

## Description

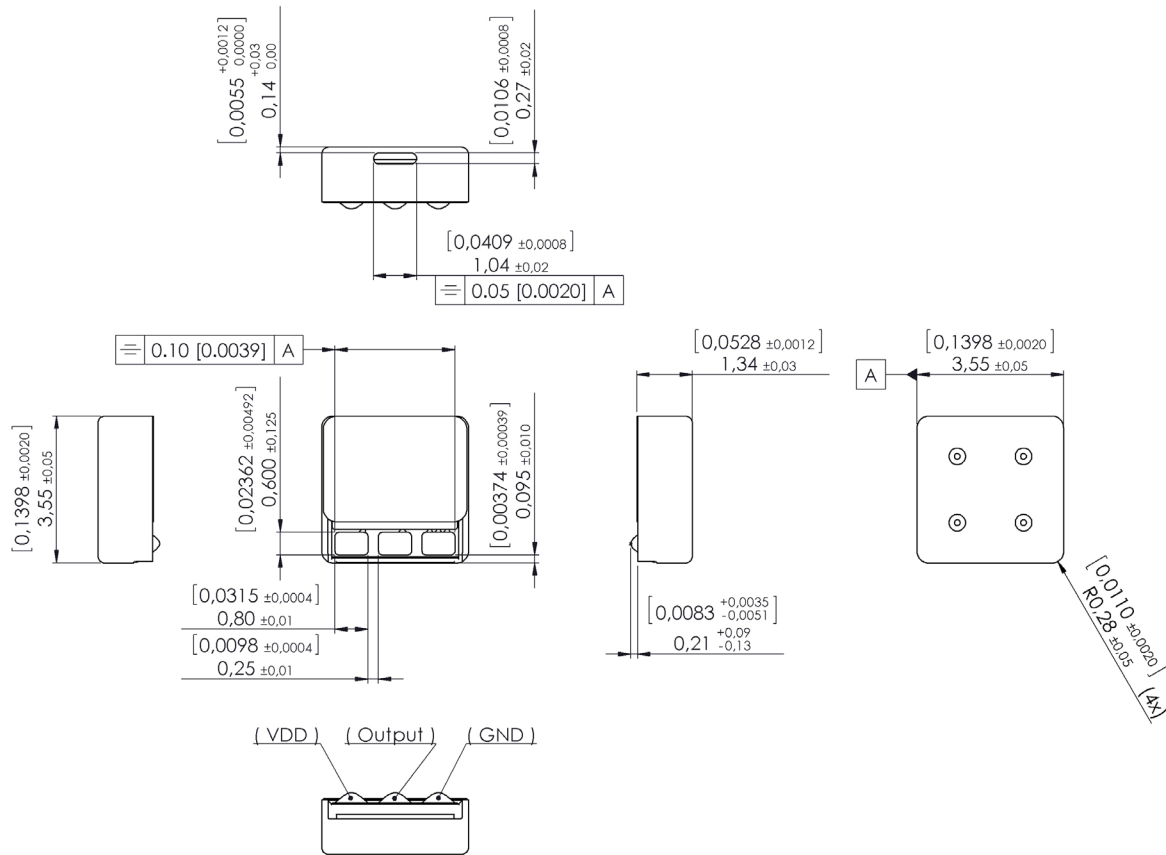
Electret condenser microphone, for hearing instruments with integrated capacitors and an integrated amplifier to decrease sensitivity for high frequency spurious signals and an improved ESD protection.



## Features

- Super thin design - Great CIC application
- Two-stage low noise CMOS amplifier
- Integrated cellular protection (superior EMI suppression)
- Superior ESD protection

## Product drawing - Dimensions in mm [inch]



Sonion reserves the right to make changes at any time to improve reliability, function or design, in order to provide the best product possible.

