

Data Sheet



receiver 37A042

3370 - 3024042
Version: 1 07-SEP-2010

Description

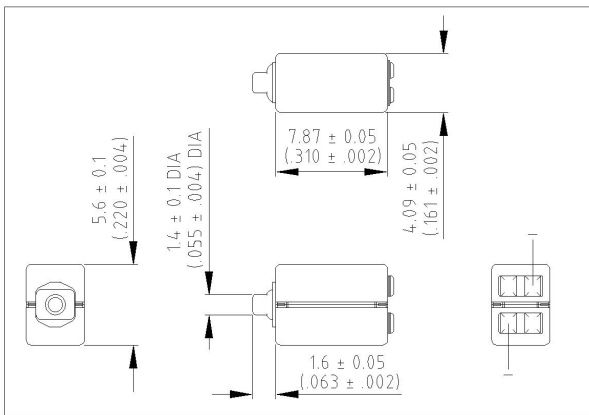
Mniature magnetic receiver (balanced armature type) for use in hearing aids.

Features

- High power receiver
- Perfect for high power premium BTE applications
- Tandem, twin-motor performance
- Significantly reduced mechanical vibration
- Specifically designed for digital applications



Dimensions in mm (inch)

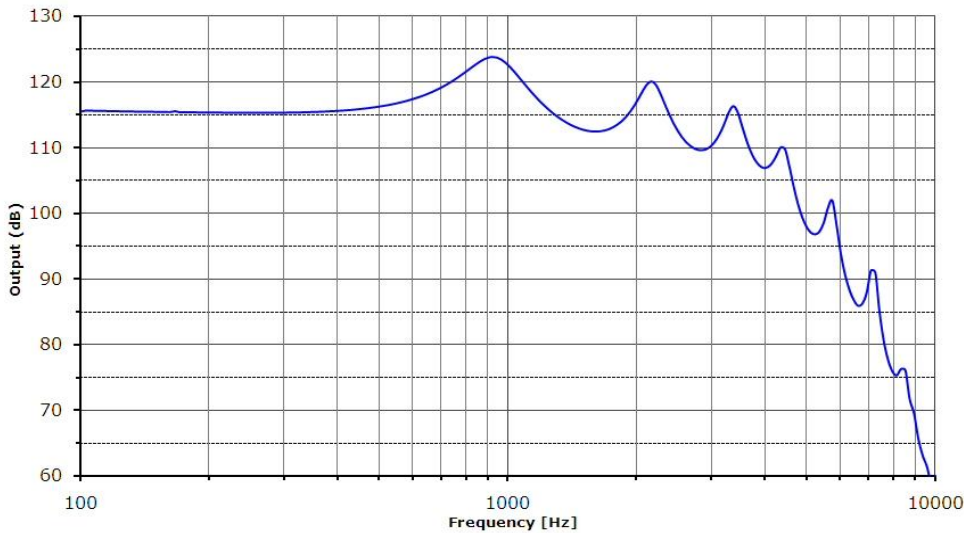


Mechanical Data

Weight	0.6 gr.
Case material	Ni80Fe15Mb5
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 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

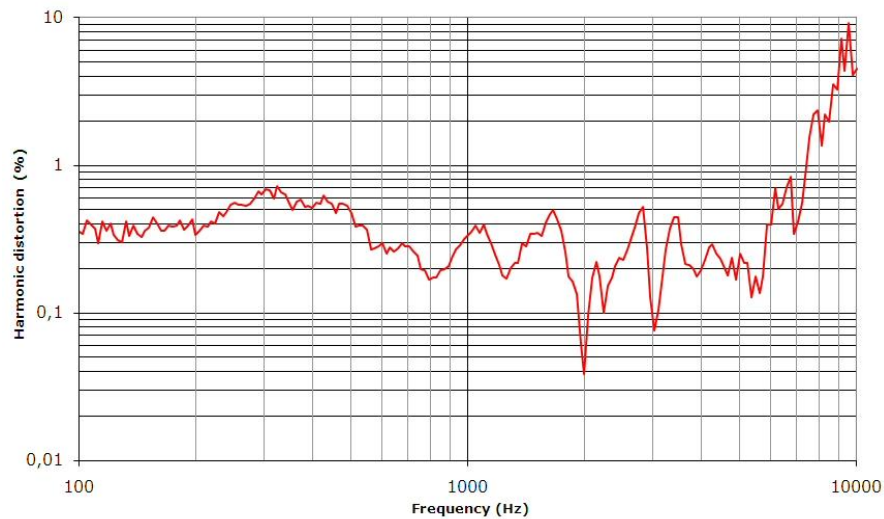
Electric parameters		Mn	Typ	Max	Unit	Comments
Impedance @ 1000 Hz parallel		100	125	150	Ohm	
Impedance @ 1000 Hz series		400	500	600	Ohm	
Impedance @ 500 Hz parallel		90	113	136	Ohm	
Impedance @ 500 Hz series		372	465	558	Ohm	
DC resistance @ 20 °C parallel		62	73	84	Ohm	
DC resistance @ 20 °C series		247	290	334	Ohm	

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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THD vs Frequency, typical, nominal input



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