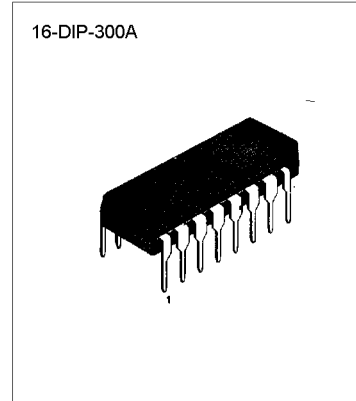


**INTRODUCTION**

The KA22261 is a monolithic integrated circuit consisting of a dual equalizer amplifier with REC AMP, and it is suitable for stereo radio cassettes.

**FEATURES**

- Dual equalizer amplifier with ALC circuit.
- High open loop voltage gain : 78dB (Typ).
- Recording amplifier available because of high open loop voltage gain.
- Not necessary diode or transistor for ALC.
- Good channel separation : 60dB (Typ).
- Good ALC response balance between channels.
- Wide operating supply voltage range :  $V_{CC} = 6V \sim 15V$ .



**ORDERING INFORMATION**

Device	Package	Operating Temperature
KA22261	16-DIP-300A	-20°C ~ +70°C

**BLOCK DIAGRAM**

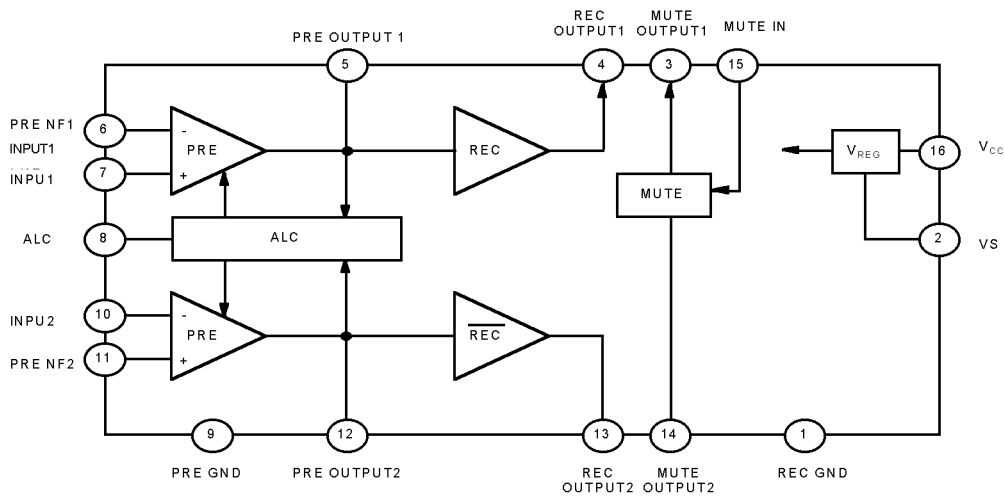


Fig 1.

**ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)**

Characteristics	Symbol	Value	Unit
Supply Voltage	V <sub>CC</sub>	16	V
Power Dissipation	P <sub>D</sub>	750	W
Operating Temperature	T <sub>OPR</sub>	-20 ~ +70	°C
Storage Temperature	T <sub>STG</sub>	-40 ~ +150	°C

**ELECTRICAL CHARACTERISTICS**

 (Ta = 25°C, V<sub>CC</sub> = 9V, f = 1KHz, unless otherwise specified)

Characteristics		Symbol	Test Condition	Min	Typ	Max	Unit
Quiescent Circuit Current		I <sub>CCQ</sub>	V <sub>I</sub> = 0		8.5	10.5	mA
PRE AMP	Open Loop Voltage Gain	G <sub>VO</sub>	V <sub>I</sub> = -80dbm	65	78		dB
	Output Voltage	V <sub>O1</sub>	THD = 1%	0.5	0.8		V
	Total Harmonic Distortion	THD <sub>1</sub>	V <sub>O</sub> = 0.2V		0.15	0.5	%
	Output Noise Voltage	V <sub>NO</sub>	R <sub>G</sub> = 2.2KΩ, NAB BW(-3dB) = 30Ha ~ 20KHz		0.26	0.6	mW
	Cross Talk	CT	R <sub>G</sub> = 2.2KΩ	47	60		dB
REC AMP	Closed Loop Voltage Gain	G <sub>VC</sub>	R <sub>L</sub> = 10KΩ	12.7	14.7	16.7	dB
	Output Voltage	V <sub>O2</sub>	THD = 1%	2.0	2.5		V
	Total Harmonic Distortion	THD <sub>2</sub>	V <sub>O</sub> = 1.5V		0.3	1.0	%
	ALC Range ( Note 1)	ΔV <sub>ALC</sub>	V <sub>I</sub> = -60dB, R <sub>G</sub> = 2.2KΩ		45		dB
	ALC Distortion	THD <sub>ALC</sub>	V <sub>I</sub> = -20dBm, R <sub>G</sub> = 2.2KΩ		0.3	1.0	V
	ALC Voltage	V <sub>O(ALC)</sub>	V <sub>I</sub> = -20dBm, R <sub>G</sub> = 2.2KΩ	0.9	1.1	1.42	%
Muting Attenuation		ATT <sub>MUTE</sub>		45	55		dB
ALC Balance		CB <sub>ALC</sub>	V <sub>I</sub> = -20dBm		0	2	dB

 \*Note 1 : Input voltage range from V<sub>I</sub> = -60dB to output voltage V<sub>O</sub> = 3dB up.

