

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.

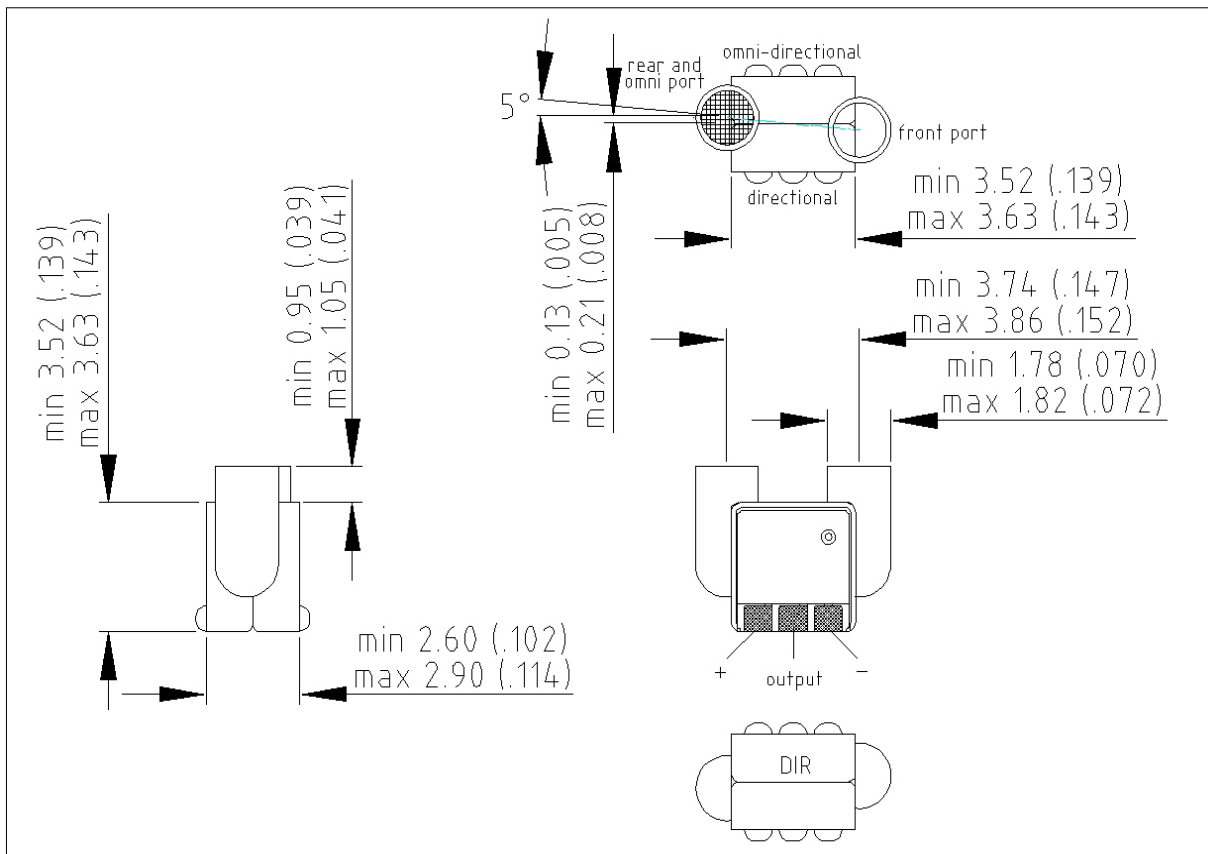
The microphone unit is equipped with special integrated amplifiers to increase the sensitivity. It has a decreased sensitivity for high frequency spurious signals and an improved ESD protection.



Features

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

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.

