

Smart Components

A2B compatible Acceleration Sensor / Microphones

A2B compatible Acceleration Sensor — Acceleration sensor module for ANC systems —

● Features

- A2B (Automotive Audio Bus) interface compatible
- Outputs acceleration variation as audio components for the ANC system
- Collects vibrations of a wide frequency range
- Low latency

● Typical Specifications

| Item | Specification |
|-----------------------|-------------------------------------------|
| Axes | 2 (X , Y) |
| Frequency | 30 Hz to 1,000 Hz |
| Measurement range | ± 8 G |
| Noise density | 130 $\mu\text{g} / \sqrt{\text{Hz}}$ typ. |
| Latency | 0.2 ms typ. |
| Operating temperature | - 40 °C to 85 °C |

● Applications

- Automotive ANC (Active Noise Control) systems



Prototype

A2B compatible Microphones — High input and high SN microphones for the HF / ANC system —

● Features

- A2B (Automotive Audio Bus) interface compatible
- 125dB SPL high sound-pressure input microphone
- Signal to noise ratio : 65dB (typ.)
- Flat low-frequency characteristics

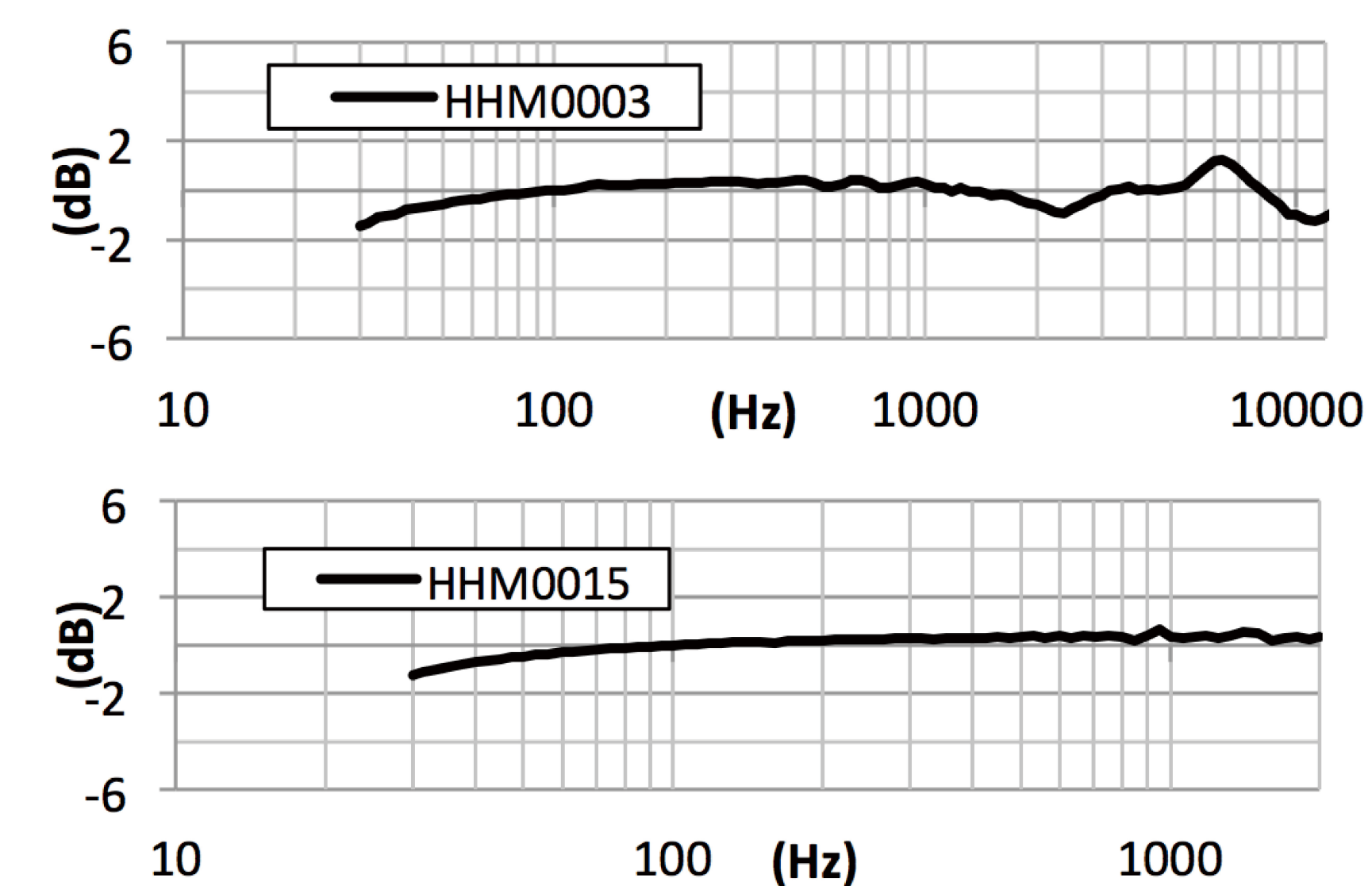
● Typical Specifications

| Item | Specification |
|-----------------------|--------------------------------------|
| Sensitivity | - 34 dBFS typ. / Pa at 1 kHz |
| Maximum input level | 125 dB SPL (THD 3 % typ. at 1 kHz) |
| SN ratio | 65 dB typ. |
| Operating temperature | - 40 °C to 85 °C |

