

# Data Sheet



receiver 37AE007C/8

3370 - 3021774  
Version:1 20-JAN-2010

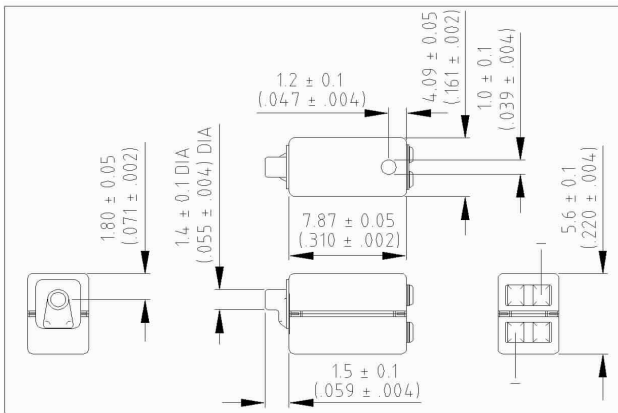
## Description

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
- Specifically designed for digital applications
- Same the size as a 1900 receiver

## Dimensions in mm (inch)

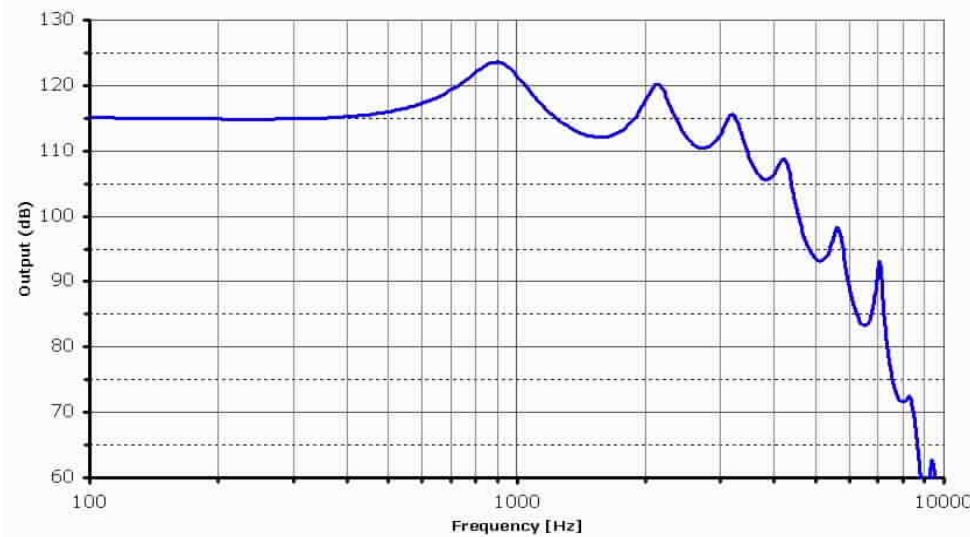


## Mechanical Data

Weight	0.6 gr.
Case material	Ni80Fe15Mo5
Solder pad content	Sn96.5Ag3.0Cu0.5
Dimensions	Refer to outline drawing

## 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 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 0.7 mVA RMS with ventholes closed unless specified otherwise.  
Environmental conditions: 23 °C (73.4F), 50 % RH.

Acoustic parameters		Min	Typ	Max	Unit	Comments
Sensitivity	@ 200 Hz	111.5	114.5	117.5	dB	
	@ 300 Hz	111.5	114.5	117.5	dB	
	@ 500 Hz	112	115	118	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	117.5	120	122.5	dB	
Valley 2	frequency	2600	2850	3100	Hz	
	output	107.5	110.5		dB	
Peak 3	frequency	3000	3300	3600	Hz	
	output	113.5	116	118.5	dB	
Valley 3	frequency	3800	4050	4300	Hz	
	output	101.5	104.5		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	98	101.5	105	dB	
THD	@ 1/3 peak			5	%	
	@ 1/2 peak			5	%	
Maximum output @ peak frequency			142		dB	100 mVA input

Electric parameters	Min	Typ	Max	Unit	Comments
Impedance @ 1000 Hz parallel	18.4	22.4	26.4	Ohm	
Impedance @ 1000 Hz series	72.3	88.2	104.1	Ohm	
Impedance @ 500 Hz parallel	17.3	21	24.7	Ohm	
Impedance @ 500 Hz series	68.2	83.2	98.2	Ohm	
DC resistance @ 20 °C parallel	13.1	14.9	16.7	Ohm	
DC resistance @ 20 °C series	51.6	58.7	65.8	Ohm	

Additional parameters	Min	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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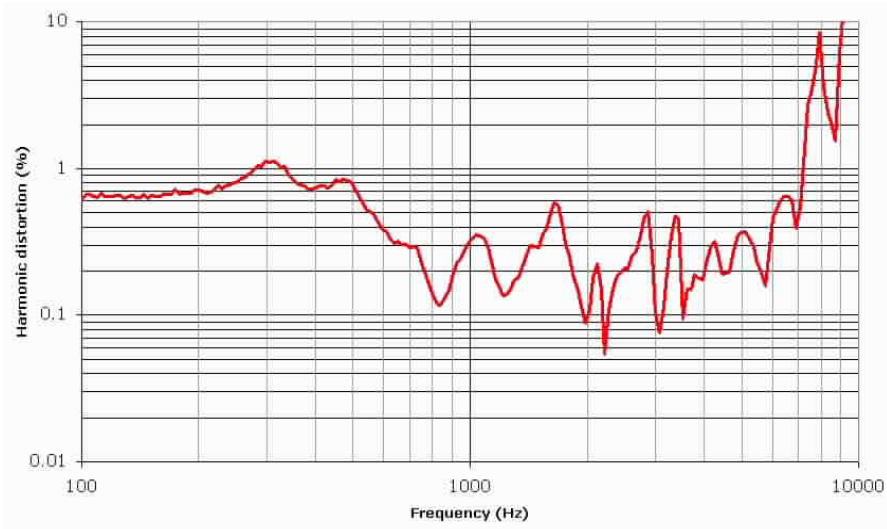
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## THD vs Frequency, typical, nominal input



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