**TEST CIRCUIT**

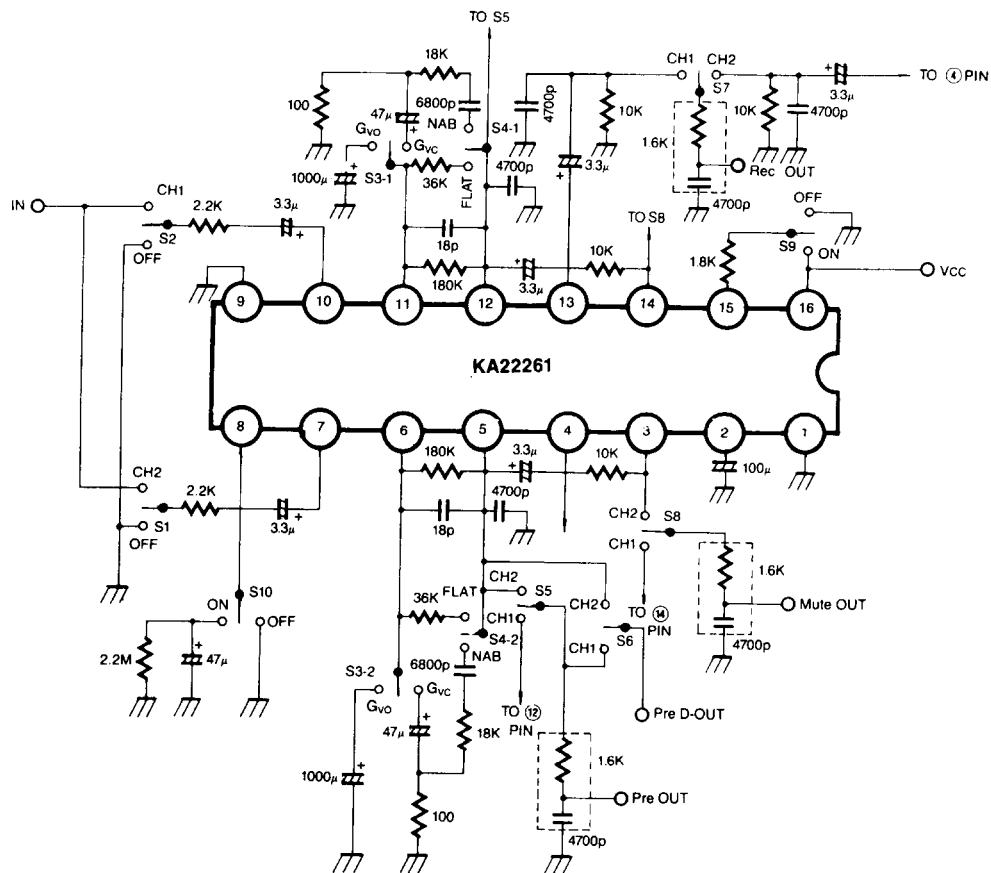
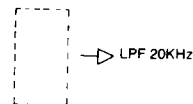


Fig. 2



**APPLICATION CIRCUIT**

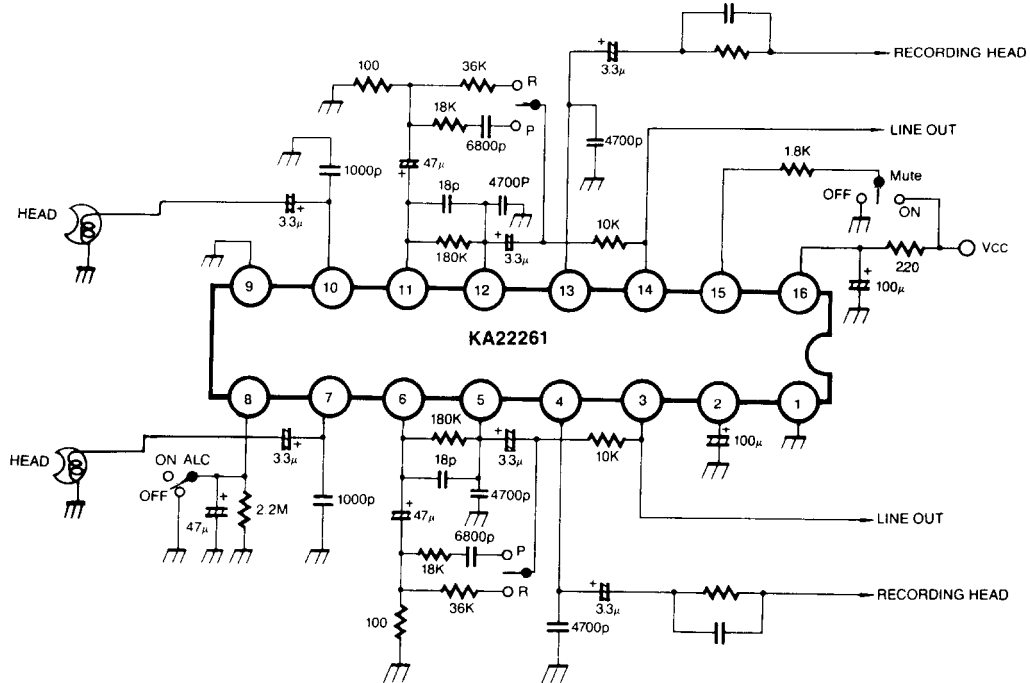


Fig. 3

Dimensions in Millimeters