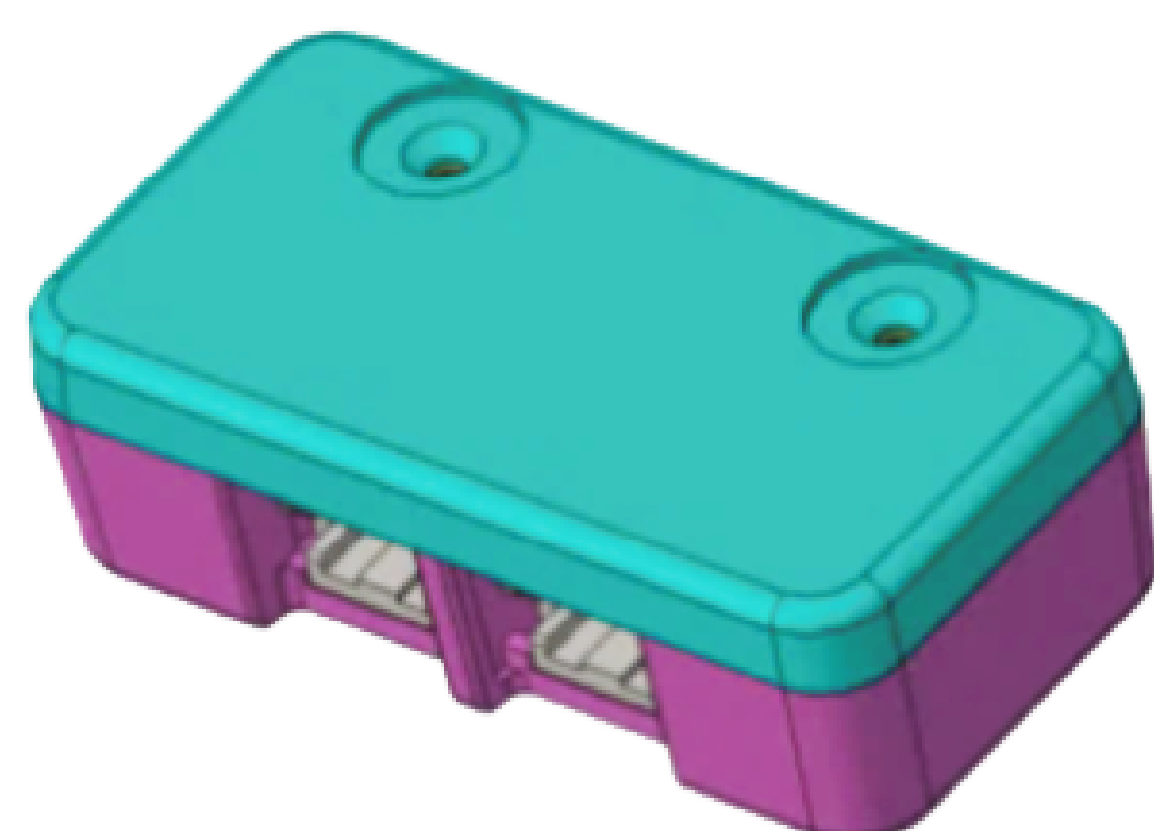
● Applications

- Automotive HF (Hands-Free) systems
- Automotive ANC (Active