



Product brief

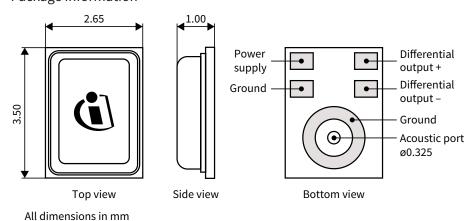
IM70A135V01

IP57 dust and water resistant analog differential XENSIV™ MEMS microphone

Product overview

Key parameters	Specifications
Environmental robustness	IP57
Sensitivity @ 1 kHz, 94 dBSPL	-38 ±1 dBV
Signal-to-Noise Ratio (SNR)	70 dB(A) @ 2.75 V 69 dB(A) @ 1.6 V
Acoustic overload point (1/10% THD)	130/135 dBSPL
Current consumption	170 μA @ 2.75 V 70 μA @ 1.6 V
Low frequency roll off (LFRO)	37 Hz
Group delay @ 1 kHz	2 µs
Supply voltage	1.52 to 3.00 V
Interface	Analog differential
Port location	Bottom port
Package dimensions	3.50 x 2.65 x 1.00 mm

Package information



Key features

- Component level IP57 water and dust resistant
- > 70 dB(A) signal-to-noise ratio
- Acoustic Overload Point (AOP) of 135 dBSPL
- > Tight sensitivity (-38 ±1 dB) tolerance
- > 37 Hz low frequency roll-off
- > Analog differential output
- > 170 µA current consumption

Benefits

- > Far-field and low volume audio pick-up
- Clear audio signals even for highest sound pressure levels
- Highest precision of audio beams and algorithms

Typical applications

- Active Noise Cancellation (ANC): headphones and wireless earbuds
- Voice User Interface (VUI):
 e.g. smart speaker, home
 automation, and IOT devices
- High quality audio capturing:
 e.g. cameras, laptop, tablet, and
 conference systems