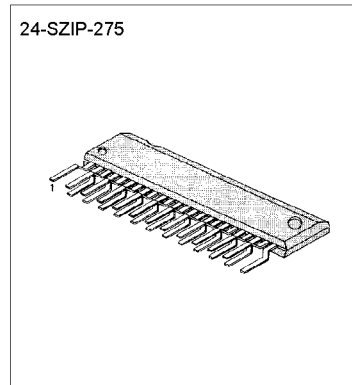


INTRODUCTION

The KA22234 is a monolithic integrated circuit developed for the stereo 5 band graphic equalizer amplifier. It is consisting of an operational amplifier, four resonant circuits with an active filter, and it is suitable for radio cassettes, car stereos or music centers.

FEATURES

- Tone control with independent adjustment of each band through external capacitor
- Gain control through external variable resistor (Gain = $\pm 11\text{dB}$)
- Excellent cross talk characteristic (CT = 70dB Typ, at $R_G = 0$)
- Wide operating supply voltage range: $V_{CC} = 3.5\text{V} \sim 14\text{V}$



ORDERING INFORMATION

Device	Package	Operating Temperature
KA22234	24-SZIP-275	-20°C ~ +70°C

BLOCK DIAGRAM

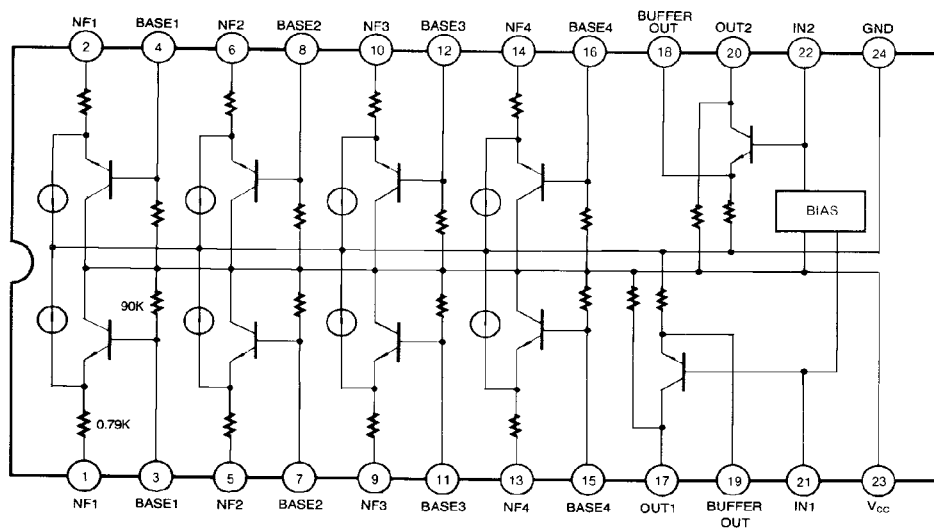


Fig. 1

ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

Characteristic	Symbol	Value	Unit
Supply Voltage	V _{CC}	15	V
Power Dissipation	P _D	500	mW
Operating Temperature	T _{OPR}	-20 ~ + 70	°C
Storage Temperature	T _{STG}	-40 ~ + 125	°C

ELECTRICAL CHARACTERISTICS

 (Ta = 25°C, V_{CC} = 8V, R_L = 20KΩ, Flat Mode, unless otherwise specified)

Characteristic	Symbol	Test Conditions		Min	Typ	Max	Unit	
		f(Hz)	Condition					
Quiescent Circuit Current	I _{CCQ}		V _I = 0	4.0	7.0	10.0	mA	
Output Voltage	V _O	1K	THD = 1%	500	600		mV	
Total Harmonic Distortion	THD	1K			0.1	0.3	%	
Channel Balance	CB	1K		-1.0	0	1.0	dB	
Cross Talk	CT	1K		50	70		dB	
Output Noise Voltage	V _{NO}	Flat, R _G = 2.2KΩ BW(-3dB) = 10Hz ~ 30KHz			10	20	μV	
Voltage Gain	Flat	G _V (Flat)	1K	V _I = 100mV	-2.0	-1.5	1.0	dB
	Boost	G _V (Boost)	100	V _I = 100mV	9.0	11.0	14.0	dB
			300					
			1K					
			3K					
			10K					
	Cut	G _V (Cut)	100	V _I = 100mV	-14.0	-11.0	-9.0	dB
			300					
			1K					
			3K					
			10K					

