

Description

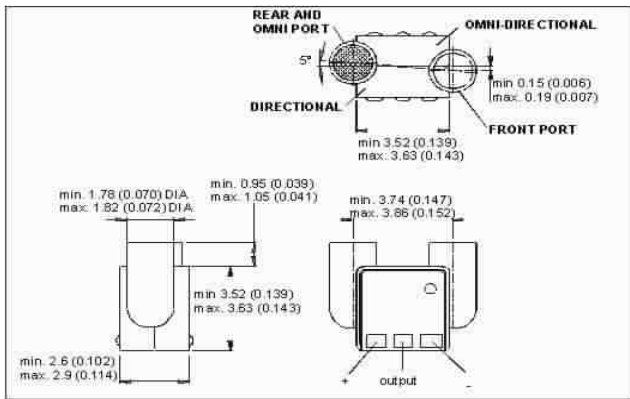
The 6950 is a unit consisting of a directional and an omni-directional microphone for hearing instruments. The null angle of this product has been optimised for use in the ear, therefore the typical free field null angle is 103 degrees. Due to the compact size, port location and null angle this unit is excellent for use in the ear configurations. Tubing is not required since the mechanical design allows direct placement in the faceplate. 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

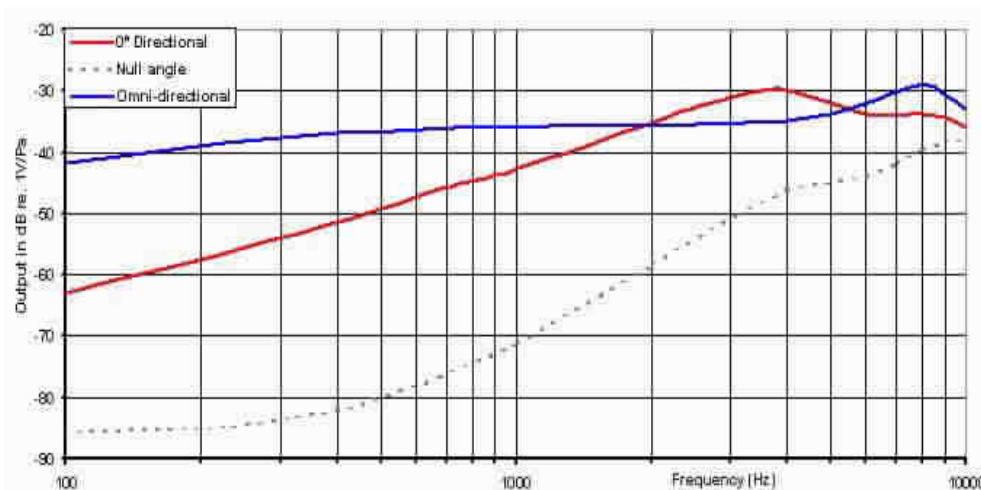
- Superior Performance
- Great For Any Hearing Instrument Size
- Two Microphone Module: Directional and Omni Modes
- Different Size Spouts Available

Dimensions in mm (inch)



Typical response curve

The response curves shown below are typical for this Unit in a free field setup.




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

Data Sheet



microphone 6950

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Specification

Parameters Directional		Min	Typ	Max	Unit	Comments
Sensitivity *	@ 100 Hz	-30	-27	-24	dB	re. 1 kHz value
	@ 1 kHz	-46	-43	-40	dB	re. 1V per Pascal
	@ peak	10	13.5	17	dB	re. 1 kHz value
Peak frequency		3.2	3.7	4.2	kHz	Approx.
Equivalent noise (A-weighted)			38	41	dB SPL	
Null angle		96	103	110	Degrees	
AI-DI			5.8		dB	
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	
Parameters Omni-Directional		Min	Typ	Max	Unit	Comments
Sensitivity *	@ 100 Hz	-8	-6	-4	dB	re. 1 kHz value
	@ 1 kHz	-39	-36	-33	dB	re. 1V per Pascal
	@ 8 kHz	4	7	10	dB	re. 1 kHz value
Peak frequency			8		kHz	Approx.
Equivalent noise (A-weighted)			26.5	29.5	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	
* Sensitivity change on reducing supply to 0.9 VDC: 3 dB max.						
** Output impedance change on reducing supply to 0,9 VDC: 7,5 kOhm max.						
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.						

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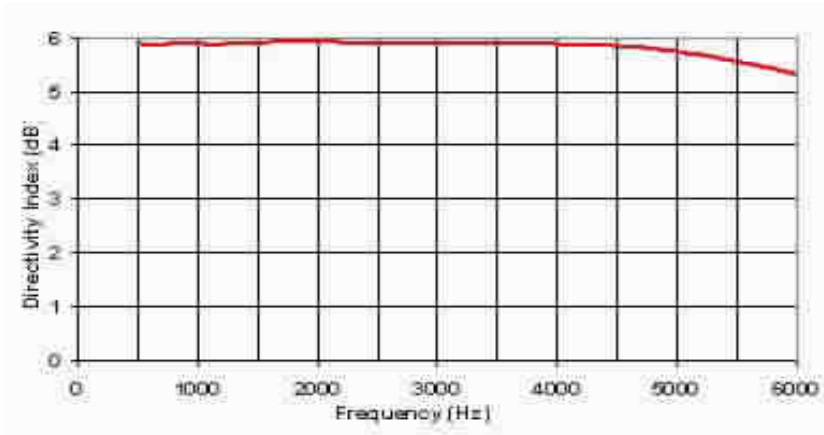


microphone 6950

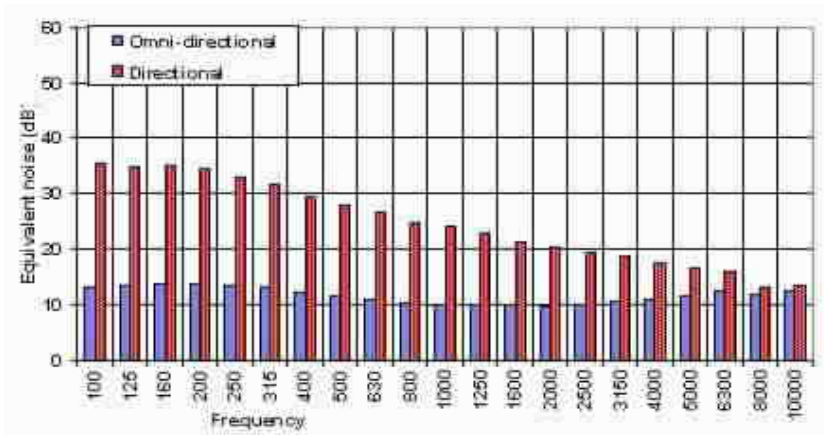
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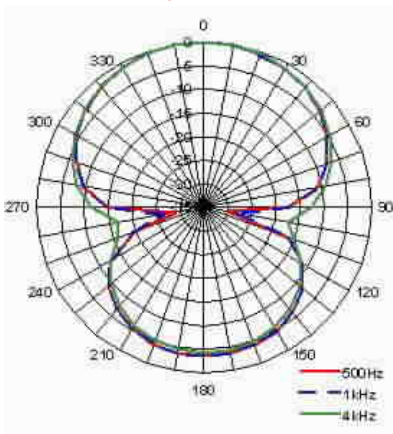
Directivity index vs Frequency (no tubing)



1/3 Octave equivalent noise (open ports)



Polar plot (typical)



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