

Patents pending

V. 0.1 - Aug 2004

### Description

Miniature magnetic receiver (Balanced Armature Type) for use in hearing aids.

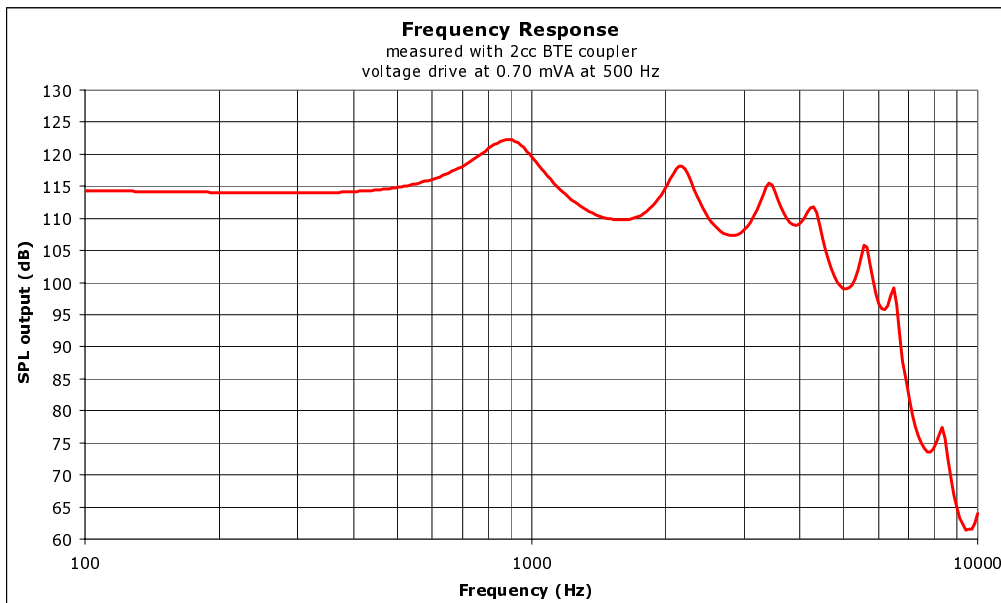


### Features

- Perfect for higher power premium BTE applications
- Tandem, twin-motor performance
- Significantly reduced mechanical vibration
- Specifically designed for digital applications
- Same the size as a 1900 receiver
- Broadband output

### Typical response curve

Refer to specifications section for measurement conditions.



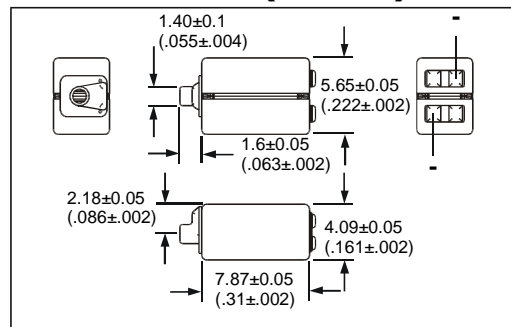
Sonion reserves the right to make changes at any time to improve reliability, function or design, in order to provide the best product possible. Receivers series 3300 can produce very high sound pressure levels. When such receivers are applied in hearing instruments or other communications equipment special attention should be paid to this capacity in order to prevent possible hearing damage.

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### Mechanical Data

Weight	0.6 g
Case material	Ni80Mo5Fe15
Solder pad content	Sn62Pb36Ag2
Dimensions	Refer to outline drawing

### Dimensions in mm. (inches)



### Specifications

Measurement specifications:

- The acoustic termination consists of:  
8 mm x 1 mm ID + 28 mm x 1.5 mm ID + 25 mm x 2 mm ID + 18 mm x 3 mm ID + 2 cc coupler.
- Drive is voltage drive of RMS 0.70 mVA at 500 Hz unless specified otherwise.

Acoustic Parameters		Min	Typ	Max	Unit	Comments
Sensitivity	@ 200 Hz	111	114	117	dB	
	@ 300 Hz	111	114	117	dB	
	@ 500 Hz	111.5	114.5	117.5	dB	
Peak 1	frequency	740	890	1040	Hz	
	output	119.5	122	124.5	dB	
Valley 1	frequency	1325	1575	1825	Hz	
	output	106	109		dB	
Peak 2	frequency	1975	2175	2375	Hz	
	output	115.5	118	120.5	dB	
Valley 2	frequency	2575	2825	3075	Hz	
	output	104	107		dB	
Peak 3	frequency	3100	3400	3700	Hz	
	output	112.5	115	117.5	dB	
Valley 3	frequency	3650	3900	4150	Hz	
	output	106.5	109		dB	
Peak 4	frequency	4025	4275	4525	Hz	
	output	109	112	115	dB	
Valley 4	frequency	4825	5075	5325	Hz	
	output	96	99		dB	
Peak 5	frequency	5175	5575	5975	Hz	
	output	101	105.5	110	dB	
THD	@ 1/3 x pkf 1			5	%	
	@ 1/2 x pkf 1			5	%	
Output @ peak frequency 1			137		dB	100 mVA input
Electric Parameters		Min	Typ	Max	Unit	Comments
Impedance (500 Hz) parallel		14	18	22	Ohm	
Impedance (500 Hz) series		58	72	86	Ohm	
Impedance (1 kHz) parallel		28	35	42	Ohm	
Impedance (1 kHz) series		112	140	168	Ohm	
DC resistance @ 20 °C parallel		10	12	14	Ohm	
DC resistance @ 20 °C series		40	48	56	Ohm	
Additional Parameters		Min	Typ	Max	Unit	Comments
Shock resistance		15000			g	85% survival rate with THD @ 300 Hz < 10%
Storage temperature range		-40		63	°C	

A positive voltage applied to the terminals will result in an increase in pressure in the sound outlet.

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### THD vs Frequency

