KAS-700-0149
Mics on Flex, 2 Pack, SPM0687LR5H-1, WINFREY, Bottom Port Differential Analog

Knowles analog microphone exclusively for far field IoT/ANC applications mounted on flexable bias boards

ASSEMBLY OVERVIEW

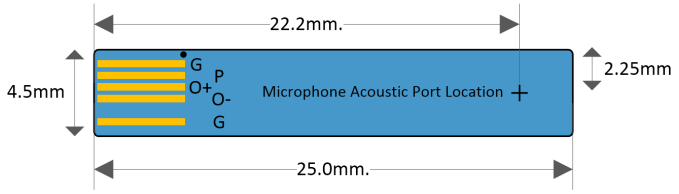
- Bottom Port differential analog microphone mounted to flexible bias board.
- For use with Knowles "Muskie" Microphone Evaluation Kit. Part# KAS-33100-0004
- 70dB Signal to Noise Ratio (SNR) enables far-field voice pick up for IoT applications.
- 130dB Acoustic Overload Point (AOP) provides a large dynamic range for barge-in applications.
- Differential mode configuration improves noise immunity to power supply variations, allowing extension of microphone PCB traces.

KEY MICROPHONE PARAMETERS	SPECIFICATIONS
Signal-to-noise ratio (SNR)	70 dB (A)
Acoustic Overload Point (10% AOP)	130 dB SPL
Low Frequency Roll Off (LFRO)	< 13 Hz
Bandwidth (±3dB)	13 kHz
Current consumption (uA)*	300 uA
Sensitivity and Tolerance	-40 +/- 1 dB (Single Ended) -34.75 +/- 1 dB (Differential)
Supply voltage (V)	2.75 V
Interface	Analog
Port location	Bottom Port
Package dimensions	4.72 x 3.76 x 1.24 mm

KAS-700-0049 MIC ON FLEX BOM

- SPM0687LR5H-1, Bottom port differential analog microphone
- BYPASS CAPACITOR, 0.1uF, 0.1 F ±10% 16V, X5R, 0402
- KCB3924 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	O-	Bit Clock
5	-	NC
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.