

# AN7062N

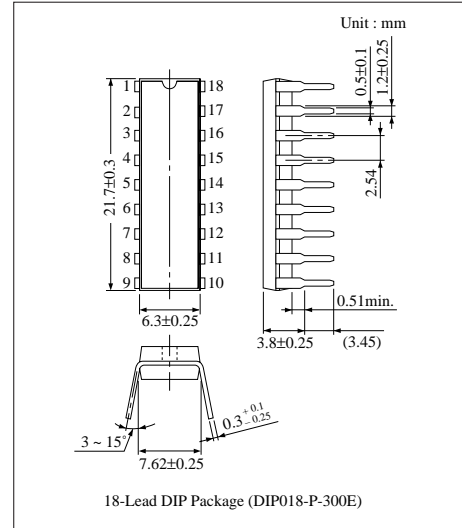
## High Voltage Input Amplifier Circuit for Hi-Fi Power Amplifier

### ■ Overview

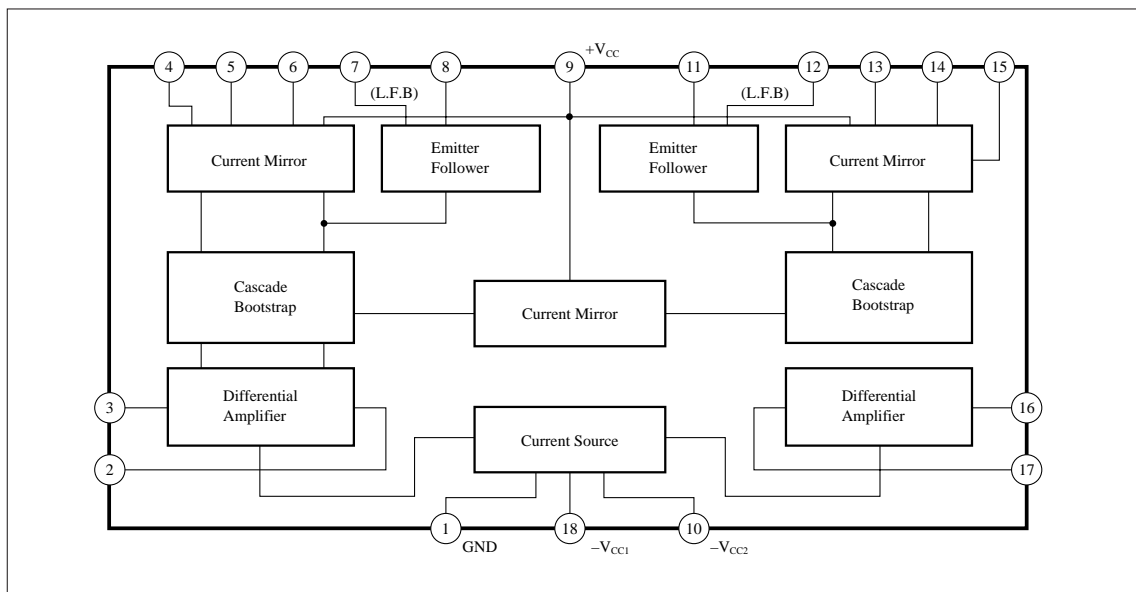
The AN7062N is a high voltage integrated circuit designed for pre-driver of 60W-class Hi-Fi audio amp. Stereo operation is enabled due to two amplifiers built-in.

### ■ 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

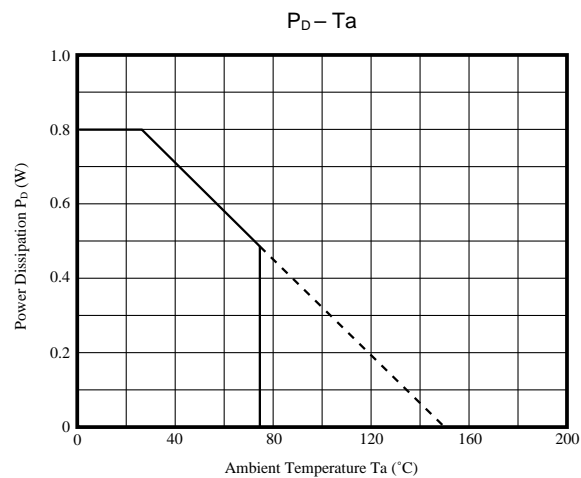


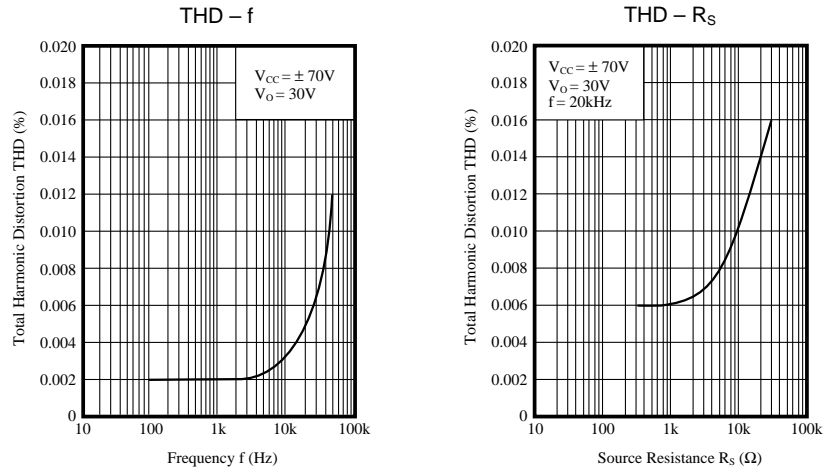
### ■ Absolute Maximum Ratings (Ta= 25°C)

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, DIN - A Filter, f = 20Hz ~ 20kHz, -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	$-V_{CC1}$

Test Circuit 1

