



KAS-700-0176  
V2S200D on Flex, 2 Pack, (Engineering Samples)  
Multimode Voice Vibration Sensor, PDM

Note: Illustrative image only. Actual sensor mounted to flexible circuit may differ in appearance.

## Knowles V2S200D (Engineering Samples)

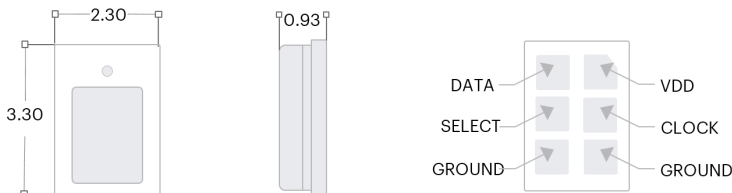
high-performance multi-mode digital voice vibration sensor mounted on flexible bias boards

### ASSEMBLY OVERVIEW

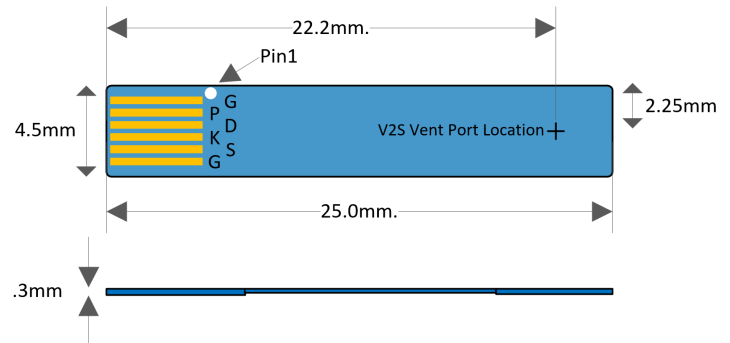
- ▶ Specialized sensor to improve voice call quality
- ▶ Up to 50dB environmental noise suppression outdoors and indoors
- ▶ Higher SNR and bandwidth vs typical sensors for excellent fidelity
- ▶ Size and power optimized for TWS application
- ▶ Ease of integration with PDM interface
- ▶ No specialized handling needed during integration into final product

KEY PARAMETERS	SPECIFICATIONS
Signal-to-noise ratio (SNR)	64.5 dB (A)
Bandwidth ( $\pm 3$ dB)	4 kHz
Current consumption (Low Pwr Mode/ Normal Mode)	290uA / 700 uA
Sensitivity and Tolerance	-25 $\pm$ 1.5 dB FS
Supply voltage	1.65 to 3.3V
Interface	PDM Digital
Clock Rates Supported (Low Pwr Mode/ Normal Mode)	600KHz – 950KHz / 1.2MHz - 3.3 MHz
Package dimensions	3.30 x 2.30 x 0.93 mm

### MICROPHONE DIMENSIONS (MM)



### FLEX CIRCUIT DIMENSIONS



### FLEX CIRCUIT PINOUTS

The table below shows the pinout for the flex connector. The same connector can be used for all microphone flexes, regardless of port orientation or electrical interface.

Flex Pin#	Flex Marking	Signal
1	G	Ground
2	P	Power
3	D	Data
4	K	Bit Clock
5	S	Select
6	G	Ground

### ADDITIONAL INFORMATION

For more information, visit <https://www.knowles.com/V2S>, email us at [sales@knowles.com](mailto:sales@knowles.com), or contact your nearest Knowles representative.

#### DISCLAIMER

The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics. With respect to any examples given herein, any typical values stated herein and/or any information regarding the application of the device, Knowles Electronics, LLC hereby disclaims any and all warranties and liabilities of any kind, including without limitation warranties of non-infringement of intellectual property rights of any third party.

#### INFORMATION

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

© 2023, Knowles Electronics, LLC, Itasca, IL USA. All Rights Reserved. Knowles and the logo are trademarks of Knowles Electronics, LLC.

