

General Description

The AS9896 is a stereo bridged audio power amplifier capable of delivering 1.2W of continuous average power into a 8Ω load or 1.7W into 4Ω with less than 1% THD when powered by a 5V power supply. It does not require output coupling capacitors or bootstrap capacitors, and is ideal for mobile phone and other low voltage applications where minimal power consumption is a primary requirement.

The AS9896 features a low-power consumption shutdown mode, and an internal thermal shutdown protection mechanism. Advanced pop & click circuitry is built in to eliminate noises that would otherwise occur during turn-on and turn-off transitions. The AS9896 is unity-gain stable and can be configured by external gain-setting resistors.

Key Specifications

- BTL mode P_{O} at THD+N=1%, f=1kHz, V_{DD} =5V
1.7 W (typ) into 4Ω
1.2 W (typ) into 8Ω
- BTL mode P_{O} at THD+N=10%, f=1kHz, V_{DD} =5V
2 W (typ) into 4Ω
1.5 W (typ) into 8Ω
- Shutdown current 0.1μA (typ)

Features

- No output coupling capacitors, bootstrap capacitors, or snubber circuits required
- Unity-gain stable
- QFN
- External gain configuration capability

Applications

- Portable Computers
- Desktop computers

Connection Diagram

QFN Package

