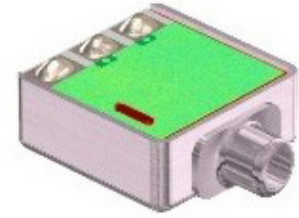


Description

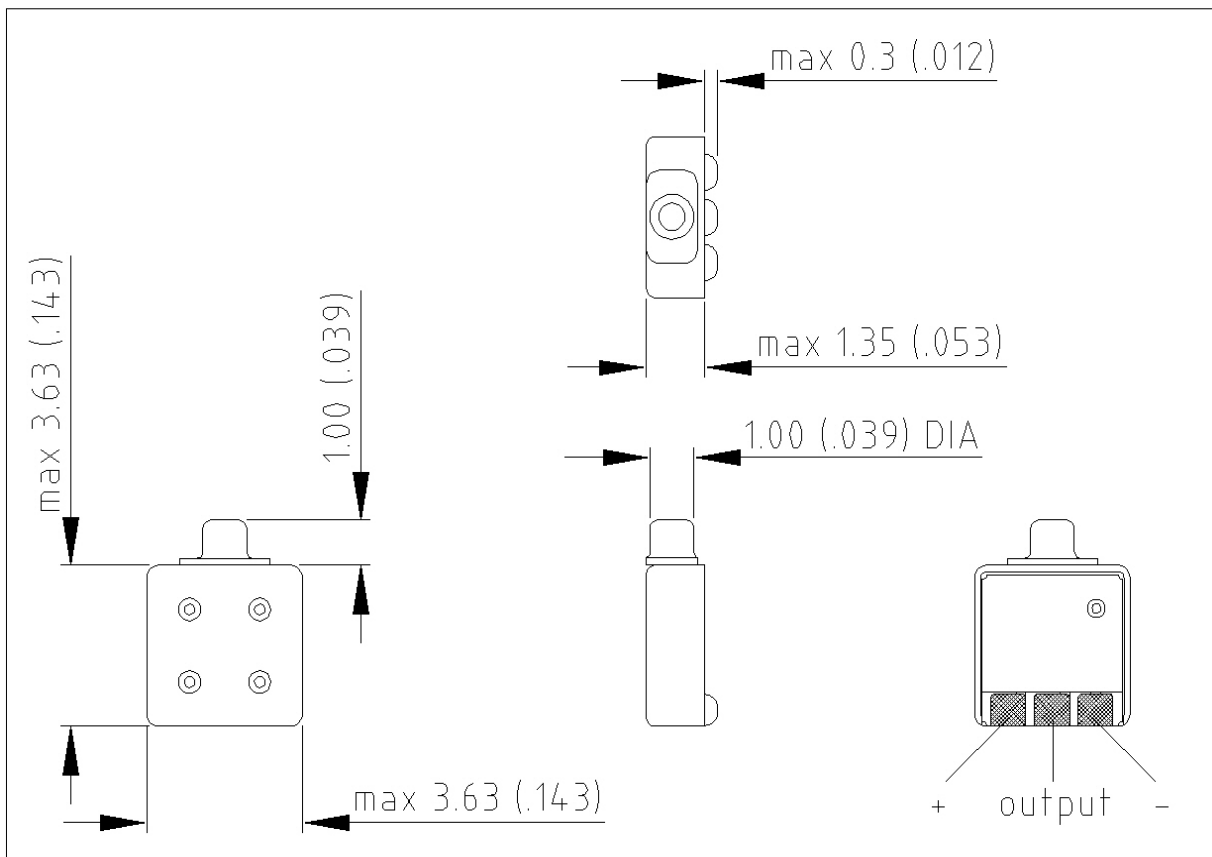
Miniature electret condenser microphone for hearing instruments with integrated capacitors and an integrated amplifier to decrease sensitivity for high frequency spurious signals.



Features

- Integrated cellular protection (superior EMI suppression)
- Low noise CMOS amplifier
- Better matching stability
- Reduced power supply feedthrough
- High dynamic range
- Performance parameter independent of supply voltage

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.

