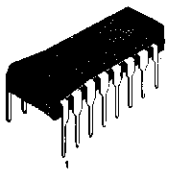
INTRODUCTION

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

16-DIP-300A



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 ~ 15V.

ORDERING INFORMATION

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

BLOCK DIAGRAM

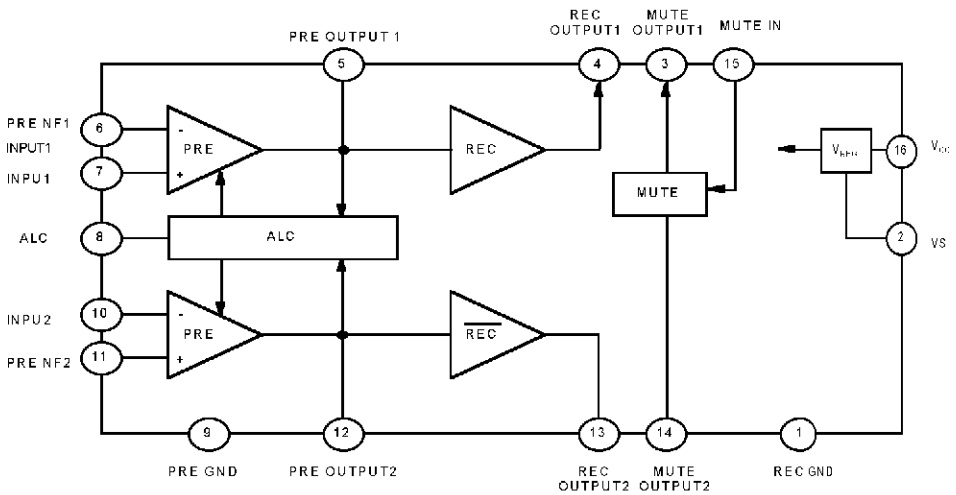


Fig 1.

ABSOLUTE MAXIMUM RATINGS (Ta = 25℃)

Characteristics	Symbol	Value	Unit
Supply Voltage	V_{CC}	16	V
Power Dissipation	P_D	750	W
Operating Temperature	T_{OPR}	-20 ~ +70	℃
Storage Temperature	T_{STG}	-40 ~ +150	℃

ELECTRICAL CHARACTERISTICS

(Ta = 25℃, V_{CC} = 9V, f = 1KHz, unless otherwise specified)

Characteristics		Symbol	Test Condition	Min	Typ	Max	Unit
Quiescent Circuit Current		I_{CCQ}	V_I = 0		8.5	10.5	mA
PRE AMP	Open Loop Voltage Gain	G_{VO}	V_I = -80dbm	65	78		dB
	Output Voltage	V_{O1}	THD = 1%	0.5	0.8		V
	Total Harmonic Distortion	THD_1	V_O = 0.2V		0.15	0.5	%
	Output Noise Voltage	V_{NO}	R_G = 2.2KΩ, NAB BW(-3dB) = 30Ha ~ 20KHz		0.26	0.6	mW
	Cross Talk	CT	R_G = 2.2KΩ	47	60		dB
REC AMP	Closed Loop Voltage Gain	G_{VC}	R_L = 10KΩ	12.7	14.7	16.7	dB
	Output Voltage	V_{O2}	THD = 1%	2.0	2.5		V
	Total Harmonic Distortion	THD_2	V_O = 1.5V		0.3	1.0	%
	ALC Range (Note 1)	$\triangle V_{ALC}$	V_I = -60dB, R_G = 2.2KΩ		45		dB
	ALC Distortion	THD_{ALC}	V_I = -20dBm,R_G = 2.2KΩ		0.3	1.0	V
	ALC Voltage	$VO_{(ALC)}$	V_I= -20dBm, R_G = 2.2KΩ	0.9	1.1	1.42	%
Muting Attenuation		ATT_{MUTE}		45	55		dB
ALC Balance		CB_{ALC}	V_I = -20dBm		0	2	dB

*Note 1 : Input voltage range from V_I = -60dB to output voltage V_O = 3dB up.

