

# Hearing Aid Omnidirectional MEMS Microphone

Data Sheet ADMP803

## **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 ADMP803 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 ADMP803 consumes only 17  $\mu A$  of current while providing an equivalent input noise of 27 dBA SPL with an analog 4.5 k $\Omega$  impedance output. Combined with the benefits of MEMS technology, reflow solder compatibility, and a highly stable response over time and temperature, these features make the ADMP803 an ideal microphone choice for assistive listening devices (ALDs) such as hearing aids.

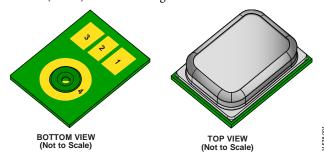
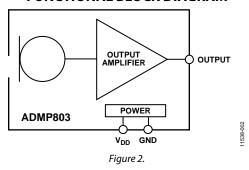


Figure 1. Isometric Views of the ADMP803 Microphone Package

### **FUNCTIONAL BLOCK DIAGRAM**



For more information about the ADMP803, contact HA\_Mics@analog.com.

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**NOTES**