Noise Control) systems

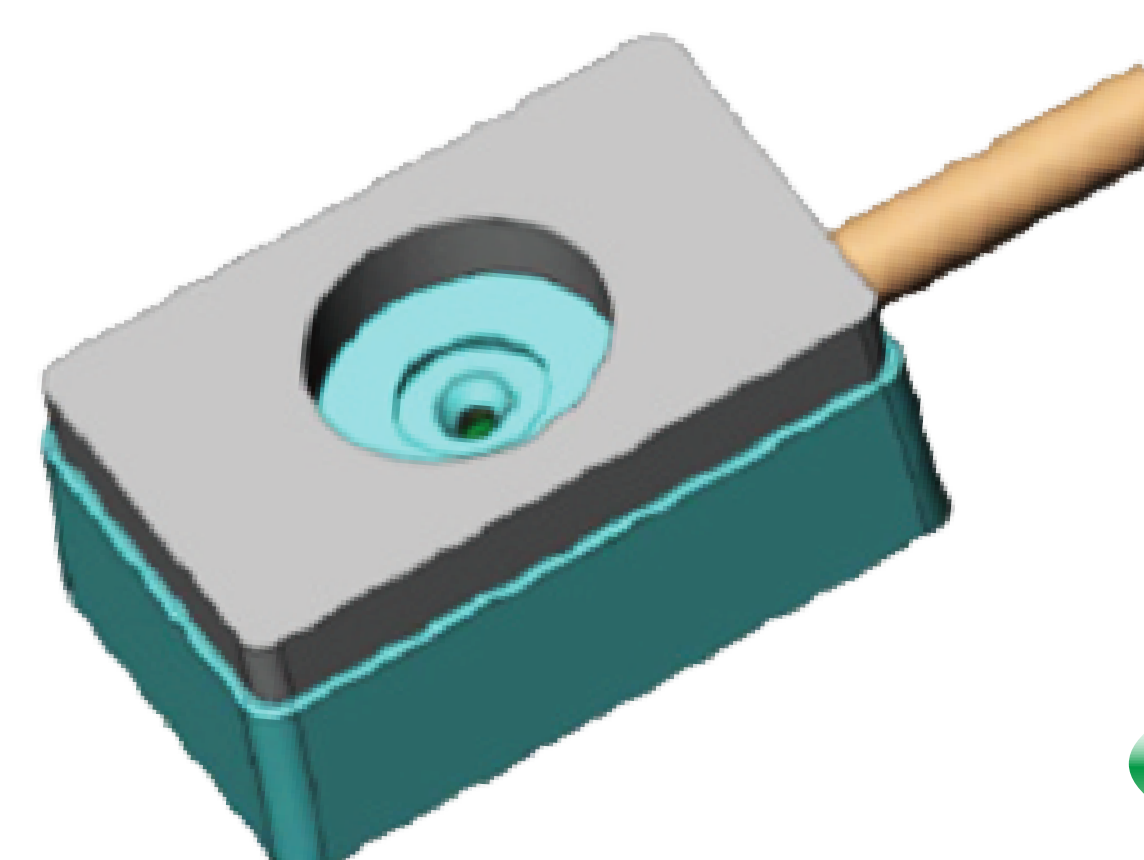
Frequency Response



HHM0003



HHM0015



Prototype