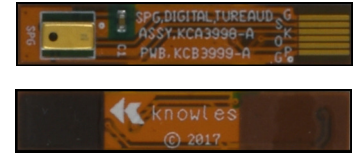


## KAS-700-0152 Microphone Flex, 2 Pack, SPG08P4HM4H-1, BARACUS, Top Port PDM



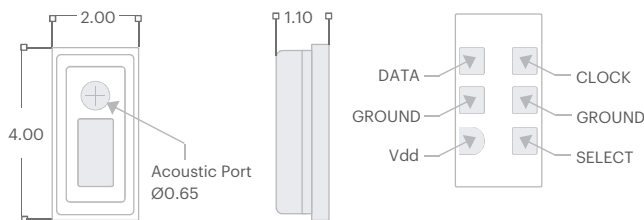
# Knowles robust SPG08P4HM4H-1, high-performance digital microphone mounted on flexible bias boards

## ASSEMBLY OVERVIEW

- ▶ Top Port PDM microphone mounted to flexible bias board.
- ▶ For use with Knowles "Muskie" Microphone Evaluation Kit. Part# KAS-33100-0004
- ▶ 64 dB Signal-to-Noise Ratio (SNR) in a small footprint, ideal for a wide range of use cases in laptop, smartphones and mobile devices
- ▶  $\pm 1$  dB sensitivity matching improves audio algorithm performance including beam forming and noise suppression.

KEY MICROPHONE PARAMETERS	SPECIFICATIONS
Signal-to-noise ratio (SNR)	64 dB (A)
Acoustic Overload Point (1% / 10% AOP)	115 dB SPL / 120 dB SPL
Low Frequency Roll Off (LFRO)	35 Hz
Bandwidth ( $\pm 3$ dB)	10 kHz
Current consumption	715uA
Sensitivity and Tolerance	-26 $\pm$ 1 dB FS
Supply voltage	1.65 to 3.6V
Interface	PDM Digital
Clock Rates Supported (Normal Mode)	1.2 to 4.8 MHz
Port location	Top Port
Package dimensions	4.00 x 2.00 x 1.10 mm

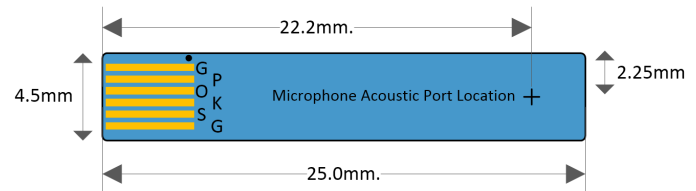
## MICROPHONE DIMENSIONS (MM)



## KAS-700-0052 MIC ON FLEX BOM

- ▶ SPG08P4HM4H-1, Top port digital microphone
- ▶ BYPASS CAPACITOR, 0.1uF, 0.1 F  $\pm 10\%$  16V, X5R, 0402
- ▶ KCB3999 FLEX CIRCUIT PCB

## 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	O	Data
4	K	Bit Clock
5	S	Select
6	G	Ground

## ADDITIONAL INFORMATION

For inquiries, please visit the Knowles website at <https://www.knowles.com/subdepartment/evaluation-kits/dpt-microphones/subdpt-sisonic-surface-mount-mems>. Or contact your nearest Knowles representative.

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### INFORMATION

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