

Description

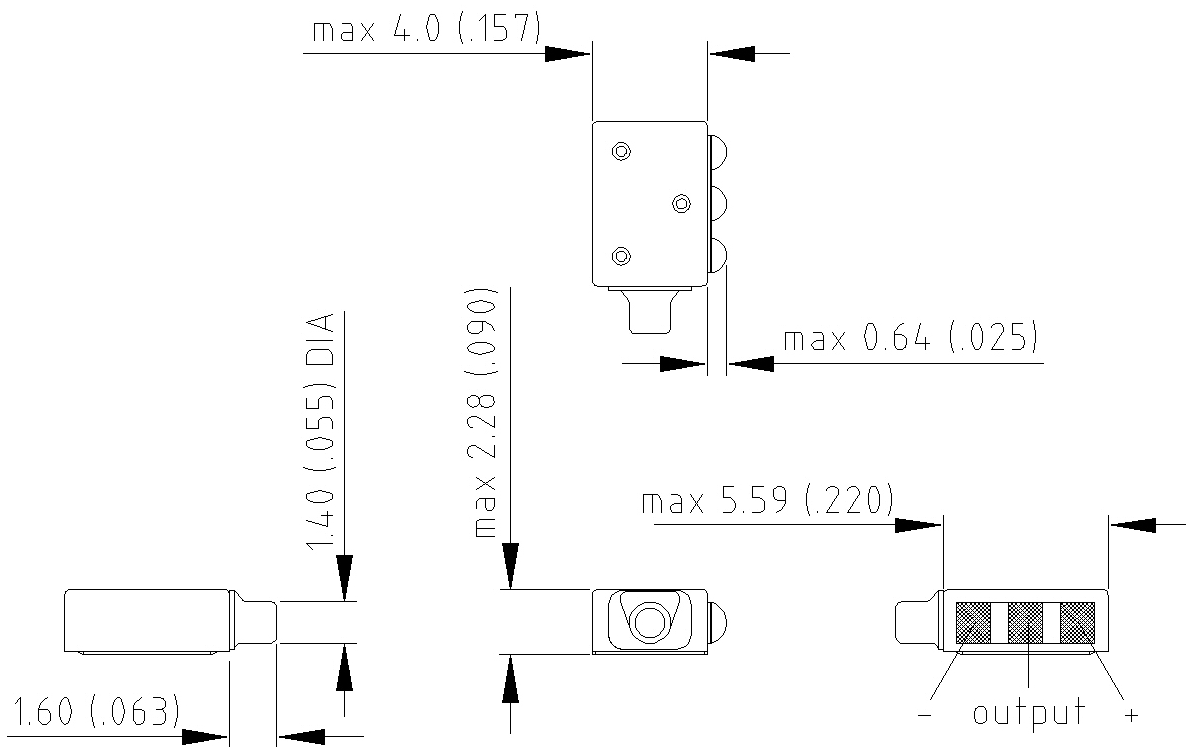
Miniature electret condenser microphone for hearing instruments with integrated capacitors and an integrated amplifier to decrease sensitivity for high frequency spurious signals and an improved ESD protection.



Features

- Larger case size
- Higher sensitivity application
- Low noise CMOS amplifier
- Integrated cellular protection (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.

