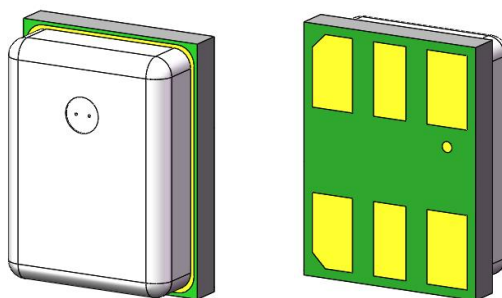


Specification of MEMS Microphone

RoHS Compliance & Halogen Free

LinkMems P/N: LVD3526T202-AC02K



Designed by	Checked by	Approved by
Kevin	Thomas	Hary

Customer Approval

Approved by: _____



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MEMS Microphone

1. Introduction

The LVD3526T202-OAC02K is a high-performance bone conduction sensor optimized for picking up the wearer's own voice. It enhances the ability of picking up your own voice via bone vibration in noisy environment. It's packaged for surface mounting and high temperature reflow assembly. Data format is a single bit PDM.

2. Electrical Characteristics

Test Condition: $V_{DD}=1.8V$, $23\pm 2^{\circ}C$, $55\pm 10\%R.H.$, unless otherwise specified.

Electrical Characteristics

Parameter	Symbol	Note/Test Condition	Values			Unit
			Min.	Typ.	Max.	
Power supply voltage	V_{DD}		1.62	1.8	3.6	V

Standard Mode

Test Condition: Measurement Clock Frequency 2.4 MHz, $V_{DD} = 1.8 V$

Specification	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Sensitivity Range	S	$f=1kHz, g_{in}=1g$ $0dB=1V/g$, Z-direction	-22	-20	-18	dB
Current Consumption	I			750		μA
S/N Ratio	SNR	A-Weighted 100-4kHz		63		dB(A)
Acoustic Sensitivity Loss	ASL	94dB SPL@100Hz	45	50		dB
		94dB SPL@1kHz	40	45		
Acceleration level	AL	THD <10% @1kHz		4		g
Peak Frequency	F_{peak}		7.5	8	8.5	kHz

Low Power Mode

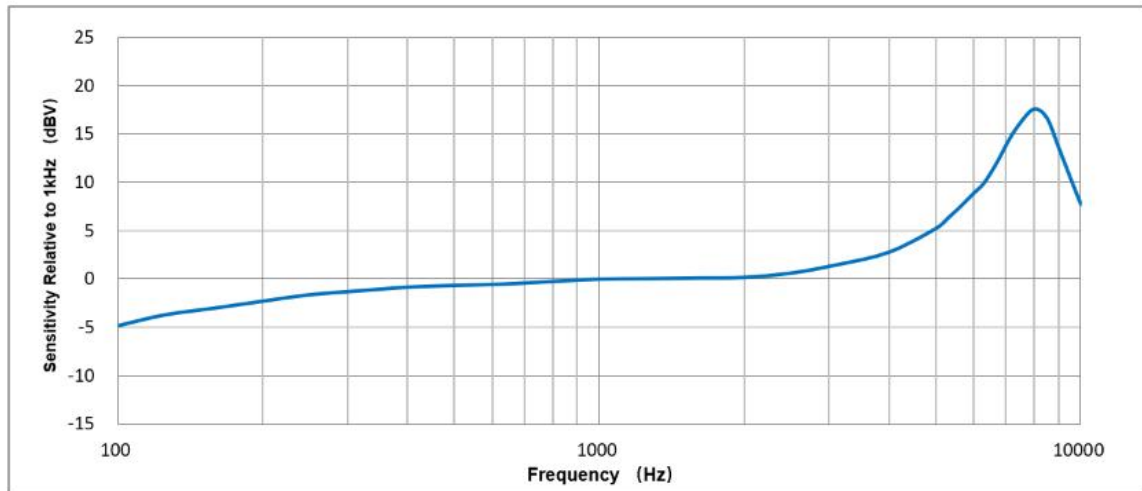
Test Condition: Measurement Clock Frequency 768 kHz, VDD = 1.8 V

Specification	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Sensitivity Range	S	f=1kHz,gin=1g 0dB=1V/g, Z-direction	-22	-20	-18	dB
Current Consumption	I			320		μA
S/N Ratio	SNR	A-Weighted 100-4kHz		63		dB(A)
Acoustic Sensitivity Loss	ASL	94dBSPL@100Hz	45	50		dB
		94dBSPL@1kHz	40	45		
Acceleration level	AL	THD <10% @1kHz		4		g
Peak Frequency	F _{peak}		7.5	8	8.5	kHz

