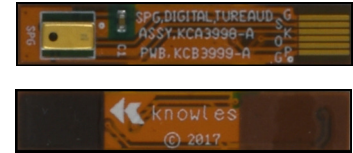


KAS-700-0152 Microphone Flex, 2 Pack, SPG08P4HM4H-1, BARACUS, Top Port PDM



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

ASSEMBLY OVERVIEW

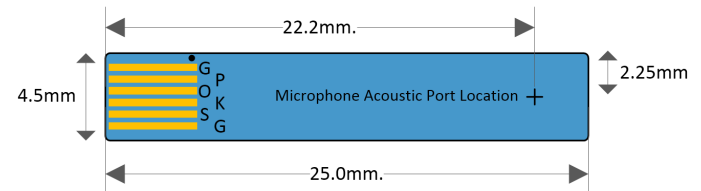
- ▶ Top Port PDM microphone mounted to flexible bias board.
- ▶ For use with Knowles "Muskie" Microphone Evaluation Kit. Part# KAS-33100-0004
- ▶ 64 dB Signal-to-Noise Ratio (SNR) in a small footprint, ideal for a wide range of use cases in laptop, smartphones and mobile devices
- ▶ ± 1 dB sensitivity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

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

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 (± 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

FLEX CIRCUIT DIMENSIONS

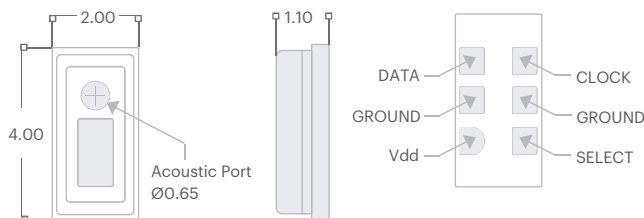


FLEX CIRCUIT PINOUTS

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

MICROPHONE DIMENSIONS (MM)



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.

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.

© 2019, Knowles Electronics, LLC, Itasca, IL USA. All Rights Reserved. Knowles and the logo are trademarks of Knowles Electronics, LLC.

