

AN7062N

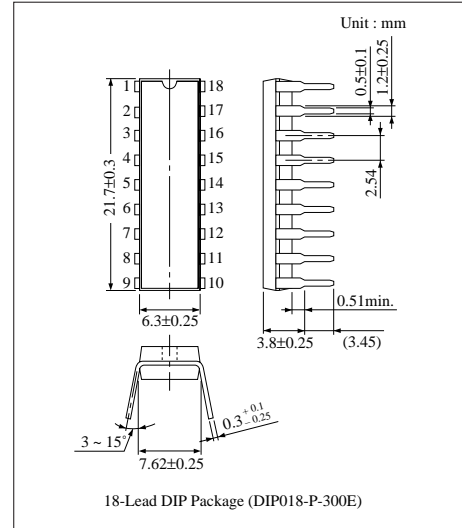
High Voltage Input Amplifier Circuit for Hi-Fi Power Amplifier

■ Overview

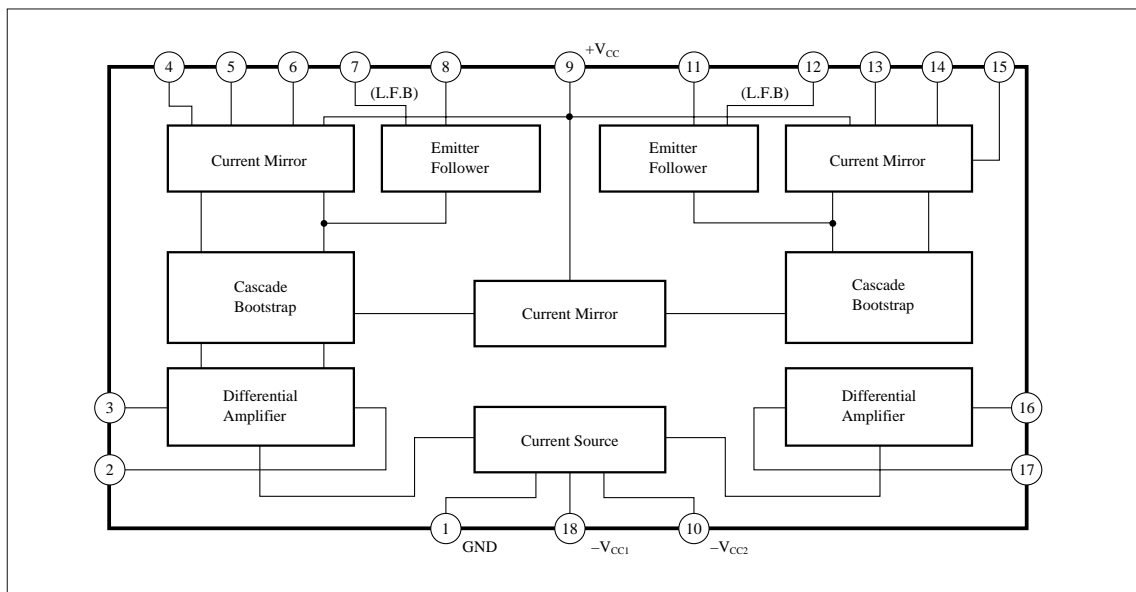
The AN7062N is a high voltage integrated circuit designed for pre-driver of 60W-class Hi-Fi audio amp. Stereo operation is enabled due to two amplifiers built-in.

■ Features

- High voltage
- Low noise : $V_{ni} = 2.5\mu\text{V}$ (typ.)
- Low distortion : THD = 0.003% (typ.)
- Good channel separation
- Wide operating supply voltage range