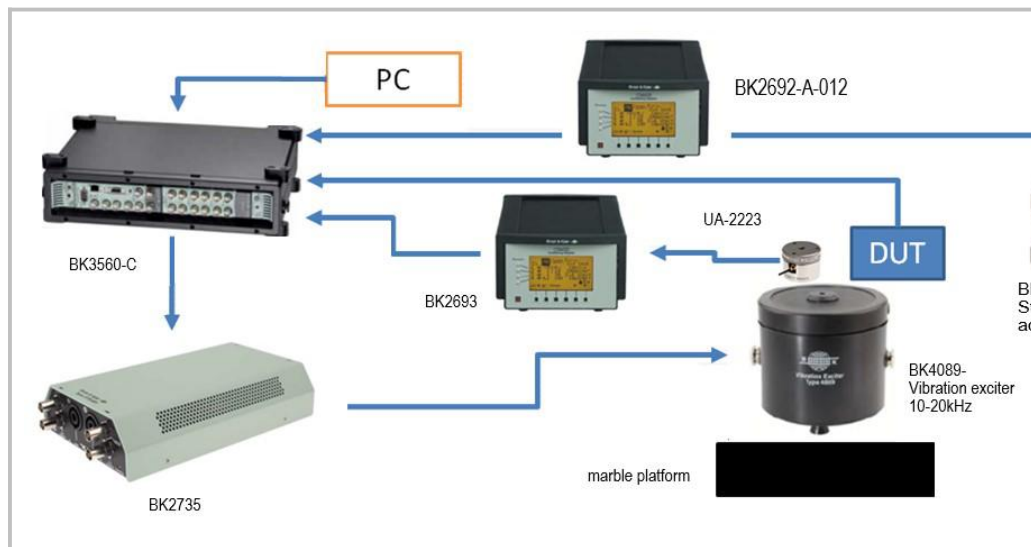
Operation Ratings

Parameter		Symbol	Note/Test Condition	Vales			Unit
				Min	Typ.	Max	
Power supply voltage		V _{DD}		1.62		3.6	V
Frequency Range	Sleep Mode			0		10	kHz
	Low Power Mode			150	768	900	kHz
	Standard Mode			1300		4800	kHz
Clock Duty Cycle				40	50	60	%
Logic Input High				0.65*V _{DD}		V _{DD} +0.3	V
Logic Input Low				-0.3		0.35*V _{DD}	V
Logic Output High				V _{DD} -0.45			V
Logic Output Low						0.45	V
Load Capacitance						100	pF

