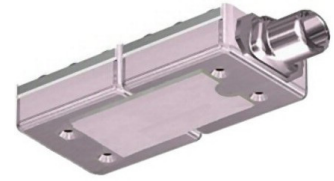


Description

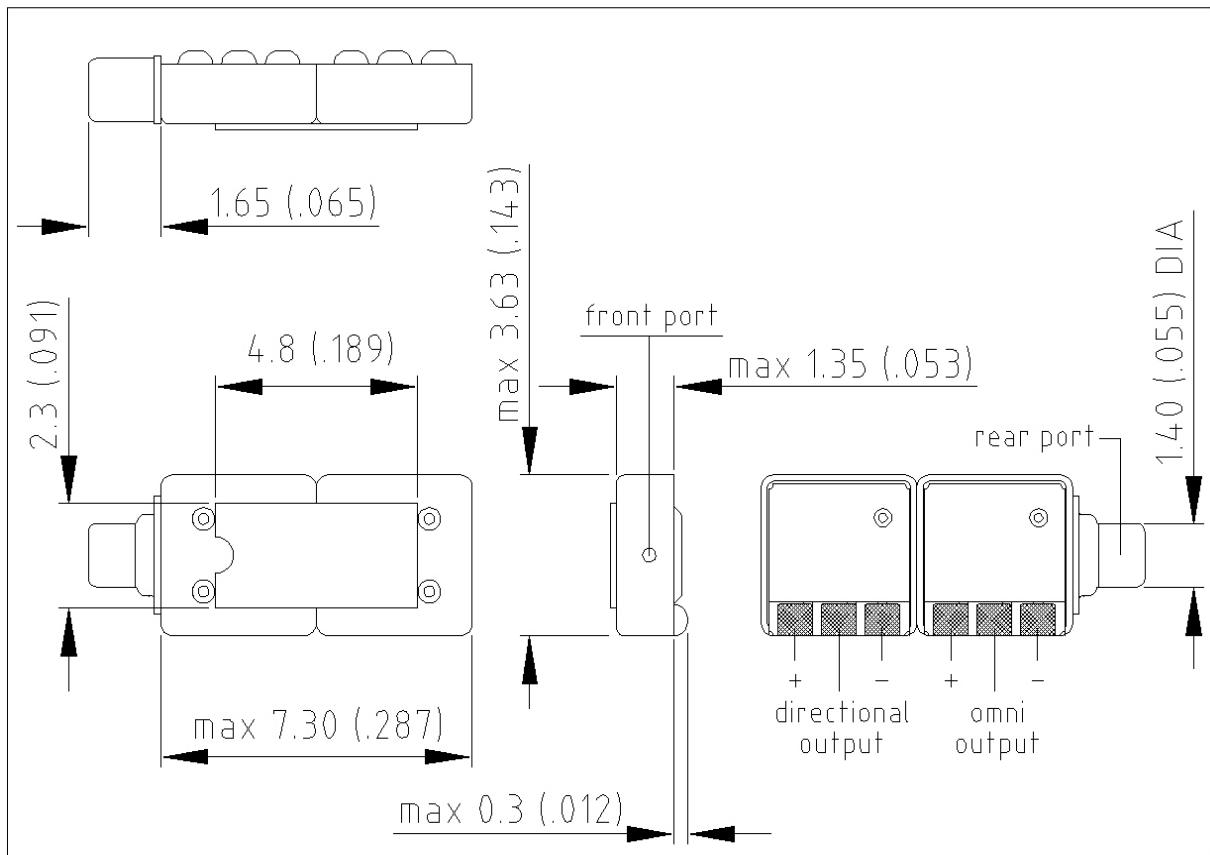
The 6912 is a unit consisting of a directional and an omni-directional microphone for hearing instruments. The microphone unit is equipped with special integrated amplifiers to increase the sensitivity. It has a decreased sensitivity for high frequency spurious signals and an improved ESD protection.



Features

- Superior Performance
- Great For Any Hearing Instrument Size
- Two Microphone Module: Directional and Omni Modes
- Different Size Spouts Available

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

Parameters directional		Min	Typ	Max	Unit	Comments
Sensitivity *	@ 100 Hz	-30	-27	-24	dB	re. 1 kHz value
	@ 1 kHz	-35	-32	-29	dB	re. 1V per Pascal
	@ 2.5 kHz	4	7	10	dB	re. 1 kHz value
Peak frequency			2.5		kHz	Approx.
Equivalent noise (A-weighted)			29	32	dB SPL	
Power supply feedthrough			-12	-10	dB	
Battery voltage range		0.8	1	5	VDC	
Battery drain		10	25	30	µA	
Output impedance **		2.8	3.9	5.5	kOhm	
Delay time			19		µs	
Null angle		115	130	145	Degrees	
AI-DI			5.5		dB	
Input-referred vibration sensitivity			78		dB SPL/g	1 kHz ref. acc. in axial dir.
Humidity coefficient of sensitivity			0.05		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

