

IM69D129F

Ultra-low power digital PDM XENSIV™ MEMS microphone

Product overview

Key parameters	Normal mode
Environmental robustness	IP57
Sensitivity @ 1 kHz, 94 dB SPL	-36 ± 1 dBFS
Signal-to-noise ratio (SNR)	69 dB(A)
Current consumption	450 μ A
Acoustic overload point (1/10% THD)	127 dB SPL / 129 dB SPL
Low frequency roll-off (LFRO)	11 Hz
Supply voltage	1.62 to 3.60 V
Interface	Digital PDM
Port location	Bottom port
Package dimension	3.5 x 2.65 x 0.98 mm

Key features

- Ultra-low 450 μ A current consumption in always on mode
- Component level IP57 water and dust resistant
- 69 dB(A) Signal-to-noise ratio
- Acoustic overload point (AOP) of 129 dB SPL
- Tight sensitivity (-36 ± 1 dB) tolerance
- 11 Hz low frequency roll-off

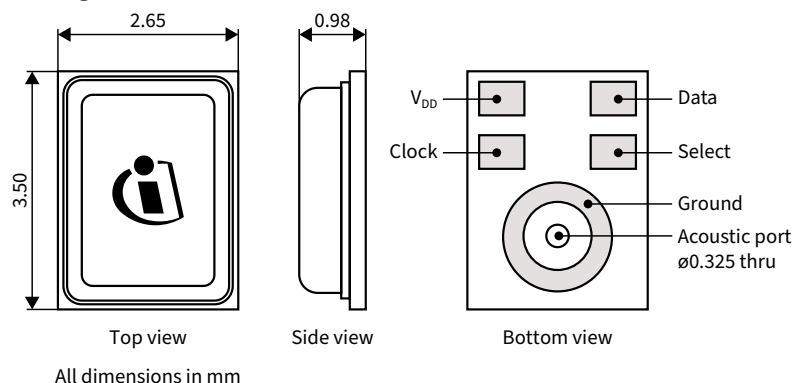
Key benefits

- Battery saving without compromising in acoustic performance
- Clear audio signals even for high sound pressure levels
- Highest precision of audio beams and algorithms

Typical applications

- Active Noise Cancellation (ANC): headphones and earphones
- Smartphones and mobile devices
- Hearing enhancement devices
- Voice User Interface (VUI): e.g. smart speaker, home automation, and IOT devices
- Power constrained applications

Package information



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