



Product brief

IM73A135V01

IP57 dust and water resistant analog differential XENSIV™ MEMS microphone

Product overview

Key parameters	Specifications
Environmental robustness	IP57
Sensitivity @ 1 kHz, 94 dB SPL	-38 ±1 dBV
Signal-to-Noise Ratio (SNR)	73 dB(A) @ 2.75 V 71 dB(A) @ 1.6 V
Acoustic overload point (1/10% THD)	132/135 dB SPL
Current consumption	170 µA @ 2.75 V 70 µA @ 1.6 V
Low frequency roll off (LFRO)	20 Hz
Group delay @ 1kHz	2 µs
Supply voltage	1.52 to 3.0 V
Interface	Analog differential
Port location	Bottom port
Package dimensions	4.00 x 3.00 x 1.20 mm

Key features

- > Component level IP57 water and dust resistant
- > 73 dB(A) signal-to-noise ratio
- > 71 dB(A) signal-to-noise ratio in low power mode
- > Acoustic Overload Point (AOP) of 135 dB SPL
- > 20 Hz low frequency roll-off

Benefits

- > High performance, IP57 robust microphone in small form factor
- > Low power mode for battery-critical applications
- > Very low self-noise and low corner frequency
- > Far field and low volume audio pick-up
- > Clear audio signals even for highest sound pressure levels

Typical applications

- > Replacement of Electret Condenser Microphones (ECMs)
- > Active Noise Cancellation (ANC): head- and earphones, earbuds
- > Voice User Interface (VUI): e.g. smart speakers, home automation and IOT devices
- > High quality audio capturing: e.g. cameras, laptops, tablets, conference systems

Package information

