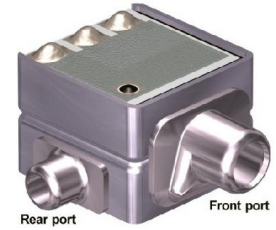


## Description

The 6908 is a unit consisting of a directional and an omni-directional microphone for hearing instruments. Due to the compact size, this unit is excellent for use in a BTE, ITE and ITC configuration.

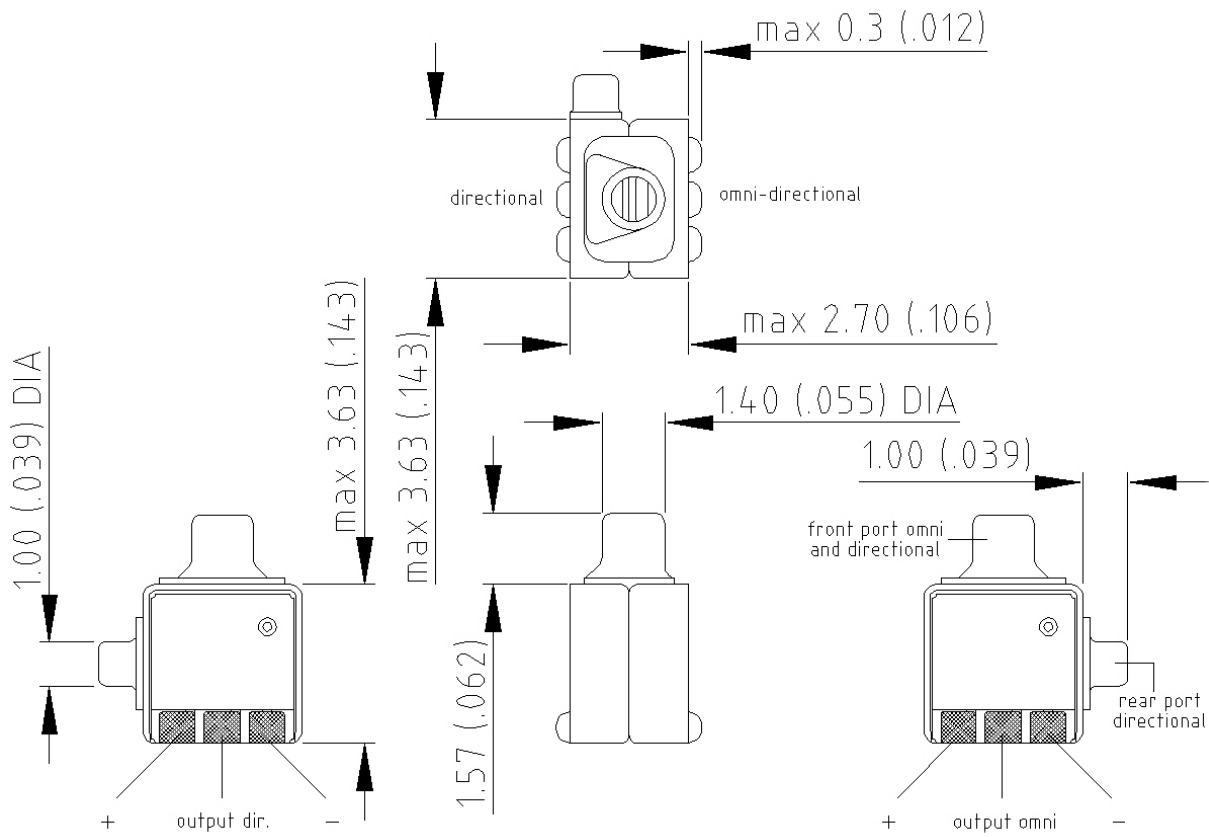
The unit is equipped with special integrated amplifiers to increase the sensitivity. It has a decreased sensitivity for high frequency spurious signals and an improved ESD protection.



## 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

Measuring conditions unless otherwise stated: Supply 1,3V, open sound ports without tubing and with the front port in the direction of the sound source. Environmental conditions: 23°C (73.4F), 50% RH.

Parameters directional	Min	Typ	Max	Unit	Comments	
Sensitivity *	@ 300 Hz	-14	-11	-8	dB	re. 1 kHz value
	@ 1 kHz	-41	-38	-35	dB	re. 1V per Pascal
	@ 3 kHz	4	7	9	dB	re. 1 kHz value
Peak frequency		3.5		kHz	Approx.	
Equivalent noise (A-weighted)		34	37	dB SPL		
Battery voltage range	0.9	1.3	5	VDC		
Battery drain	20	40	50	µA		
Output impedance **	2	3	5.5	kOhm		
Delay time	6.5	7.5	8.5	µs		
Null angle	132	142	152	Degrees		
AI-DI		5.4		dB		
ESD protection level	5			kV		

