

Hearing Aid Omnidirectional MEMS Microphone

Data Sheet ADMP801

FEATURES

Small surface-mount package: 3.35 mm \times 2.5 mm \times 0.98 mm Equivalent input noise: 27 dBA SPL

Sensitivity: –35 dBV

Hearing aid-compatible voltage range: 0.9 V to 1.3 V

Low current consumption: 17 µA

0.8 sec startup to within 0.2 dB of 1 kHz sensitivity

Flat frequency response

Good sensitivity and frequency response matching

Single-ended analog output

Compatible with Sn/Pb and Pb-free solder processes

RoHS/WEEE compliant

APPLICATIONS

Hearing aids
Hearing aid accessories
Assistive listening/alerting and signaling systems
Audiometers
Bone conduction devices
Hearing protection

GENERAL DESCRIPTION

The ADMP801 is a high performance MEMS microphone with a unique combination of very low self-noise, tiny package volume (7.3 mm³), and low power consumption. Running from a 1 V supply, the ADMP801 consumes only 17 μA of current while providing an equivalent input noise of 27 dBA SPL with an analog 4.5 k Ω impedance output. These features, combined with the benefits of MEMS technology, reflow solder compatibility, and a highly stable response over time and temperature, make the ADMP801 an ideal microphone choice for assistive listening devices (ALDs) such as hearing aids.

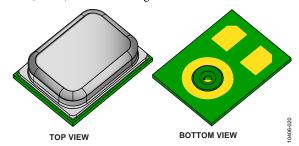
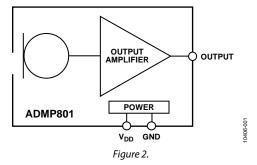


Figure 1. Isometric Views of the ADMP801 Microphone Package

FUNCTIONAL BLOCK DIAGRAM



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NOTES