

1 Watt Audio Power Amplifier

DESCRIPTION

The EUA4890 is an audio power amplifier designed for portable communication device applications such as mobile phone applications. The EUA4890 is capable of delivering 1.0W of continuous average power to an 8Ω BTL and with less than 1% distortion (THD+N) from a 5.0V power supply, and 350mW to a 8Ω BTL load from a 3V power supply.

The EUA4890 provides high quality audio while requiring few external components and minimal power consumption. It features a low-power shutdown mode, which is achieved by driving the SHUTDOWN pin with logic low.

The EUA4890 contains circuitry to prevent from "pop and click" noise that would otherwise occur during turn-on and turn-off transitions.

For maximum flexibility, the EUA4890 provides an externally controlled gain (with resistors), as well as an externally controlled turn-on and turn-off times (with the bypass capacitor).

The EUA4890 is available in a MSOP-8 , 3mm×3mm DFN package.

FEATURES

- 2.5-5.5V operation
- 65dB PSRR at 217Hz, $V_{DD}=5V$
- 0.1μA ultra low current shutdown mode
- Improved pop & click circuitry
- No output coupling capacitors, snubber networks or bootstrap capacitors required
- Thermal shutdown protection
- Unity-gain stable
- External gain configuration capability
- BTL output can drive capacitive loads
- RoHS compliant and 100% lead(Pb)-free

APPLICATIONS

- Mobile Phones
- PDAs
- Portable electronic devices

Block Diagram

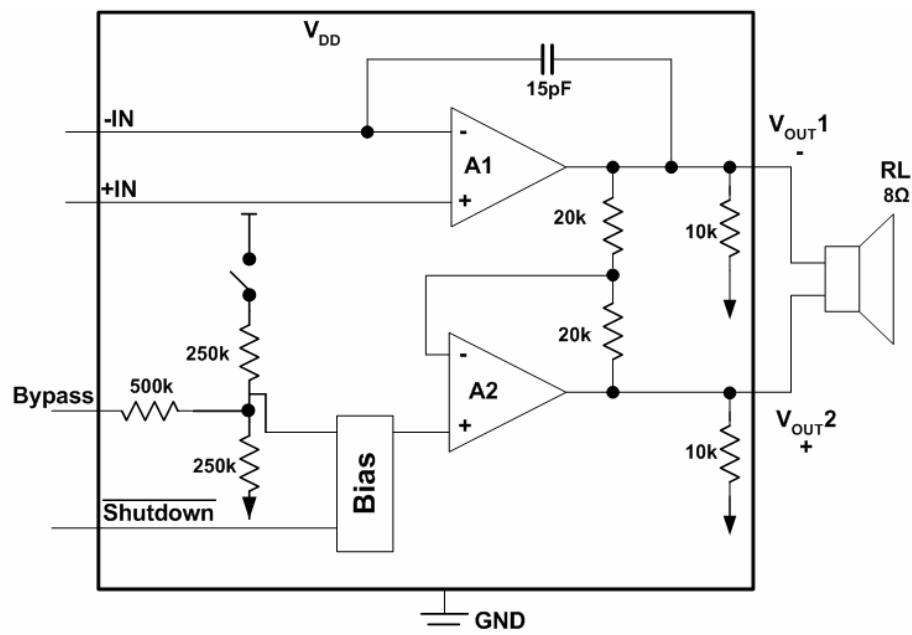


Figure1.