Parameters omni-directional		Min	Typ	Max	Unit	Comments
Sensitivity *	@ 70 Hz	-6	-3	0	dB	re. 1 kHz value
	@ 1 kHz	-37	-34	-31	dB	re. 1V per Pascal
	@ 8.5 kHz	2	5	8	dB	re. 1 kHz value
Peak frequency			8.5		kHz	Approx.
Equivalent noise (A-weighted)			26	29	dB SPL	
Power supply feedthrough			-12	-10	dB	
Battery voltage range		0.8	1	5	VDC	
Battery drain		10	25	30	µA	
Output impedance **		2.8	3.9	5.5	kOhm	
Input-referred vibration sensitivity			67		dB SPL/g	1 kHz ref. acc. in axial dir.
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.

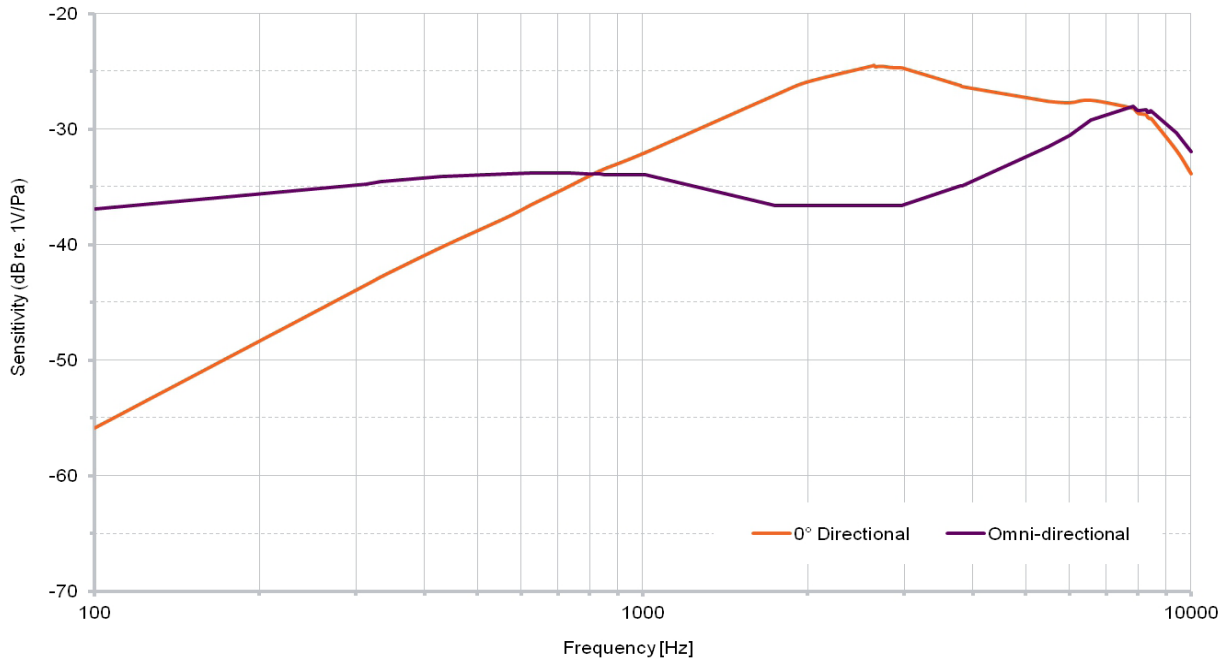
Electrical cut-off frequency 12.5 kHz

* 1 kHz sensitivity at 1.3 VDC supply: +1 dB re. 1.0 VDC supply.

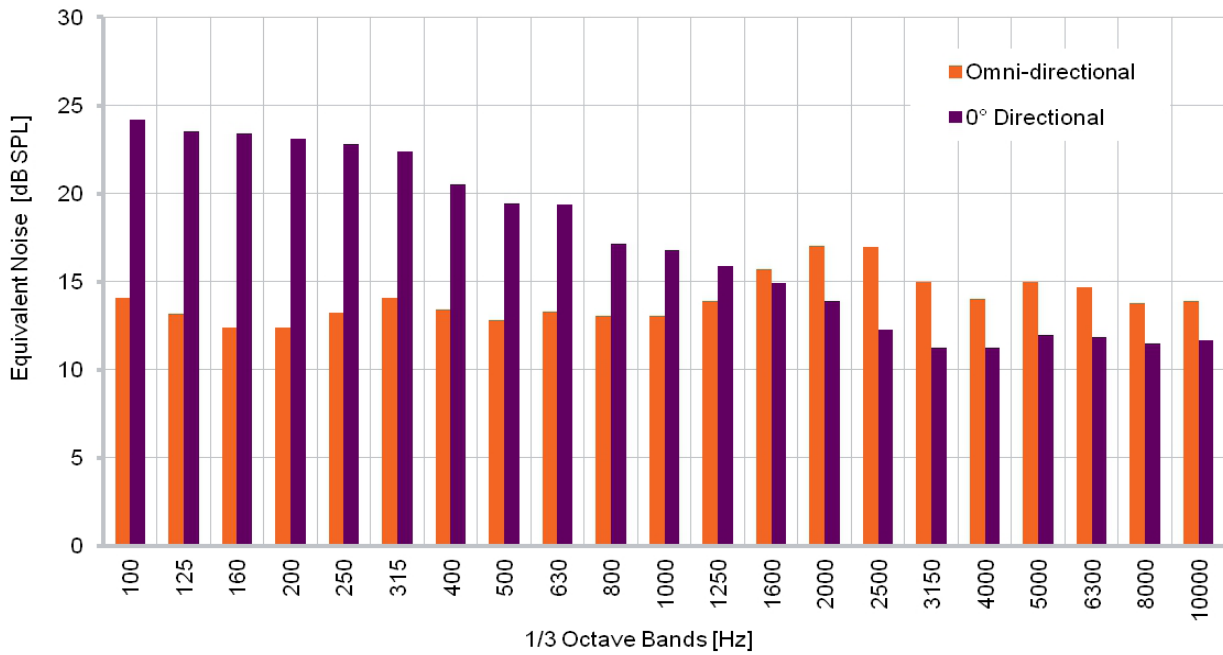
** Output impedance at 1.3 VDC supply: 2.9 kOhm typ.

