Data Sheet

RoHS 2002/95/EC

receiver 2091i

3200 - 3021159
Version:1 18-FEB-2009

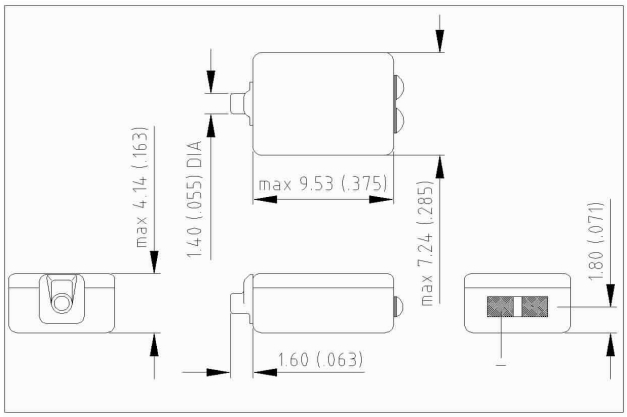
Description

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

Features

- High output, maximum peak output 140 dB
- Suitable as woofer in PM applications

Dimensions in mm (inch)

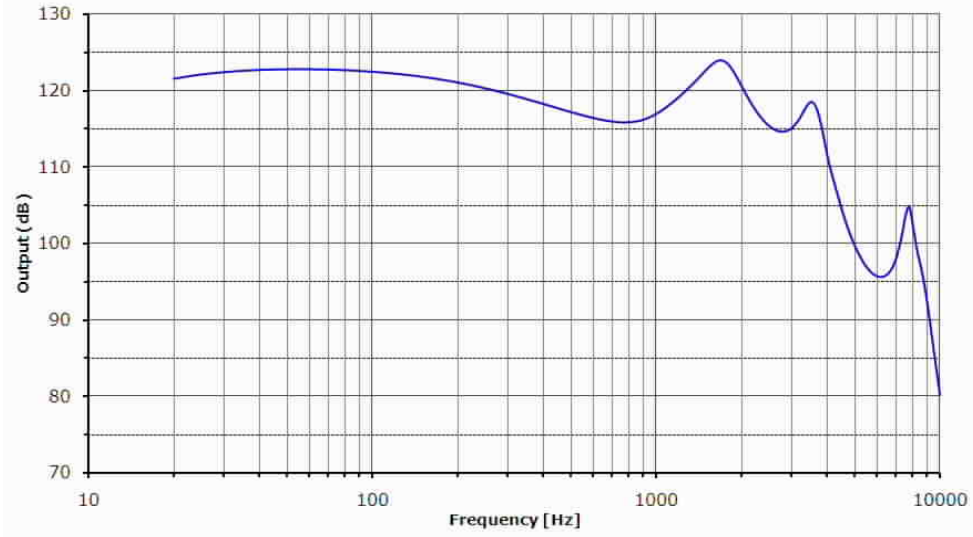


Mechanical Data

Weight	0.94 gr.
Case material	Ni80Fe20
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.

Specifications

The acoustic termination consist of: 11x1.9mmID + 4.5 x 1.4 mm ID into IEC 711 coupler. Drive is voltage drive of 0.10 V RMS from a low impedance source unless specified otherwise.
Environmental conditions: 23 °C (73.4F), 50 % RH.

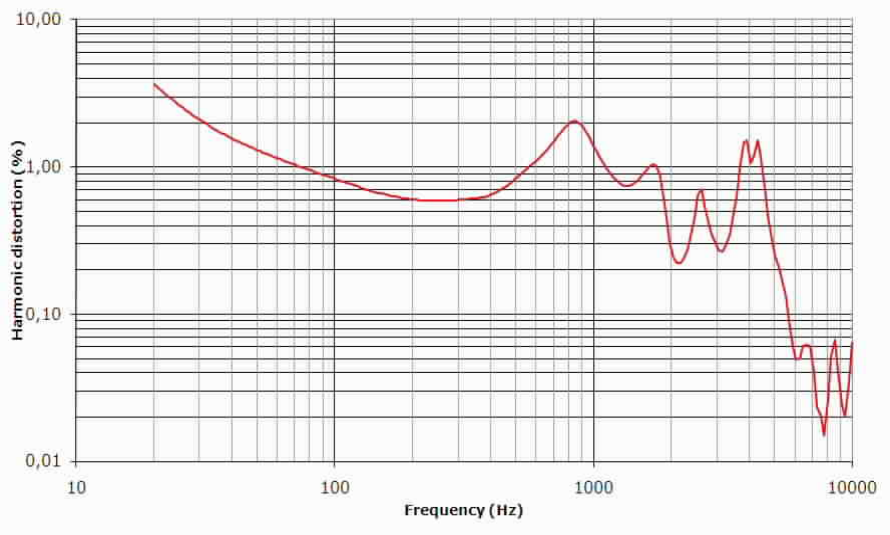
Acoustic parameters		Min	Typ	Max	Unit	Comments
Sensitivity	@ 50 Hz	120	123	126	dB	
	@ 300 Hz	117	120	123	dB	
	@ 500 Hz	114.5	117.5	120.5	dB	
	@ 1000 Hz	114	117	120	dB	
Peak 1	frequency	1450	1700	1950	Hz	
	output	121	124	127	dB	
Valley 1	frequency	2550	2800	3050	Hz	
	output	112	115	118	dB	
Peak 2	frequency	3150	3500	3850	Hz	
	output	116	119	122	dB	
Valley 2	frequency	5800	6200	6600	Hz	
	output	92	96	100	dB	
THD	@ 800 Hz		2	5	%	
	@ 1700 Hz		1	5	%	
Maximum output @ peak frequency		136	140		dB	

Electric parameters	Min	Typ	Max	Unit	Comments
Impedance @ 1000 Hz	45.6	57	68.4	Ohm	
Impedance @ 500 Hz	19.2	24	28.8	Ohm	
DC resistance @ 20 °C	9.3	11	12.7	Ohm	
DC bias current range		zero bias			

Additional parameters	Min	Typ	Max	Unit	Comments
Shock resistance	5500			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.

THD vs Frequency, typical, nominal input



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