

KAS-700-0156 Mics on Flex, 2 Pack, SPV1142LR5H-1, QUARTZ, Bottom Port Analog



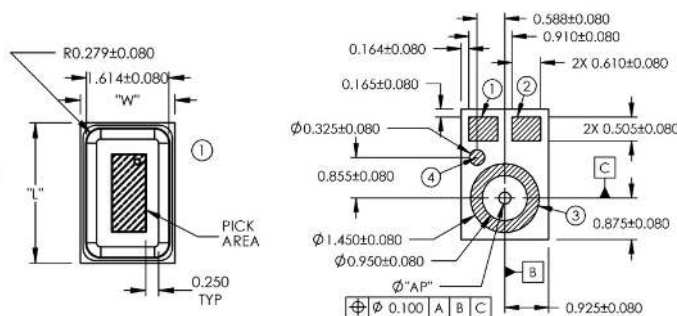
Knowles robust, SPV1142LR5H-1 high-performance analog microphone mounted on flexible bias boards

ASSEMBLY OVERVIEW

- ▶ Bottom Port Analog microphone mounted to flexible bias board.
- ▶ For use with Knowles "Muskie" Microphone Evaluation Kit. Part# KAS-33100-0004
- ▶ 63dB Signal-to-Noise Ratio (SNR) in a small footprint, ideal for a wide range of use cases where excellent wideband audio performance and RF immunity are required.
- ▶ SPV1142LR5H-1 is a miniature, high-performance, low power, ± 1 dB matched sensitivity bottom port silicon microphone.
- ▶ LFRO = 25HZ

KEY PARAMETERS	SPECIFICATIONS
Package dimensions	L x W x H = 2.75 mm x 1.85 mm x 0.90 mm (5.09mm ³)
Acoustic Overload Point (10% AOP)	123 dB SPL
Low Frequency Roll Off (LFRO)	25 Hz
Signal-to-noise ratio (SNR)	63 dB (A)
Current consumption	132 μ A Typ @ Vdd=1.8V
Sensitivity and Tolerance	-38 \pm 1 dBV / Pa
Supply voltage	1.5 to 3.6V Typ:1.8V
Startup T (< 1dB final)	50 ms Max
Interface	Analog Single Ended
Port location	Bottom Port

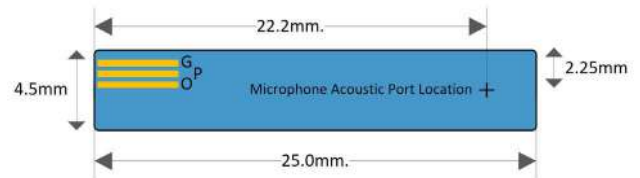
MICROPHONE DIMENSIONS (MM)



KAS-700-0056 MIC ON FLEX BOM

- ▶ SPV1142LR5H-1, Bottom port analog microphone
- ▶ BYPASS CAPACITOR, 0.1 F \pm 10% 16V, X5R, 0402
- ▶ KC10493 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	OUT
4	N/A	
5	N/A	
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.

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.

© 2021, Knowles Electronics, LLC, Itasca, IL USA. All Rights Reserved. Knowles and the logo are trademarks of Knowles Electronics, LLC.