TEST CIRCUIT

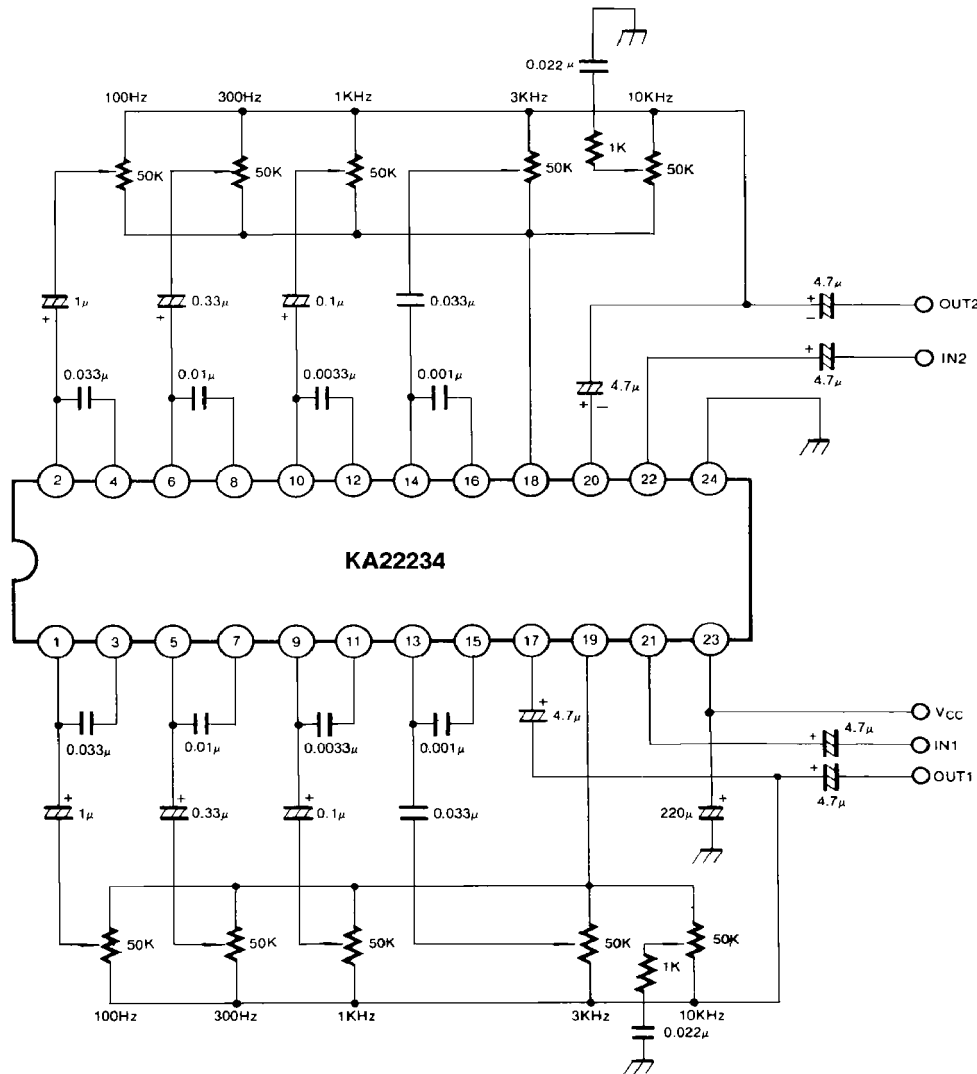
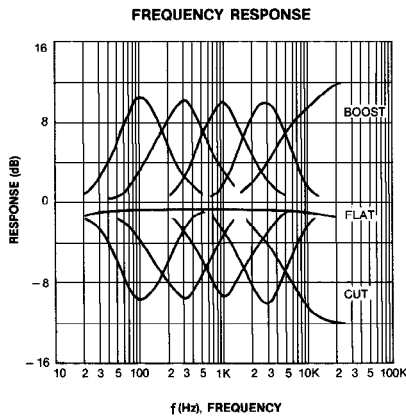
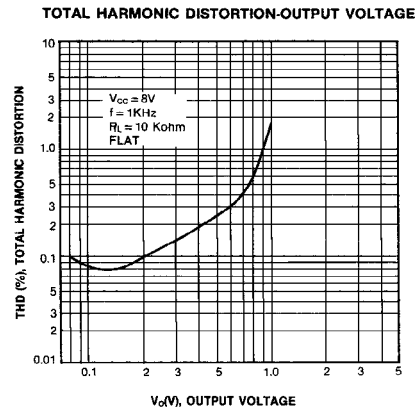
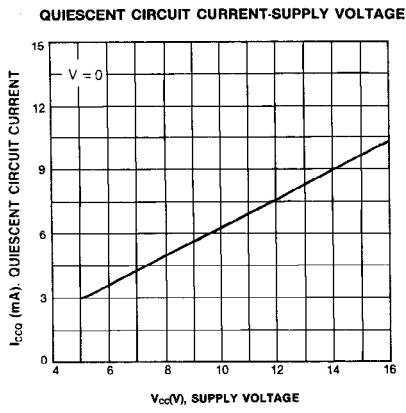


Fig. 2



Dimensions in Millimeters