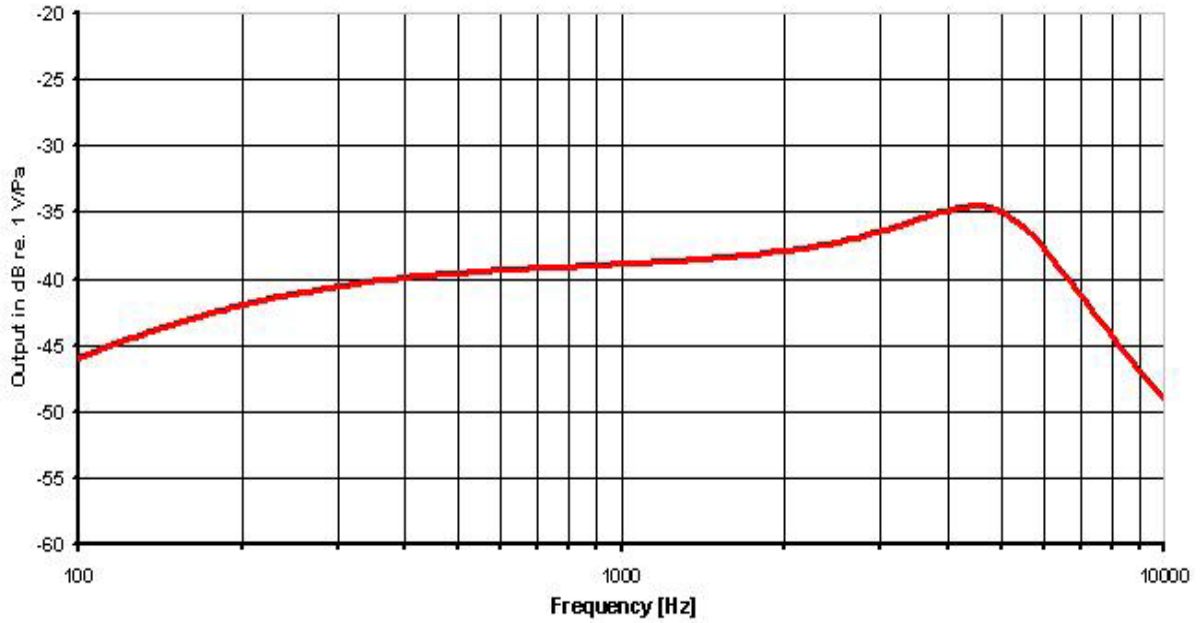
Specifications

All parameters are specified at 1.3 V and 1 MOhm // <200pF load impedance, ACcoupled with 1µF, unless specified otherwise. Environmental conditions: 23°C (73.4F), 50% RH.

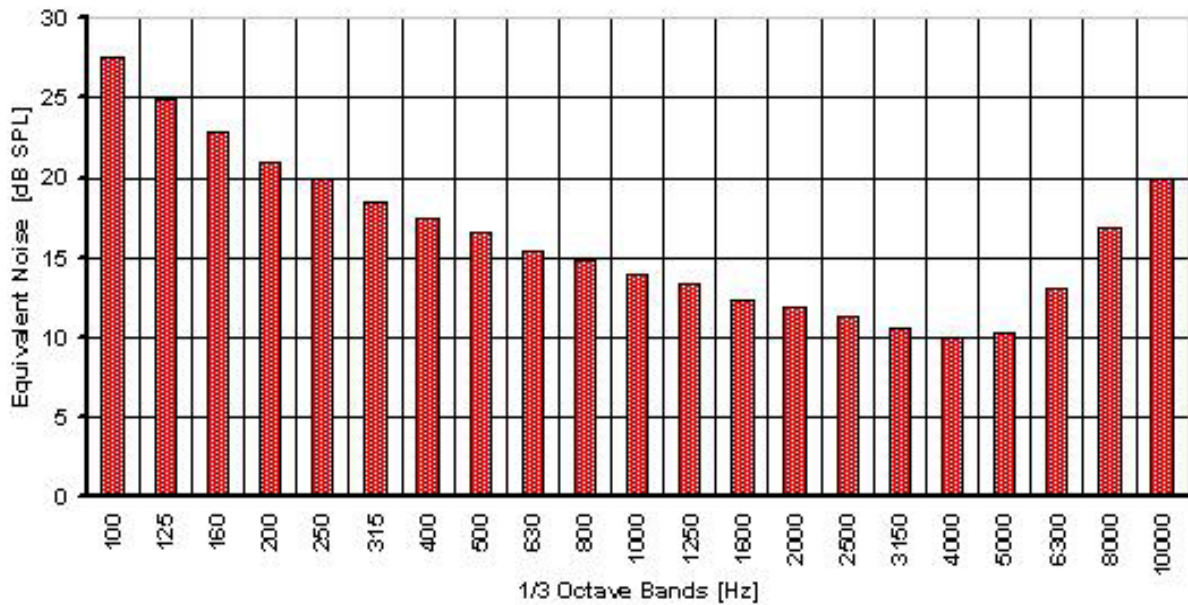
Acoustic parameters	Min	Typ	Max	Unit	Comments	
Sensitivity *	@ 100 Hz	-10	-7	-4	dB	re. 1 kHz value
	@ 1 kHz	-42	-39	-36	dB	re. 1V per Pascal
	@ peak	1.5	4.5	7.5	dB	re. 1 kHz value
Peak frequency	3.2	4.5	5.2	kHz	Approx.	
Equivalent noise (A-weighted)		26.5	29.5	dB SPL		
Power supply feedthrough		-13.5	-12	dB		
Battery voltage range	0.9	1.3	5	VDC		
Battery drain	20	35	50	µA		
Output impedance **	2	4.4	6	kOhm		
Input-referred vibration sensitivity		63		dB SPL/g	1 g acceleration, 1 kHz ref.	
Humidity coefficient of sensitivity		0.02		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						
* Sensitivity change on reducing supply to 0.9 VDC: -2 dB max.						
** Output impedance at 0.9 VDC supply: 7.5 kOhm max.						

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Typical response curve



Typical 1/3 octave equivalent noise



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