KAS-700-0145
Mics on Flex, 2 Pack, SPK0641HT4H-1, RAMIS, Top Port PDM



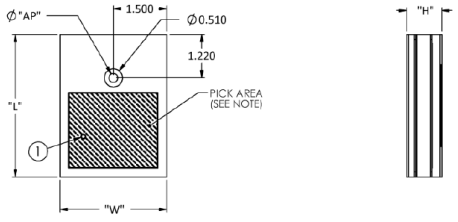
Knowles robust SPK0641HT4H-1, high-performance digital microphone mounted on flexable bias boards

ASSEMBLY OVERVIEW

- Top Port PDM microphone mounted to flexible bias board.
- For use with Knowles "Muskie" Microphone Evaluation Kit. Part# KAS-33100-0004
- 64.5 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.

KEY MICROPHONE PARAMETERS	SPECIFICATIONS
Signal-to-noise ratio (SNR)	64.5 dB (A)
Acoustic Overload Point (10% AOP)	120 dB SPL
Low Frequency Roll Off (LFRO)	35 Hz
Current consumption	630uA
Sensitivity and Tolerance	-26 ± 1 dB FS
Supply voltage	1.6 to 3.6V
Interface	PDM Digital
Clock Rates Supported (Normal Mode)	1.0 to 4.8 MHz
Port location	Top Port
Package dimensions	4.00 x 3.00 x 1.10 mm

MICROPHONE DIMENSIONS (MM)

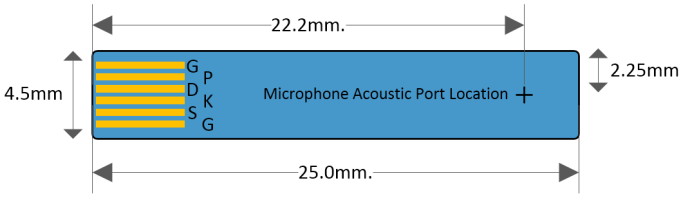


Item	Dimension	Tolerance
Length (L)	4.00	+/-0.10
Width (W)	3.00	+/-0.10
Height (H)	1.00	+/-0.10
Acoustic Port (AP)	Ø0.25	+/-0.05

KAS-700-0045 MIC ON FLEX BOM

- SPK0641HT4H-1, Top port digital microphone
- BYPASS CAPACITOR, 0.1uF, 0.1 F ±10% 16V, X5R, 0402
- KCB3436 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.

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INFORMATION

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