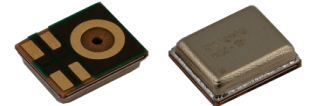


# SPW0690LM4H-1 CAMERON

## Knowles robust, high-performance digital microphone for smartphone applications

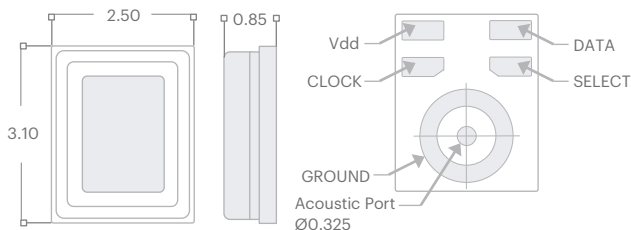


### PRODUCT OVERVIEW

- ▶ 66.5dB Signal-to-Noise Ratio (SNR) in a small footprint, ideal for a wide range of use cases in smartphones and mobile devices
- ▶ 10% THD at 135 dB SPL and a large dynamic range enables improved barge-in performance and resilience to wind noise turbulence
- ▶ Strong environmental robustness and improved ingress protection
- ▶  $\pm 1$  dB sensitivity matching and a noise-immune PDM output enhance multi-mic architecture performance and ease system integration

KEY PARAMETERS	SPECIFICATIONS
Signal-to-noise ratio (SNR)	66.5 dB (A)
Acoustic Overload Point (1% / 10% AOP)	120 dB SPL / 135 dB SPL
Low Frequency Roll Off (LFRO)	45 Hz
Bandwidth ( $\pm 3$ dB)	15 kHz
Current consumption	1000 $\mu$ A
Sensitivity and Tolerance	$-41 \pm 1$ dB FS
Supply voltage	1.65 to 3.6V
Interface	PDM Digital
Clock Rates Supported (Normal Mode)	1.1 to 4.8 MHz
Port location	Bottom Port
Package dimensions	3.10 x 2.50 x 0.85 mm

### DIMENSIONS (MM)

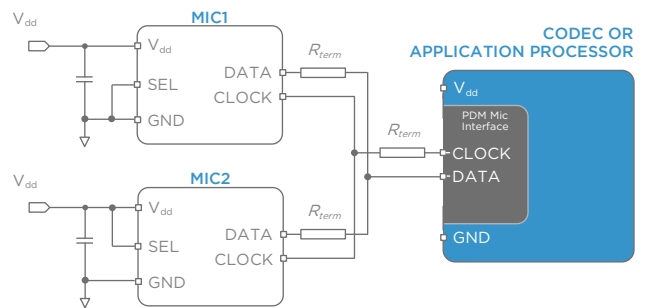


### TYPICAL APPLICATIONS

- ▶ Smartphones and Mobile Devices
- ▶ Action Cameras
- ▶ Voice-Enabled Remote Controls and Other Space-Constrained Applications
- ▶ Active Noise Cancelling (ANC) Headsets
- ▶ Hearables and Bluetooth Headsets

### APPLICATION NOTES

#### TYPICAL STEREO MODE APPLICATION CIRCUIT



Note: The above block diagram is for illustrative purposes only. Specific connectivity recommendations from the CODEC manufacturer should be followed.

### CONTACT

For inquiries, please contact your nearest Knowles representative, or Knowles at: [memsmicinfo@knowles.com](mailto:memsmicinfo@knowles.com)

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### INFORMATION

For further information on technology, delivery terms and conditions and prices, please contact a Knowles representative.

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