Parameters omni-directional	Min	Typ	Max	Unit	Comments	
Sensitivity *	@ 300 Hz	-8	-6	-4	dB	re. 1 kHz value
	@ 1 kHz	-40	-37	-34	dB	re. 1V per Pascal
	@ 7 kHz	6	9	12	dB	re. 1 kHz value
Peak frequency		7.5		kHz	Approx.	
Equivalent noise (A-weighted)		27	30	dB SPL		
Battery voltage range	0.9	1.3	5	VDC		
Battery drain	20	40	50	µA		
Output impedance **	2	3	5.5	kOhm		
ESD protection level	5			kV		
Humidity coefficient of sensitivity		0.03		dB/%RH		
Operating temperature range	-17	23	63	°C		
Storage temperature range	-40		63	°C		

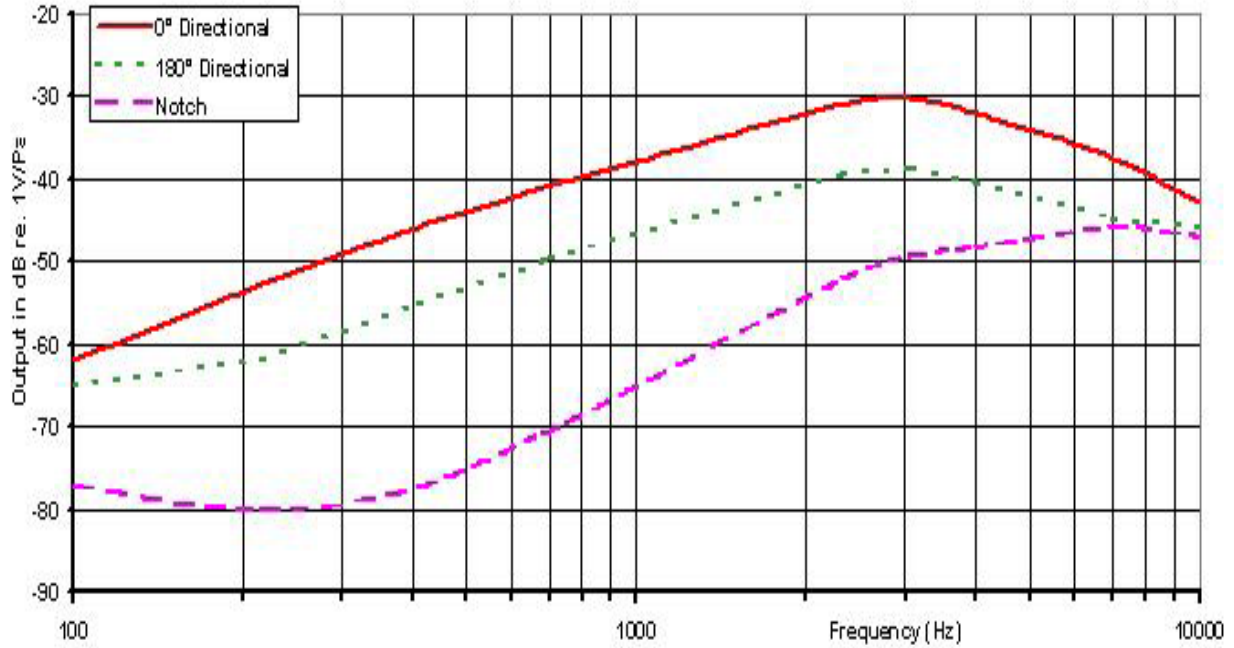
ESD protection level: Class 3 according to MIL-STD-750D, test method 1020,2.

Apply protection in accordance with IEC 61340-5-1 and 61340-5-2.

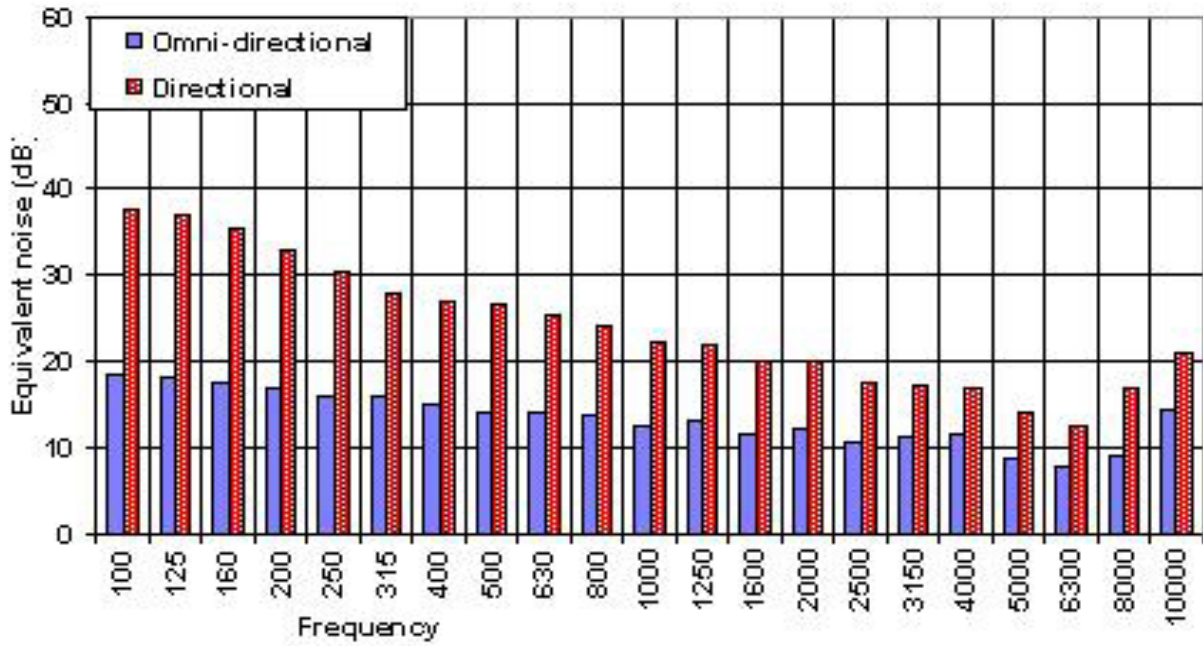
\* Sensitivity change on reducing supply to 0.9 VDC: 3 dB max.

