KAS-700-0146
Mics on Flex, 2 pack, SPW0690LM4H-1, CAMERON, Bottom Port PDM

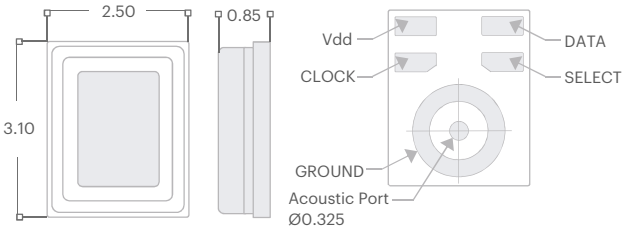
Knowles robust, SPW0690LM4H-1 high-performance digital microphone mounted on flexable bias boards

ASSEMBLY OVERVIEW

- Bottom Port PDM microphone mounted to flexible bias board.
- For use with Knowles “Muskie” Microphone Evaluation Kit. Part# KAS-33100-0004
- 66.5dB Signal-to-Noise Ratio (SNR) in a small footprint, ideal for a wide range of use cases in smartphones and mobile devices
- 10% THD at 135 dB SPL and a large dynamic range enables improved barge-in performance and resilience to wind noise turbulence
- ±1 dB sensitivity matching and a noise-immune PDM output enhance multi-mic architecture performance and ease system integration

KEY PARAMETERS	SPECIFICATIONS
Signal-to-noise ratio (SNR)	66.5 dB (A)
Acoustic Overload Point (1% / 10% AOP)	120 dB SPL / 135 dB SPL
Low Frequency Roll Off (LFRO)	45 Hz
Bandwidth (±3dB)	15 kHz
Current consumption	1000 uA
Sensitivity and Tolerance	-41 ± 1 dB FS
Supply voltage	1.65 to 3.6V
Interface	PDM Digital
Clock Rates Supported (Normal Mode)	1.1 to 4.8 MHz
Port location	Bottom Port
Package dimensions	3.10 x 2.50 x 0.85 mm

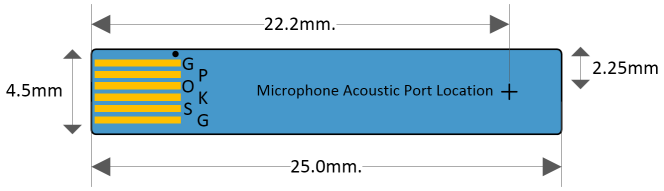
MICROPHONE DIMENSIONS (MM)



KAS-700-0046 MIC ON FLEX BOM

- SPW0690LM4H-1, Bottom port digital microphone
- BYPASS CAPACITOR, 0.1uF, 0.1 F ±10% 16V, X5R, 0402
- KCB3859 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	D	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.