TEST CIRCUIT

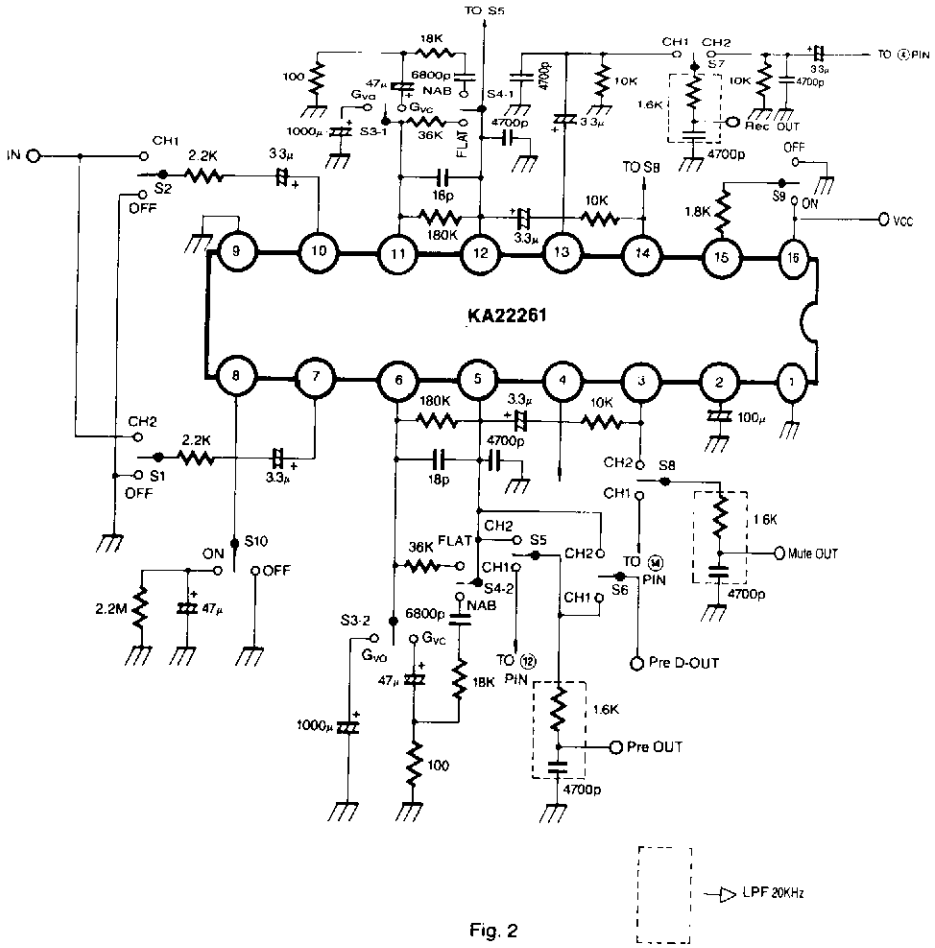


Fig. 2

APPLICATION CIRCUIT

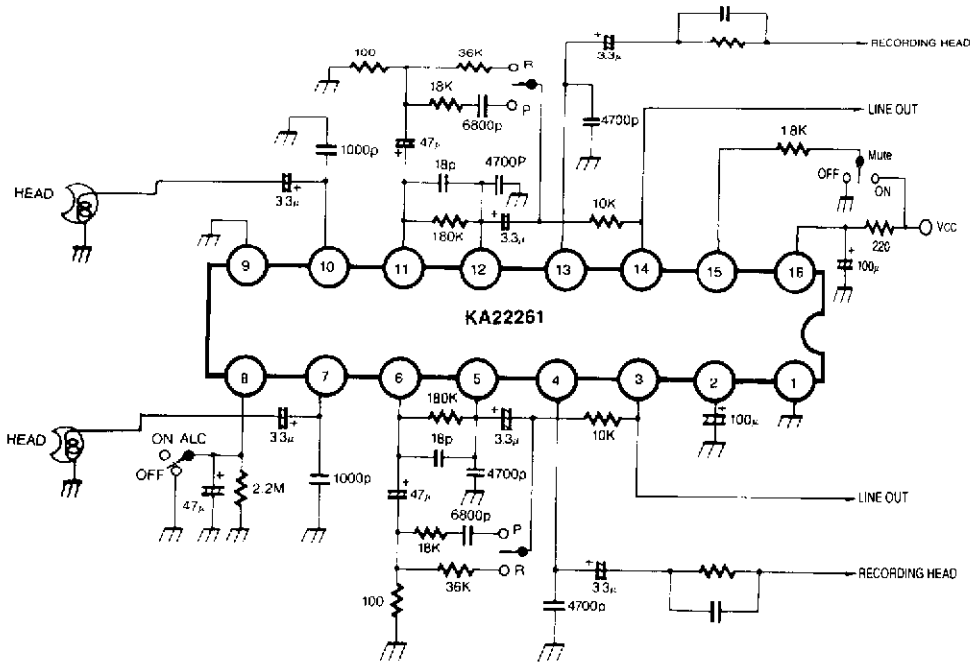
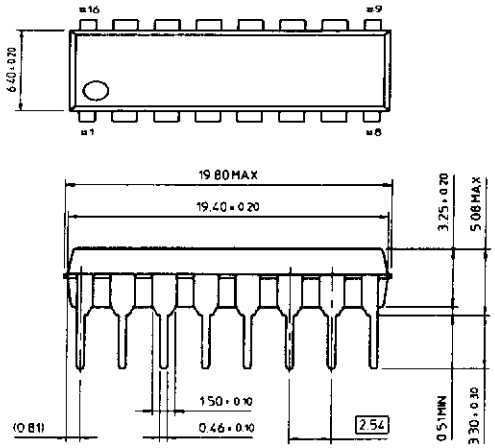


Fig. 3

Dimensions in Milimeters

16-DIP-300A



22-SDIP-300