\*\* Output impedance at 0.9 VDC supply: 7.5 kOhm max.

## Typical response curve

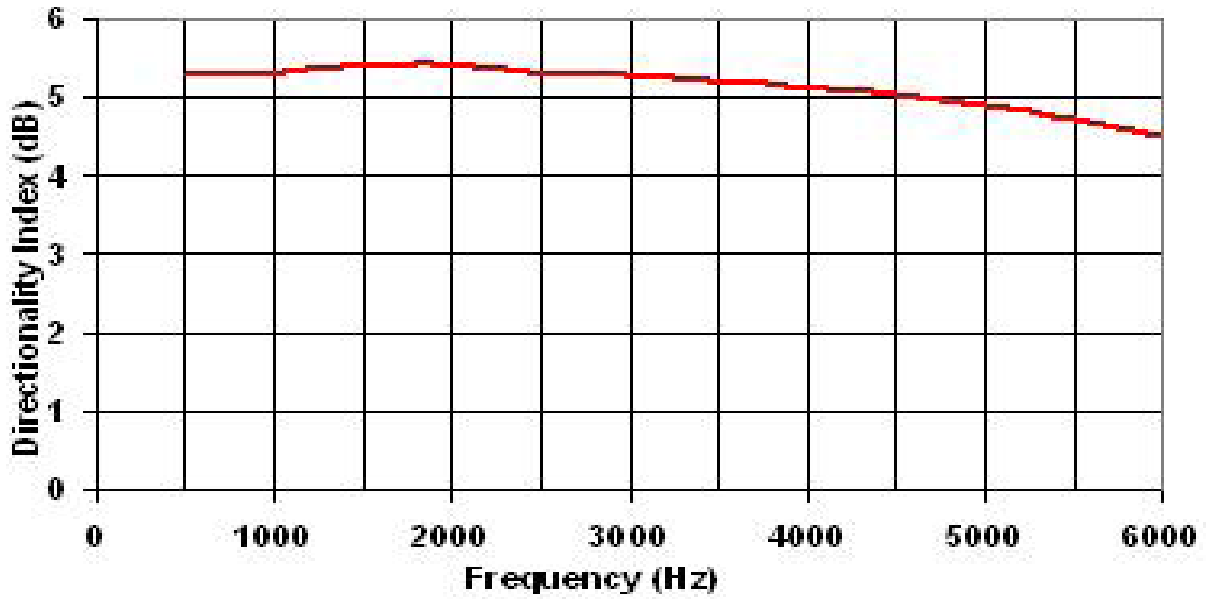


## Typical 1/3 octave equivalent noise

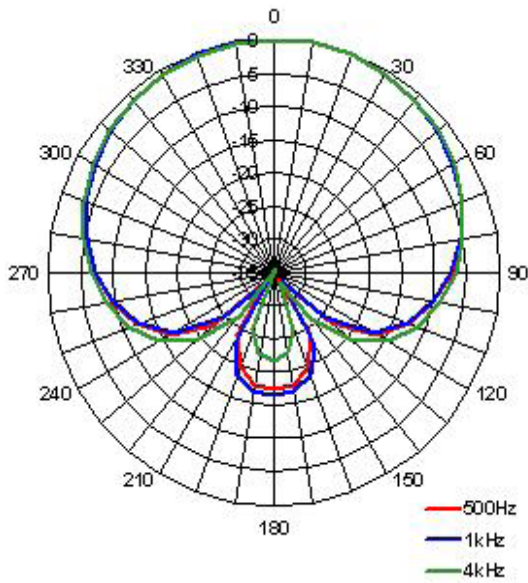


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## Typical response curve



## Polar plot



Note: when tubing is applied the polar responses and sensitivity of the directional microphone will change according to the new port spacing

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