# **Data Sheet**

Receiver 38AM007M/8a



#### **Description**

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

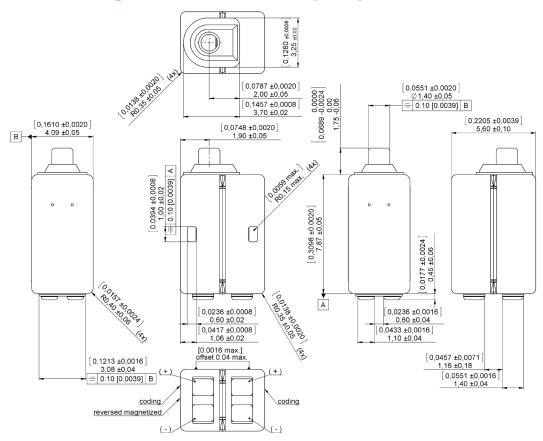
#### **Features**

- Perfect for higher power premium BTE applications
- Tandem, twin-motor performance
- Significantly reduced mechanical vibration
- Improved magnetic radiation
- Same the size as a 3300 receiver

#### Mechanical data

Weight 0.60 gr.
Case material Ni80Fe15Mo5
Solder pad material 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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Item-Configuration number: 3380-3023307 Version: 4

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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 at 200 Hz unless specified otherwise. Environmental conditions: 23°C (73.4F), 50% RH.

Acoustic parameters		Open vents			Closed vents			11:4	C
		Min	Тур	Max	Min	Тур	Max	Unit	Comments
Sensitivity	@ 200 Hz	119	122	125	110.5	113.5	116.5	dB	
	@ 300 Hz	119.5	122.5	125.5	110.5	113.5	116.5	dB	
	@ 500 Hz	121	124	127	112	115	118	dB	
Peak 1	frequency	450	600	750	700	850	1000	Hz	
	output	122.5	125	127.5	120	122.5	125	dB	
Valley 1	frequency	1200	1450	1700	1350	1600	1850	Hz	
	output	108.5	111.5		106.5	109.5		dB	
Peak 2	frequency	1700	1950	2200	1900	2150	2400	Hz	
	output	117	119.5	122	116	118.5	121	dB	
Valley 2	frequency	2400	2650	2900	2550	2800	3050	Hz	
	output	103	106		103	106		dB	
Peak 3	frequency	2900	3150	3400	3150	3400	3650	Hz	
	output	109	111.5	114	110.5	113	115.5	dB	
THD	@ 1/3 peak			8			5	%	@ 0.13V open, @ 0.17V closed
	@ 1/2 peak			6			5	%	@ 0.15V open, @ 0.20V closed
Maximum output @ peak frequency			143			143		dB	@ 100 mVA input
			138*			140**			Typ. rubfree output *@0.45V-**@0.92V

Electric parameters	Min	Тур	Max	Unit	Comments
Impedance @ 1000 Hz parallel	15	19	23	Ohm	open vents
Impedance @ 1000 Hz series	61	76	91	Ohm	open vents
Impedance @ 500 Hz parallel	32	40	48	Ohm	open vents
Impedance @ 500 Hz series	128	160	192	Ohm	open vents
Impedance @ 200 Hz parallel	12	15	18	Ohm	open vents
Impedance @ 200 Hz series	48	60	72	Ohm	open vents
DC resistance @ 20°C parallel	11	12.5	14	Ohm	open vents
DC resistance @ 20°C series	43	50	58	Ohm	open vents
DC bias current range		zero bias	3		

Additional parameters	Min	Тур	Max	Unit	Comments
Shock resistance	8000			g	90% survival rate with THD @ 1/2 peak frequency < 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

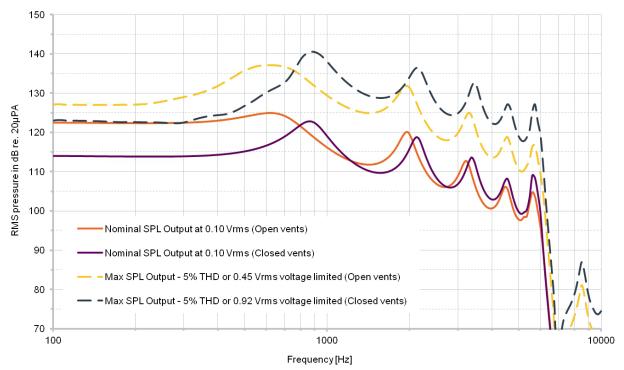
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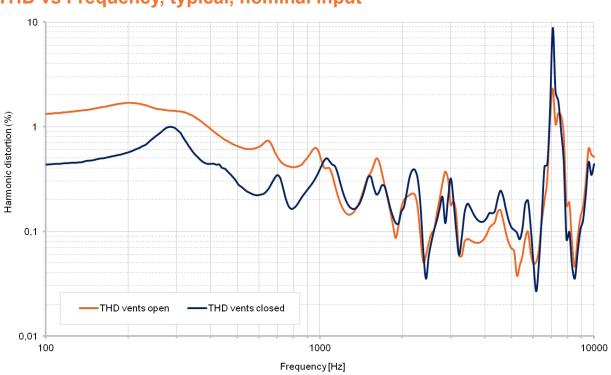




## **Typical response curve**



## THD vs Frequency, typical, nominal input



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