

Data Sheet



receiver 37AM007M

3372 - 3025334
Version: 1 20-MAY-2011

Description

Miniature magnetic receiver (balanced armature type) for use in hearing aids.



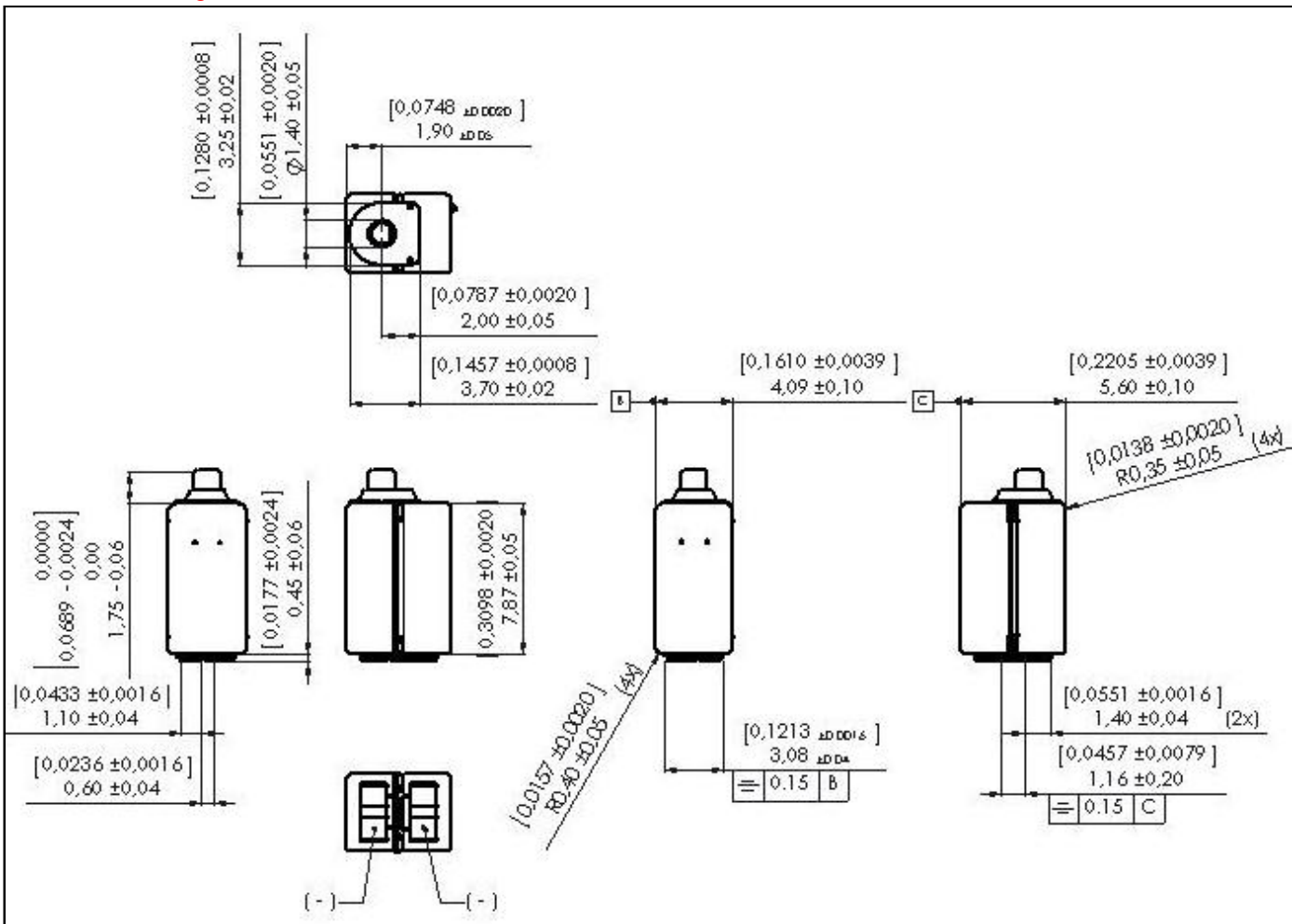
Features

- Perfect for high power premium BTE applications
- Tandem, twin-motor performance
- Significantly reduced mechanical vibration
- Reduced magnetic radiation
- Low impedance

Mechanical Data

Weight	0.6 gr.
Case material	Ni80Fe15Mb5
Solder pad content	Sn96.5Ag3.0Cu0.5
Dimensions	Refer to outline drawing

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. Receivers series of this type 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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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 0.7 mVA at 500 Hz unless specified otherwise.
Environmental conditions: 23 °C (73.4F), 50% RH.