■ Block Diagram

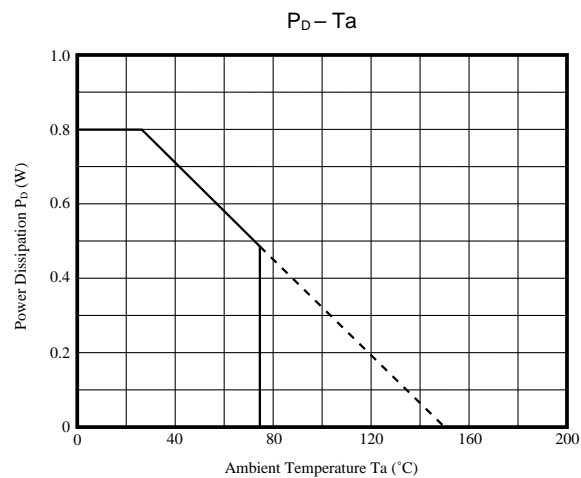


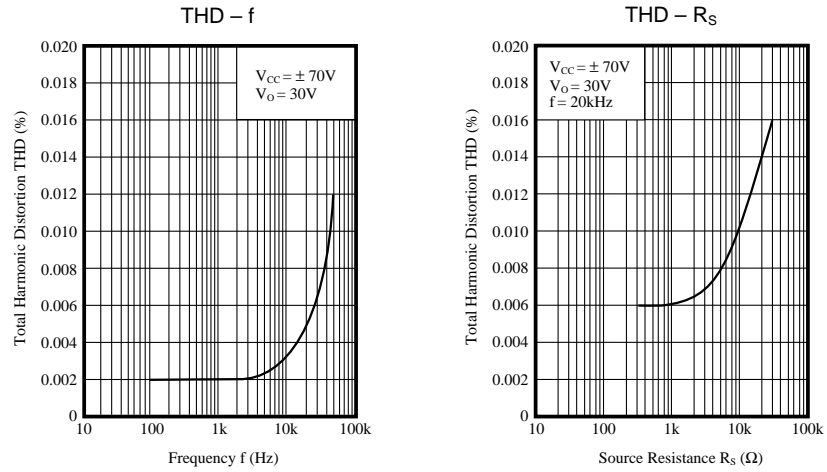
■ Absolute Maximum Ratings (Ta= 25°C)

| Parameter | Symbol | Rating | Unit |
|-------------------------------|-------------------|--------------|------|
| Supply Voltage | + V _{CC} | + 74 | V |
| Supply Voltage | - V _{CC} | - 16 | V |
| Supply Current | I _{CC} | 10 | mA |
| Power Dissipation | P _D | 800 | mW |
| Operating Ambient Temperature | T _{opr} | - 25 ~ + 75 | °C |
| Storage Temperature | T _{stg} | - 55 ~ + 150 | °C |

■ Electrical Characteristics (V_{CC} = ± 70V, f = 20kHz, Ta= 25°C)

| Parameter | Symbol | Condition | min. | typ. | max. | Unit |
|---------------------------|--------------------|--|------|-------|------|------|
| Plus Side Supply Current | I _{tot-1} | V _i = 0mV | 2.5 | 5 | 7.5 | mA |
| Minus Side Supply Current | I _{tot-2} | V _i = 0mV | 1.5 | 2.8 | 4.5 | mA |
| Output Noise Voltage | V _{no1} | V _i = 0mV, R _g = 0Ω, DIN - A Filter, f = 20Hz ~ 20kHz, -12dB/OCT | — | 0.14 | 1 | mV |
| Output Noise Voltage | V _{no2} | V _i = 0mV, R _g = 0Ω | — | 0.5 | 1.5 | mV |
| Total Harmonic Distortion | THD | V _O = 30V | — | 0.003 | 0.01 | % |
| Open Circuit Voltage Gain | G _{VO} | V _O = 30V | — | 95 | — | dB |





■ Pin Descriptions

| Pin No. | Pin Name | Pin No. | Pin Name |
|---------|---------------------------|---------|---------------------------|
| 1 | GND | 10 | $-V_{CC2}$ |
| 2 | Input (Ch.1) | 11 | Output (Ch.2) |
| 3 | N.F.B (Ch.1) | 12 | Linear Feedback (Ch.2) |
| 4 | Phase Compensation (Ch.1) | 13 | Linear Feedback (Ch.2) |
| 5 | Phase Compensation (Ch.1) | 14 | Phase Compensation (Ch.2) |
| 6 | Linear Feedback (Ch.1) | 15 | Phase Compensation (Ch.2) |
| 7 | Linear Feedback (Ch.1) | 16 | N.F.B (Ch.2) |
| 8 | Output (Ch.1) | 17 | Input (Ch.2) |
| 9 | $+V_{CC}$ | 18 | $-V_{CC1}$ |