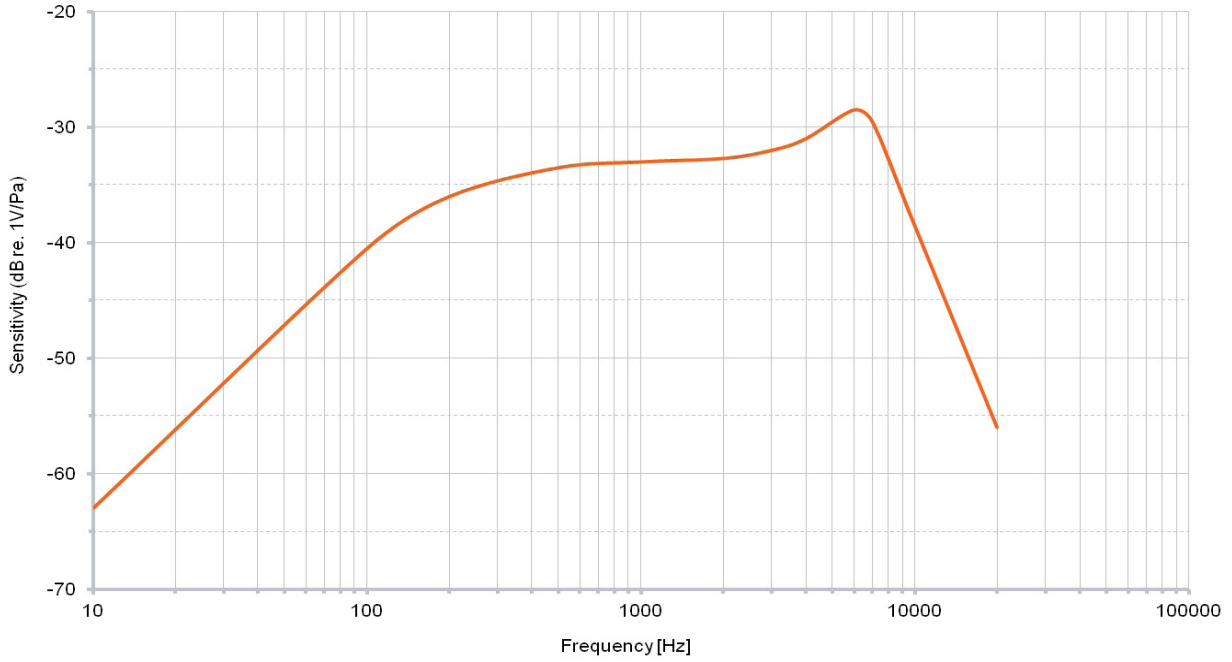
Specifications

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.

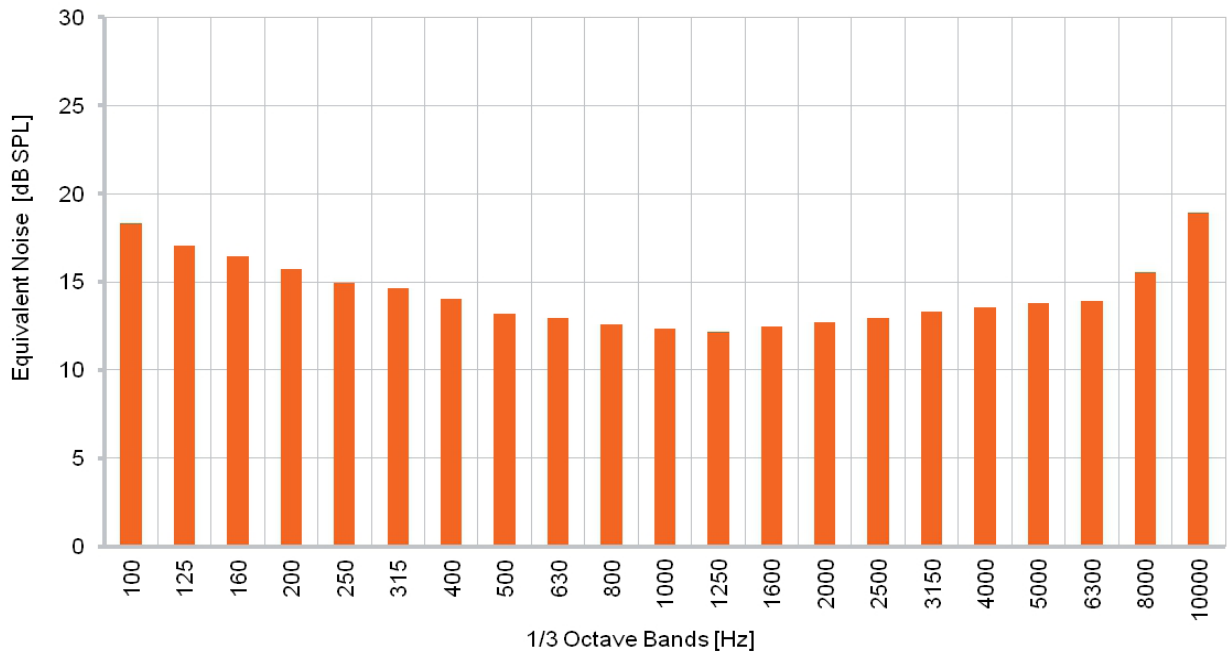
Parameters		Min	Typ	Max	Unit	Comments
Sensitivity *	@ 100 Hz	-9.5	-7.5	-5.5	dB	re. 1 kHz value
	@ 1 kHz	-36	-33	-30	dB	re. 1V per Pascal
	@ 6.1 kHz	1.5	4.5	7.5	dB	re. 1 kHz value
Peak frequency			6.1		kHz	Approx.
Equivalent noise (A-weighted)			27	30	dB SPL	
Power supply feedthrough			-33	-30	dB	
Battery 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 kHz ref. acc. in axial dir.
Humidity coefficient of sensitivity			0.02		dB/%RH	
Input-referred EMI noise	0.8-0.96 Ghz			25	dB SPL	according SMI 255, E-75 V/m
	1.8-2.0 GHz			25	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: -33 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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