}=0.775V_{rms}$	32.5	34.0	35.5	dB
Input Resistance	R_{IN}	-	-	-	34	-	$k\Omega$
Ripple Resistance Ratio	R.R	-	$f=100Hz$, $V_{ripple}=0.775V_{rms}$	-40	-47	-	dB
Output Noise Voltage	V_{NO}	-	$R_g=10k\Omega$, $BW=20Hz\sim 20kHz$	-	0.14	0.3	mV_{rms}
Cross Talk	C.T.	-	$R_g=10k\Omega$, $V_{OUT}=0.775V_{rms}$	-	-60	-	dB
Mute Control Voltage	$V_{th(ON)}$	-	MUTE ON	3.1	-	V_{CC}	V
	$V_{th(OFF)}$	-	MUTE OFF	GND	-	2.5	
Mute attenuation Level	ATT	-	$V_{out}=0.775V_{rms}\rightarrow MUTE$	-52	-60	-	dB

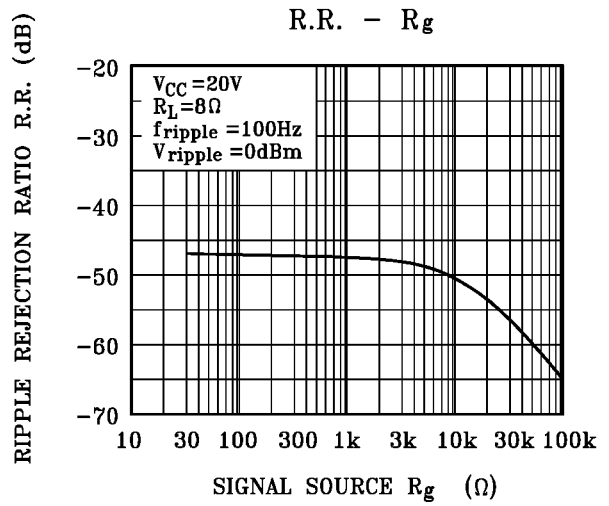
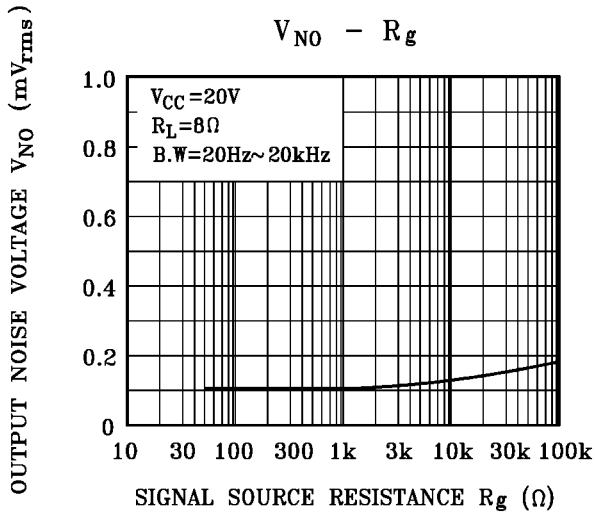
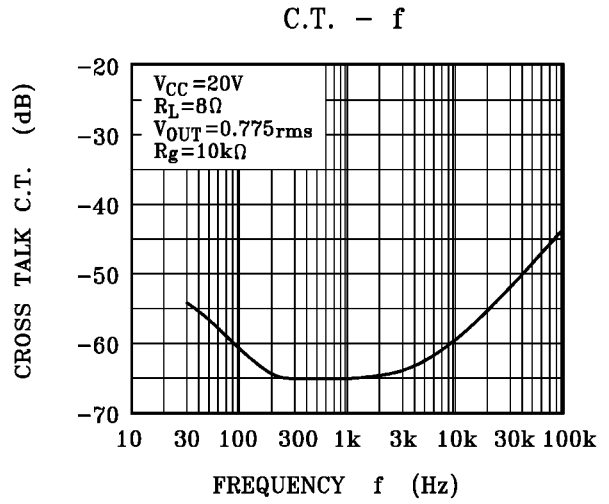
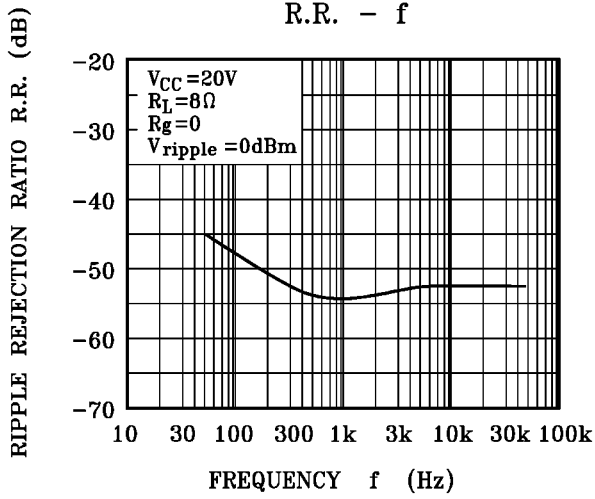
BLOCK DIAGRAM



KIA8246H

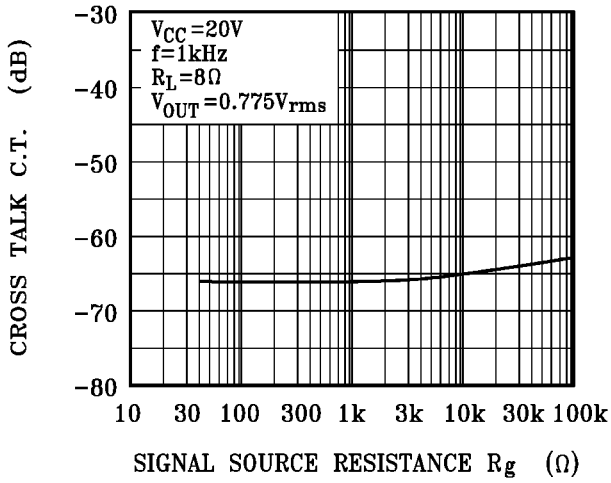


KIA8246H

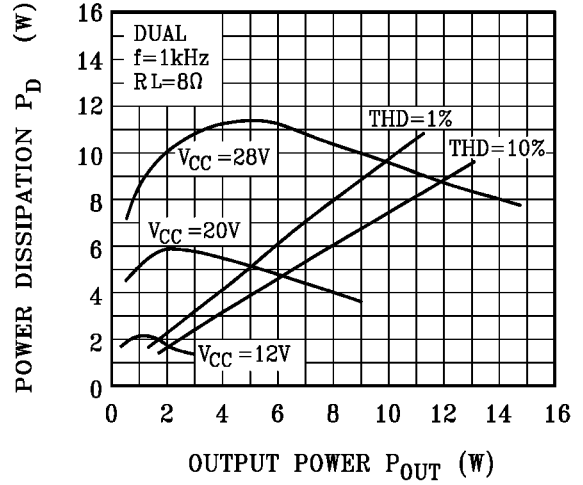


KIA8246H

C.T. - R_g



P_D - P_{OUT}



$P_{D(MAX)}$ - V_{CC}