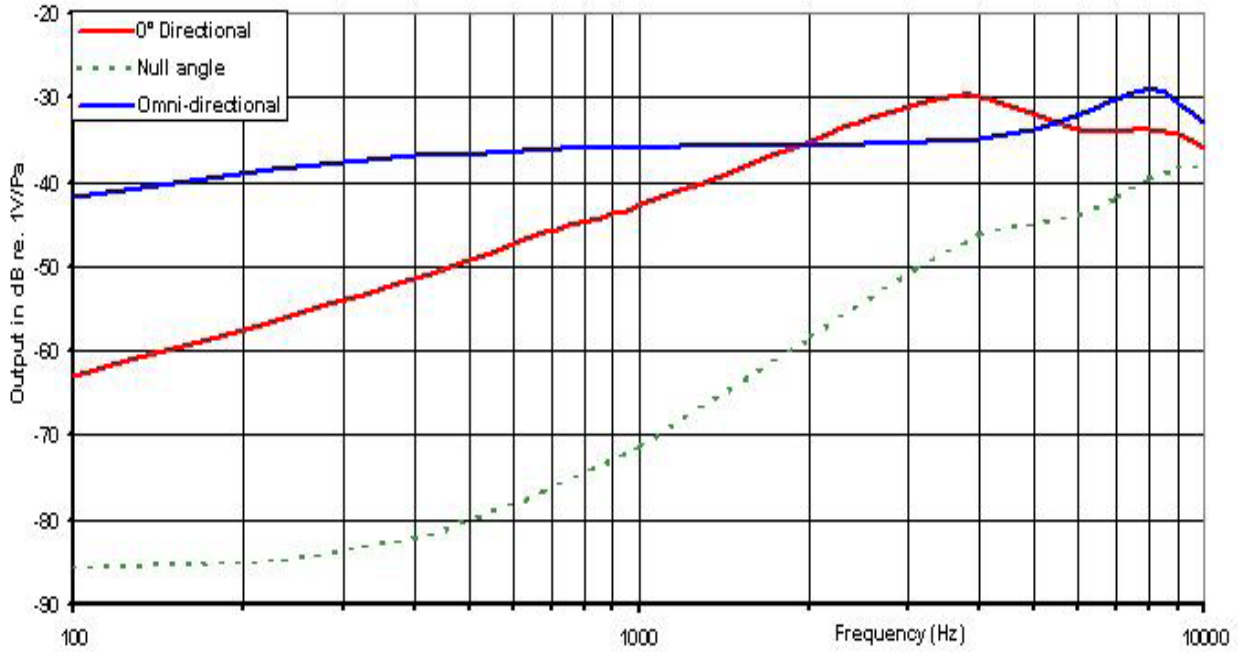
Specifications

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. Temperature 23°C (73.4F); Relative Humidity 40-60%.

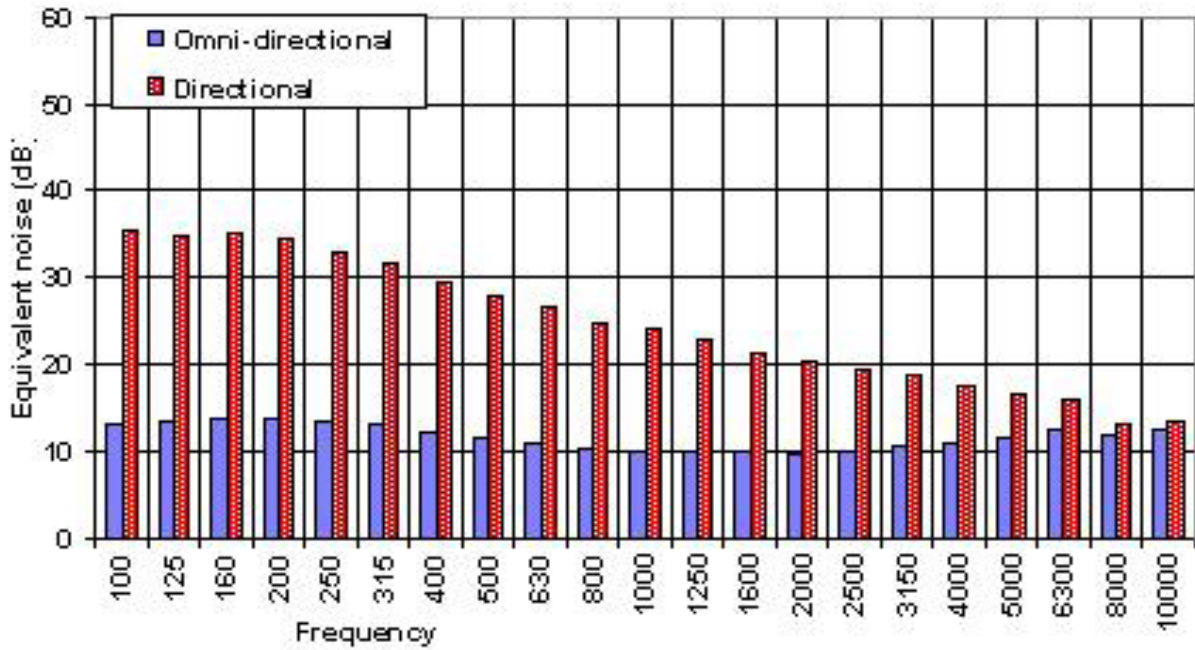
Parameters directional		Min	Typ	Max	Unit	Comments
Sensitivity *	@ 100 Hz	-30	-27	-24	dB	re. 1 kHz value
	@ 1 kHz	-46	-43	-40	dB	re. 1V per Pascal
	@ peak	10	13.5	17	dB	re. 1 kHz value
Peak frequency		3.2	3.7	4.2	kHz	Approx.
Equivalent noise (A-weighted)			38	41	dB SPL	
Battery voltage range		0.9	1.3	5	VDC	
Battery drain		20	40	50	µA	
Output impedance **		2	3	5.5	kOhm	
Null angle		96	103	110	Degrees	
AI-DI			5.8		dB	
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	
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 change on reducing supply to 0,9 VDC: 7,5 kOhm max.						

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Typical response curve



Typical 1/3 octave equivalent noise

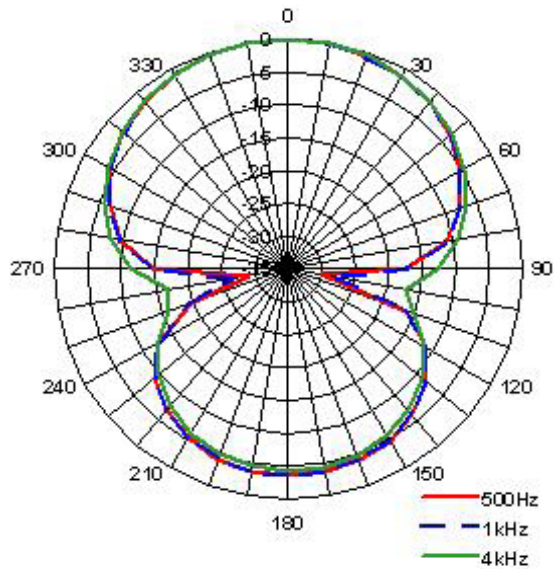


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Typical response curve



Polar plot



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