

# AN7062N

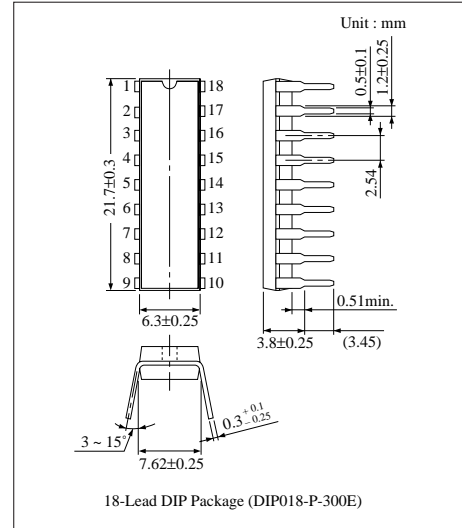
## High Voltage Input Amplifier Circuit for Hi-Fi Power Amplifier

### ■ Overview

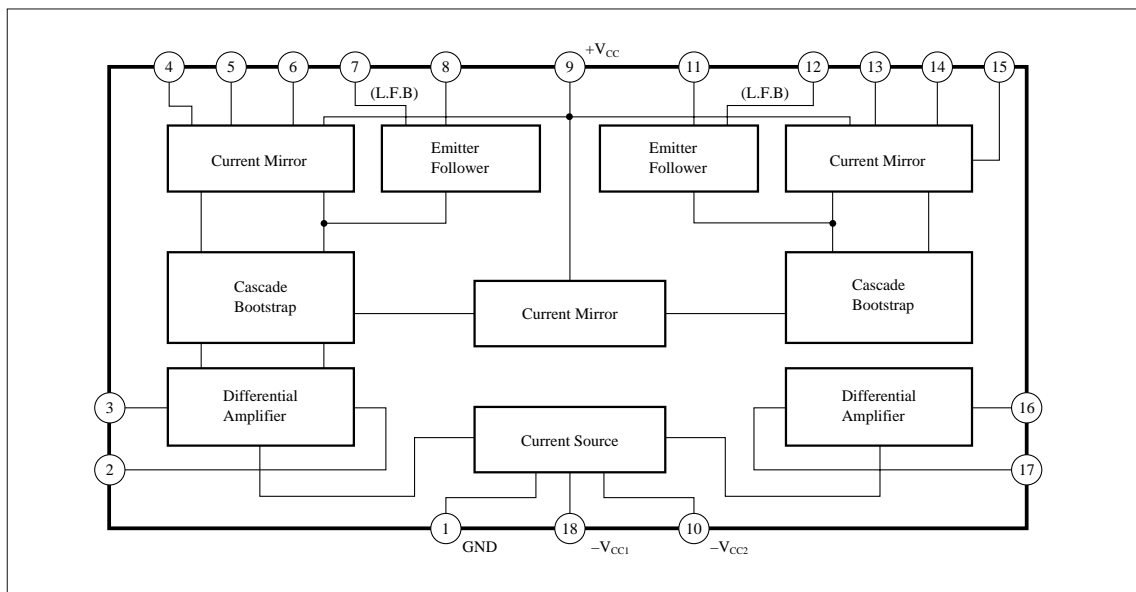
The AN7062N is a high voltage integrated circuit designed for pre-driver of 60W-class Hi-Fi audio amp. Stereo operation is enabled due to two amplifiers built-in.

### ■ 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

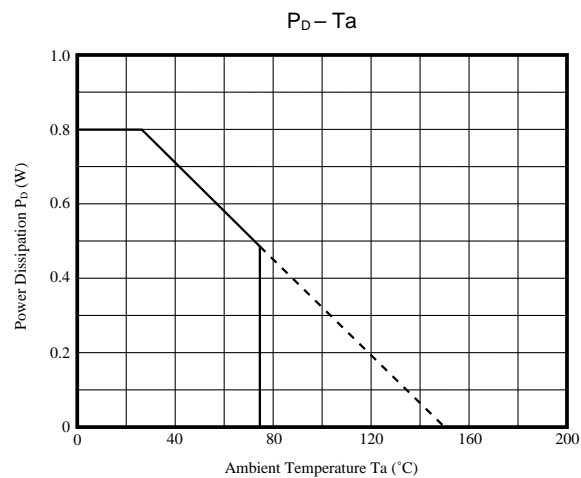


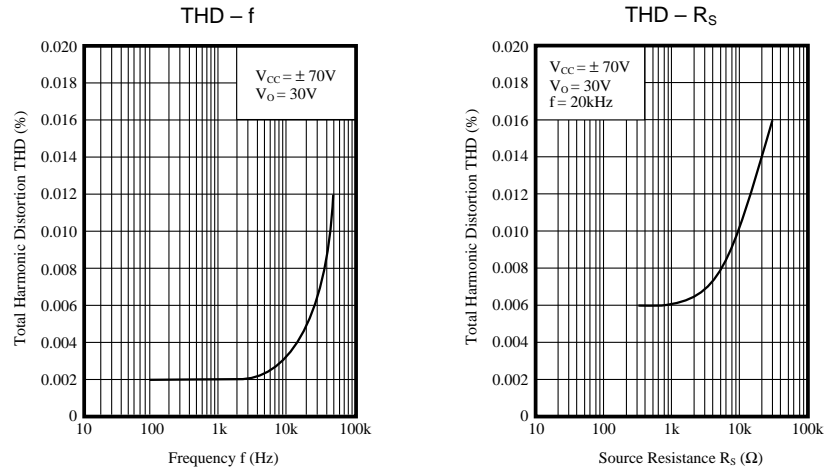
### ■ Absolute Maximum Ratings (Ta= 25°C)

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

### ■ Electrical Characteristics (V<sub>CC</sub> = ± 70V, f = 20kHz, Ta= 25°C)

| Parameter                 | Symbol             | Condition  | min. | typ.  | max. | Unit |
|---------------------------|--------------------|--|------|-------|------|------|
| Plus Side Supply Current  | I <sub>tot-1</sub> | V <sub>i</sub> = 0mV   | 2.5  | 5     | 7.5  | mA   |
| Minus Side Supply Current | I <sub>tot-2</sub> | V <sub>i</sub> = 0mV   | 1.5  | 2.8   | 4.5  | mA   |
| Output Noise Voltage      | V <sub>no1</sub>   | V <sub>i</sub> = 0mV, R <sub>g</sub> = 0Ω,<br>DIN - A Filter, f = 20Hz ~ 20kHz,<br>-12dB/OCT | —    | 0.14  | 1    | mV   |
| Output Noise Voltage      | V <sub>no2</sub>   | V <sub>i</sub> = 0mV, R <sub>g</sub> = 0Ω  | —    | 0.5   | 1.5  | mV   |
| Total Harmonic Distortion | THD                | V <sub>O</sub> = 30V   | —    | 0.003 | 0.01 | %    |
| Open Circuit Voltage Gain | G <sub>VO</sub>    | V <sub>O</sub> = 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      | $-V_{CC1}$                |