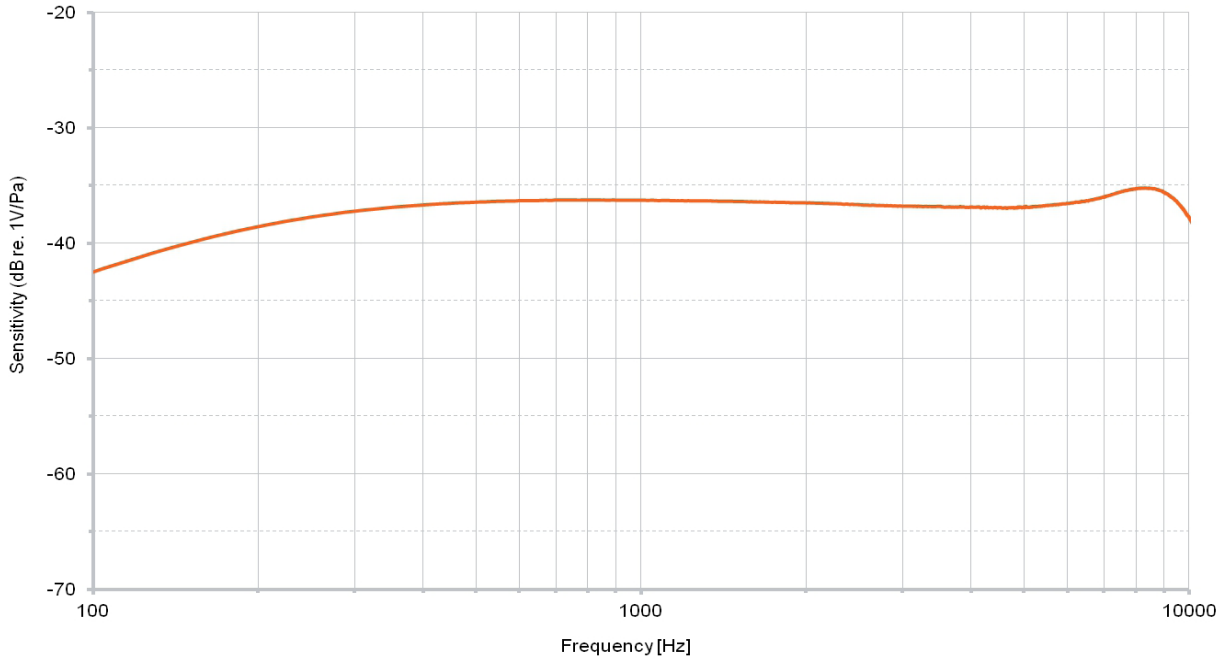
## Specifications

All parameters are specified at 0.9V and 1 MOhm // <200pF load impedance, AC-coupled with 1μF, unless specified otherwise. Environmental conditions: 23°C (73.4F), 50 % RH.

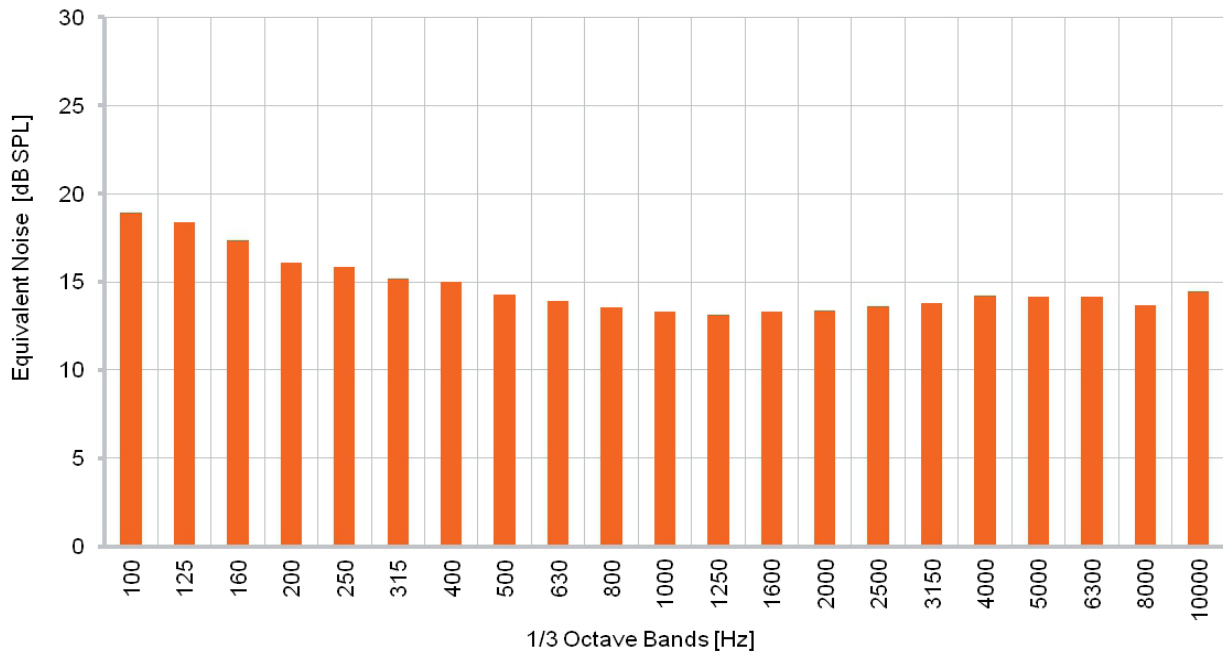
Parameters		Min	Typ	Max	Unit	Comments
Sensitivity *	@ 200 Hz	-5	-3	-1	dB	re. 1 kHz value
	@ 1 kHz	-39.5	-36.5	-33.5	dB	re. 1V per Pascal
	@ 8.3 kHz	-1	1	3	dB	re. 1 kHz value
Peak frequency			-		kHz	
Equivalent noise (A-weighted)			26	29	dB SPL	
Power supply feedthrough			-33	-30	dB	
Battery voltage range		0.8	0.9	3	VDC	
Battery drain		28	30	35	μA	
Output impedance **		3	4.1	5.3	kOhm	
Input-referred vibration sensitivity			67		dB SPL/g	1 g acceleration, 1 kHz ref.
Humidity coefficient of sensitivity			0.03		dB/%RH	
Input-referred EMI noise	0.8-0.96 Ghz			30	dB SPL	according SMI 255, E-75 V/m
	1.8-2.0 GHz			30	dB SPL	according SMI 255, E-50 V/m
Operating temperature range		-17	23	63	°C	
Storage temperature range		-40		63	°C	
ESD protection level: Class 2 according to MIL-STD-750D, test method 1020,2. Apply protection in accordance with IEC 61340-5-1 and 61340-5-2.						
Electrical cut-off frequency 12 kHz						
* 1 kHz sensitivity at 1.3 VDC supply: -36 dB re. 1V/Pa typ.						
** Output impedance at 1.3 VDC supply : 4.1 kOhm typ.						

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## Typical response curve



## Typical 1/3 octave equivalent noise



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