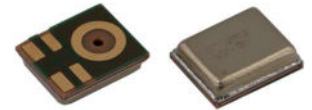




SPH21C3LR5H-1  
FALCON FB

# Knowles High Dynamic Range Analog Microphone



## PRODUCT OVERVIEW

- ▶ 68.5dB Signal-to-Noise Ratio (SNR) in a small footprint, for improved Ear transparency mode performance and far field voice pick-up
- ▶ 10% THD at 134 dB SPL and a large dynamic range enables improved barge-in performance and resilience to wind noise turbulence
- ▶ 1.8V support with 67dB SNR, <65uA current for Always-On use cases
- ▶ 18Hz LFRO for diverse ANC Implementations
- ▶ Differential analog output for improved noise robustness

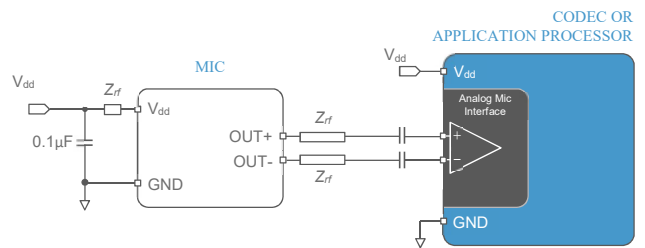
## TYPICAL APPLICATIONS

- ▶ True Wireless Headsets
- ▶ Active Noise Cancelling (ANC) Headsets
- ▶ Voice-Enable IOT Devices for Far Field Voice
- ▶ Wearables/Always ON Applications
- ▶ Hi Quality/Far field Recording in Smartphones

KEY PARAMETERS	SPECIFICATIONS	
Sensitivity and Tolerance	-38 ± 1 dB V/Pa	
Supply voltage	2.4 to 3.2V	1.51 to 1.89V
Signal-to-noise ratio (SNR)	68.5 dB (A)	67 dB (A)
Acoustic Overload Point (1% / 10% AOP)	125 / 134 dB SPL	124 / 130 dB SPL
Current consumption	200 uA @ 2.75V	63 uA @ 1.8V
Low Frequency Roll Off (LFRO)	18 Hz	
Interface	Analog Differential	
Port location	Bottom Port	

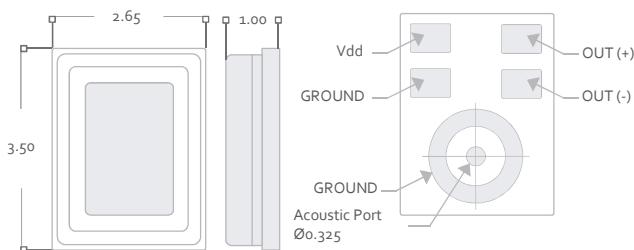
## APPLICATION NOTES

### TYPICAL DIFFERENTIAL MODE APPLICATION CIRCUIT



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

## DIMENSIONS (MM)



## CONTACT

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