Acoustic parameters		Mn	Typ	Max	Unit	Comments
Sensitivity	@ 200 Hz	112.5	115.5	118.5	dB	
	@ 300 Hz	112	115	118	dB	
	@ 500 Hz	113	116	119	dB	
Peak 1	frequency	800	950	1100	Hz	
	output	121	123.5	126	dB	
Valley 1	frequency	1400	1650	1900	Hz	
	output	109	112		dB	
Peak 2	frequency	2050	2250	2450	Hz	
	output	118	120.5	123	dB	
Valley 2	frequency	2600	2850	3100	Hz	
	output	107.5	110		dB	
Peak 3	frequency	3000	3300	3600	Hz	
	output	113.5	116	118.5	dB	
Valley 3	frequency	3800	4050	4300	Hz	
	output	102	106		dB	
Peak 4	frequency	4150	4450	4750	Hz	
	output	106	109	112	dB	
Valley 4	frequency	5050	5300	5550	Hz	
	output	93	96		dB	
Peak 5	frequency	5350	5750	6150	Hz	
	output	97.5	101	104.5	dB	
THD	@ 1/3 peak			5	%	
	@ 1/2 peak			5	%	
Maximum output @ peak frequency			143		dB	100 mVA input

Electric parameters		Mn	Typ	Max	Unit	Comments
Impedance @ 1000 Hz parallel		19	22	25	Ohm	
Impedance @ 1000 Hz series					Ohm	
Impedance @ 500 Hz parallel		15	18	21	Ohm	
Impedance @ 500 Hz series					Ohm	
DC resistance @ 20 °C parallel		9	13	16	Ohm	
DC resistance @ 20 °C series					Ohm	
DC bias current range						

Additional parameters		Mn	Typ	Max	Unit	Comments
Shock resistance		8000			g	90% survival rate with THD @ 1/2 peak freq. < 10%
Storage temperature range		-40		63	°C	

A positive voltage applied to the negative terminal (-) will result in an increase in pressure at the sound outlet.