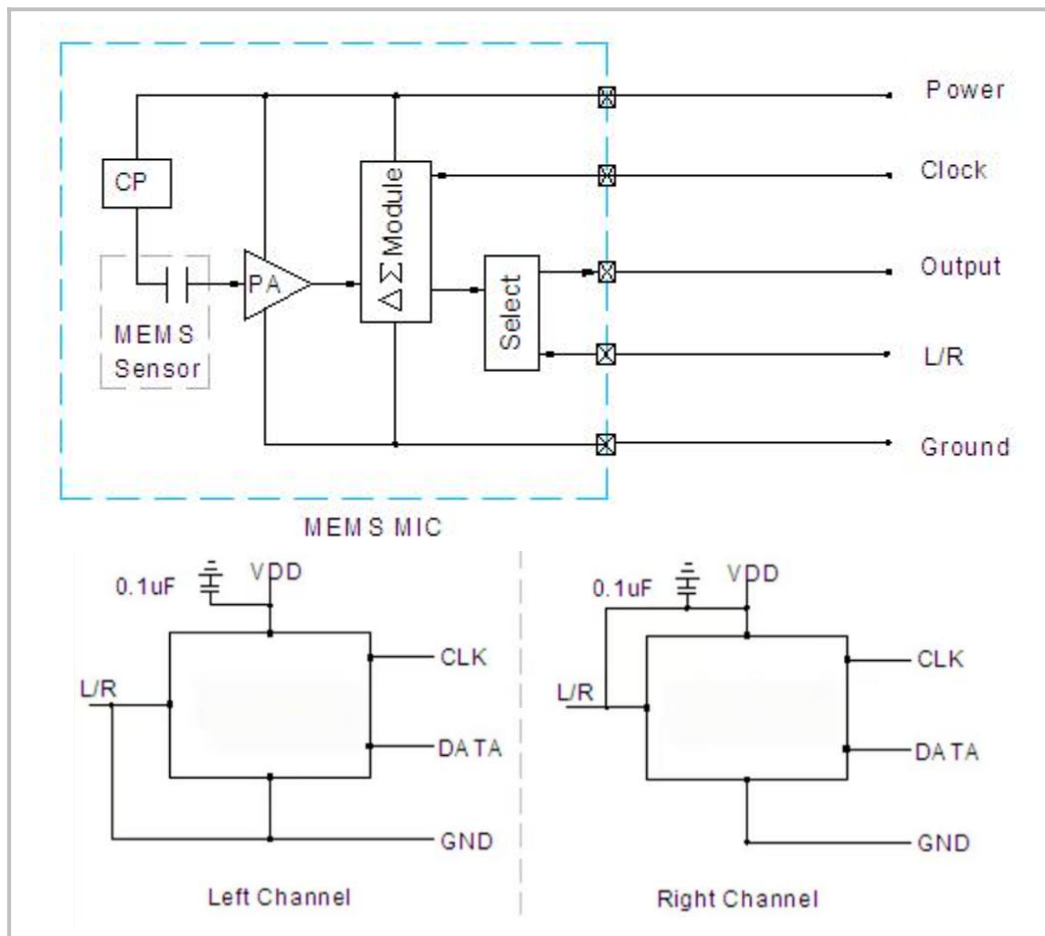
3. Frequency Response Curve



4. Test Setup (Sensitivity Test in Anechoic Room)

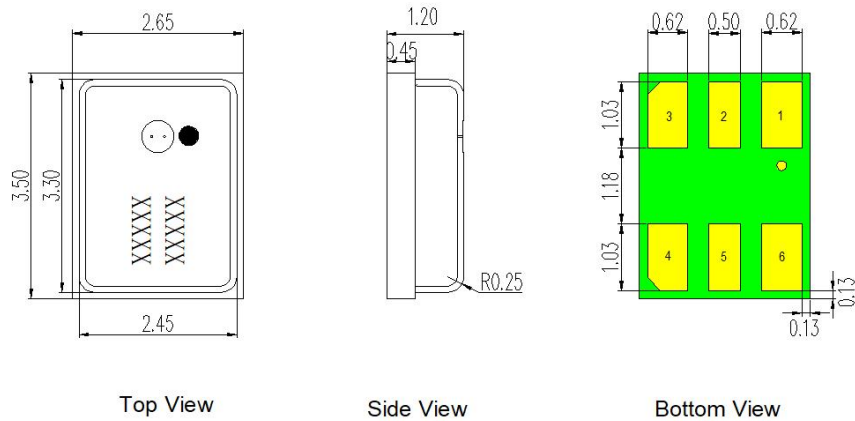


5. Measurement Circuit



6. Mechanical Characteristics

6.1 Mic Unit



Laser Mark	Description
XXXXX XXXXX	Date Code

Item	Dimension	Tolerance(+/-)	Units
Length(L)	3.50	0.10	mm
Width(W)	2.65	0.10	mm
Height(H)	1.20	0.10	mm

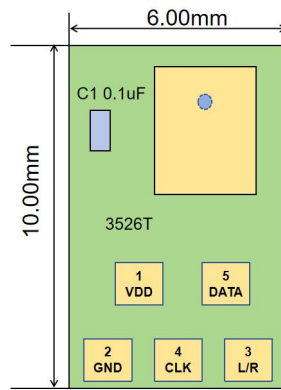
Pin #	Pin Name	Type	Description
1	GND	Ground	Ground
2	L/R	L/R Channel	Channel Select
3	GND	Ground	Ground
4	DATA	Signal	Output Signal
5	CLK	Clock	Clock Input
6	VDD	Power	Power Supply

Notes:

All dimensions are in millimeter (mm).

Tolerance ± 0.1 mm unless otherwise specified.

6.2 FPC



Top View

Item	Dimension	Tolerance(+/-)	Units
Length(L)	10.00	0.10	mm
Width(W)	6.00	0.10	mm
Height(H)	1.40	0.10	mm

Notes:

All dimensions are in millimeter (mm).

Tolerance $\pm$ 0.1mm unless otherwise specified.

Specification Revisions

Revision	Description	Approved	Date
1.0	New Version Released	Hary	15/09/2026