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Typical response curve

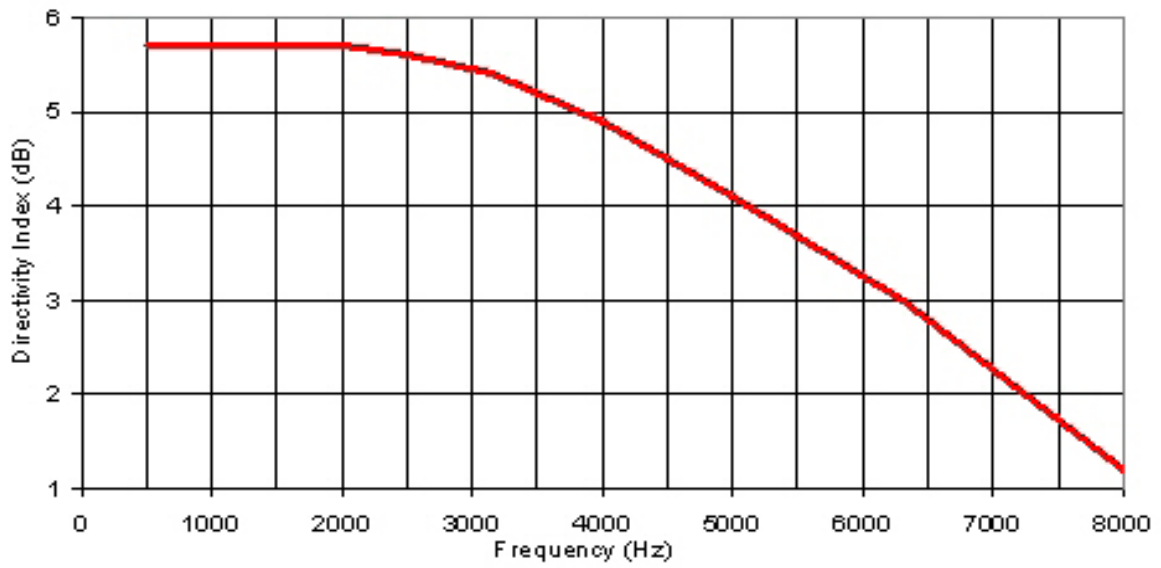


Typical 1/3 octave equivalent noise

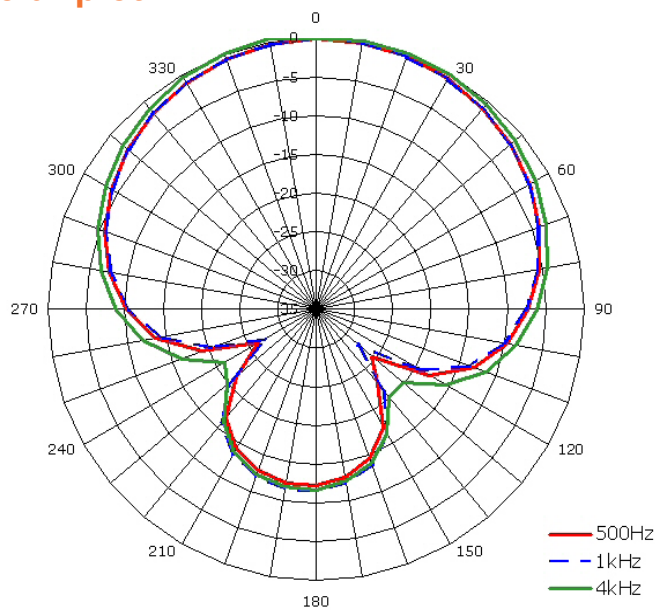


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Typical response curve



Polar plot



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