

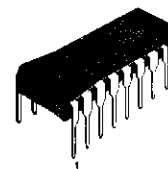
INTRODUCTION

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 : $V_{CC} = 6V \sim 15V$.

16-DIP-300A



ORDERING INFORMATION

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

BLOCK DIAGRAM

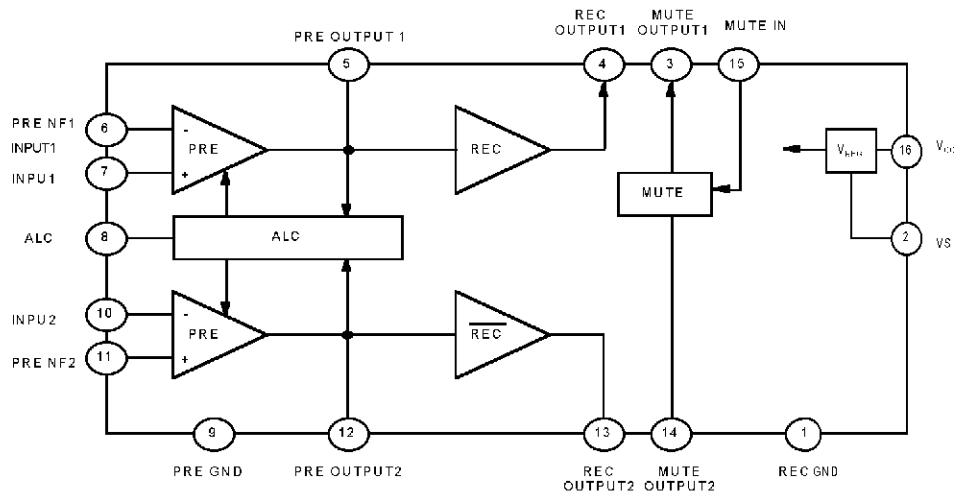


Fig 1.

ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

| Characteristics | Symbol | Value | Unit |
|-----------------------|------------------|------------|------|
| Supply Voltage | V _{CC} | 16 | V |
| Power Dissipation | P _D | 750 | mW |
| Operating Temperature | T _{OPR} | -20 ~ +70 | °C |
| Storage Temperature | T _{STG} | -40 ~ +150 | °C |

ELECTRICAL CHARACTERISTICS

 (Ta = 25°C, 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) | ∧ 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 | V _{O(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

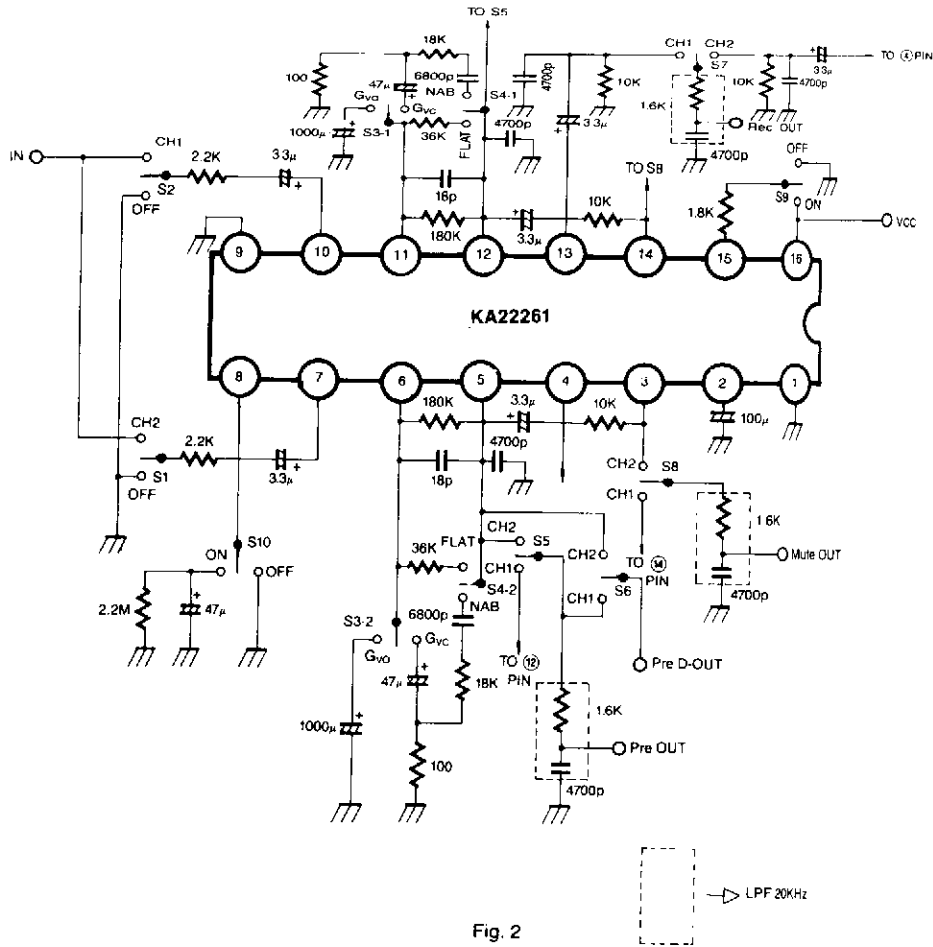


Fig. 2

APPLICATION CIRCUIT

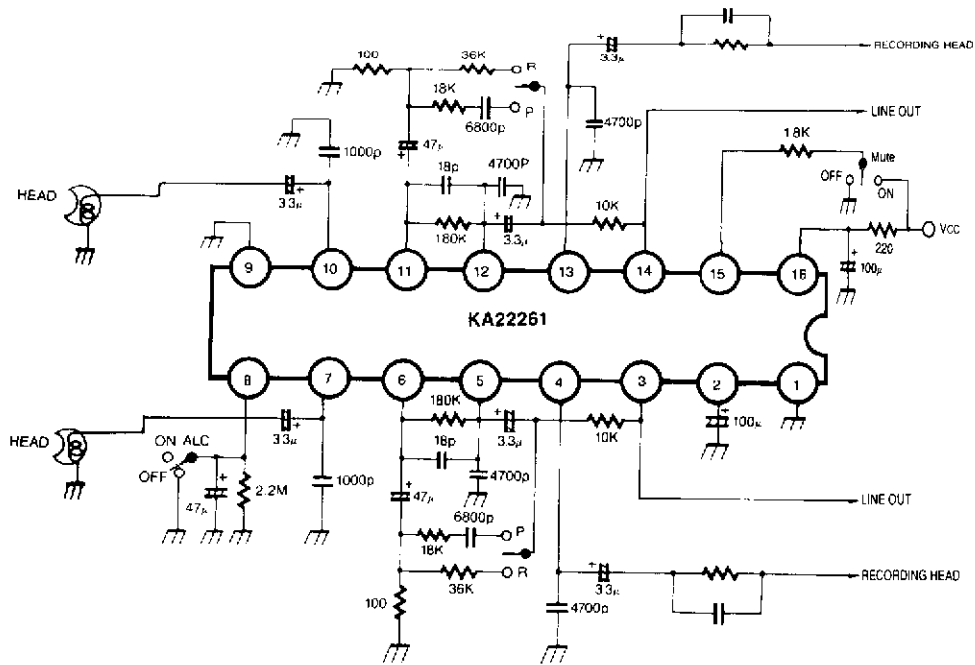


Fig. 3

Dimensions in Millimeters