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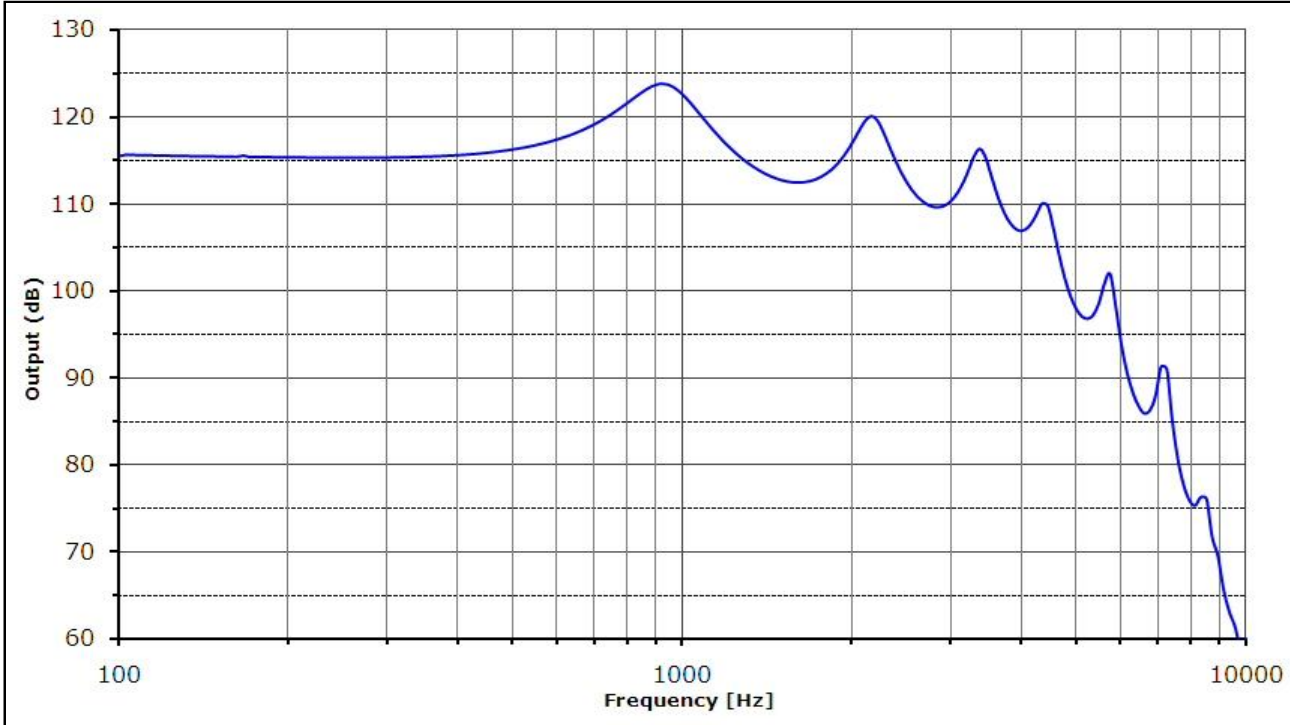
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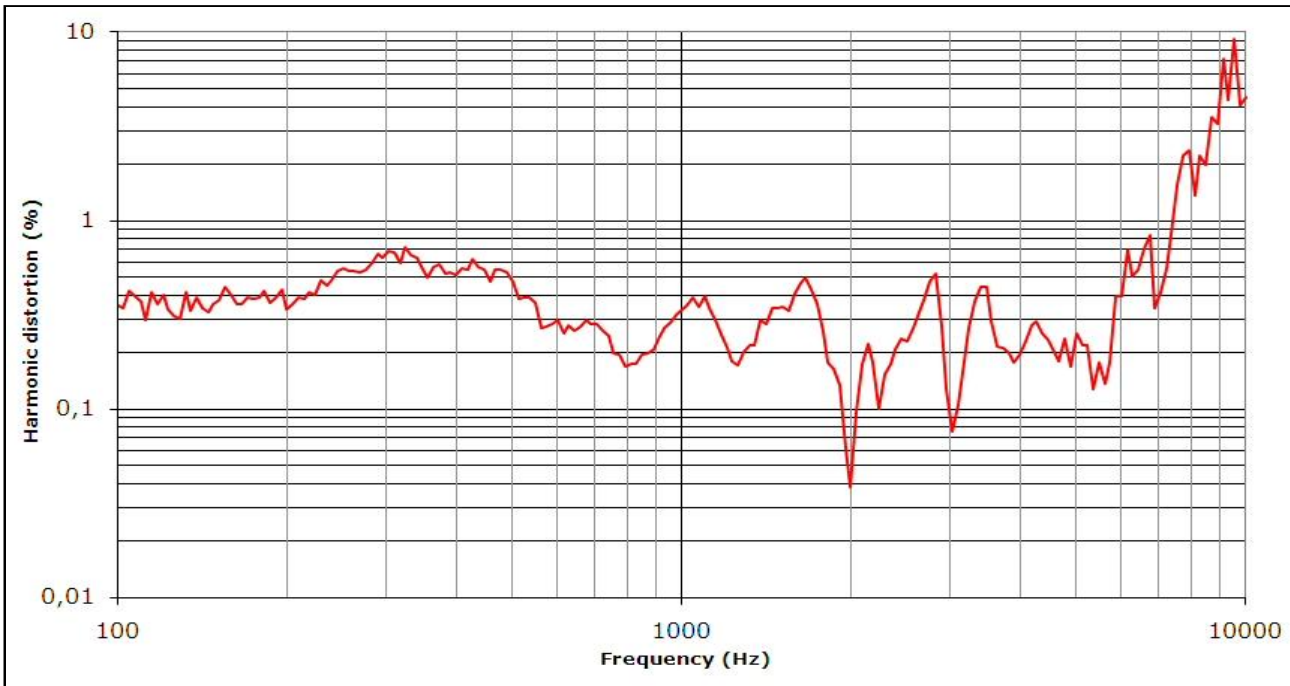
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Typical response curve, nominal input



THD vs Frequency, typical, nominal input



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