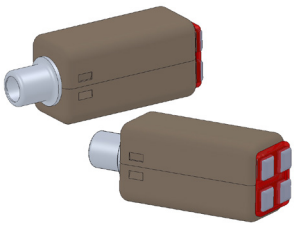
Data Sheet

Receiver E50DA020

Description

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



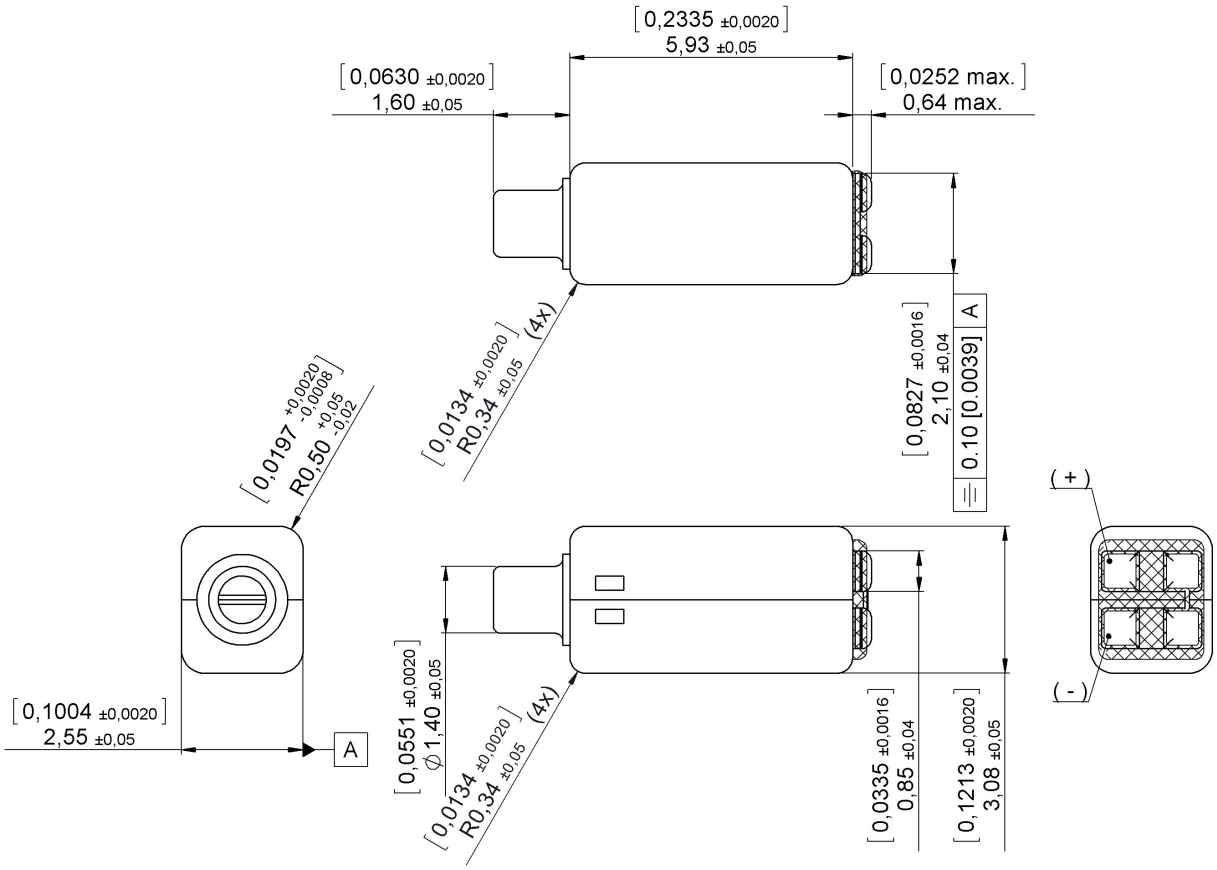
Features

- Dual receiver, series connected
- Reduced mechanical vibration
- Low magnetic radiation

Mechanical data

Weight	0.20 gr.
Case material	Ni80Fe15Mo5
Solder pad material	Sn96.5Ag3.0Cu0.5
Dimensions	Refer to outline drawing

Product drawing - Dimensions in mm [inch]



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Specifications

Acoustic loading: 10.0 mm of 1.0 mm diameter tubing into a 2 cc coupler.
Constant voltage drive of 0.240 V RMS (0.35 mVA @ 500 Hz) unless specified otherwise.
Environmental conditions: 23°C (73.4F), 50% RH.

Acoustic parameters		Min	Typ	Max	Unit	Comments
Sensitivity	@ 100 Hz	97	100	103	dB	
	@ 500 Hz	97	100	103	dB	
	@ 1000 Hz	96.5	99.5	102.5	dB	
Peak 1	frequency	2100	2400	2700	Hz	
	output	103	106	109	dB	
Valley 1	frequency	4100	4600	5100	Hz	
	output	90	93		dB	
Peak 2	frequency	5300	5800	6300	Hz	
	output	93	97	101	dB	
THD	@ 1/3 peak		1	5	%	
	@ 1/2 peak		1	5	%	
Maximum output @ peak frequency			117		dB	@ 0.92 Vrms

Electric parameters	Min	Typ	Max	Unit	Comments
Impedance @ 1000 Hz	160	200	240	Ohm	
Impedance @ 500 Hz	131	164	197	Ohm	
DC resistance @ 20°C	128	150	173	Ohm	
DC bias current range	zero bias				

Additional parameters	Min	Typ	Max	Unit	Comments
Shock resistance	12000			g	
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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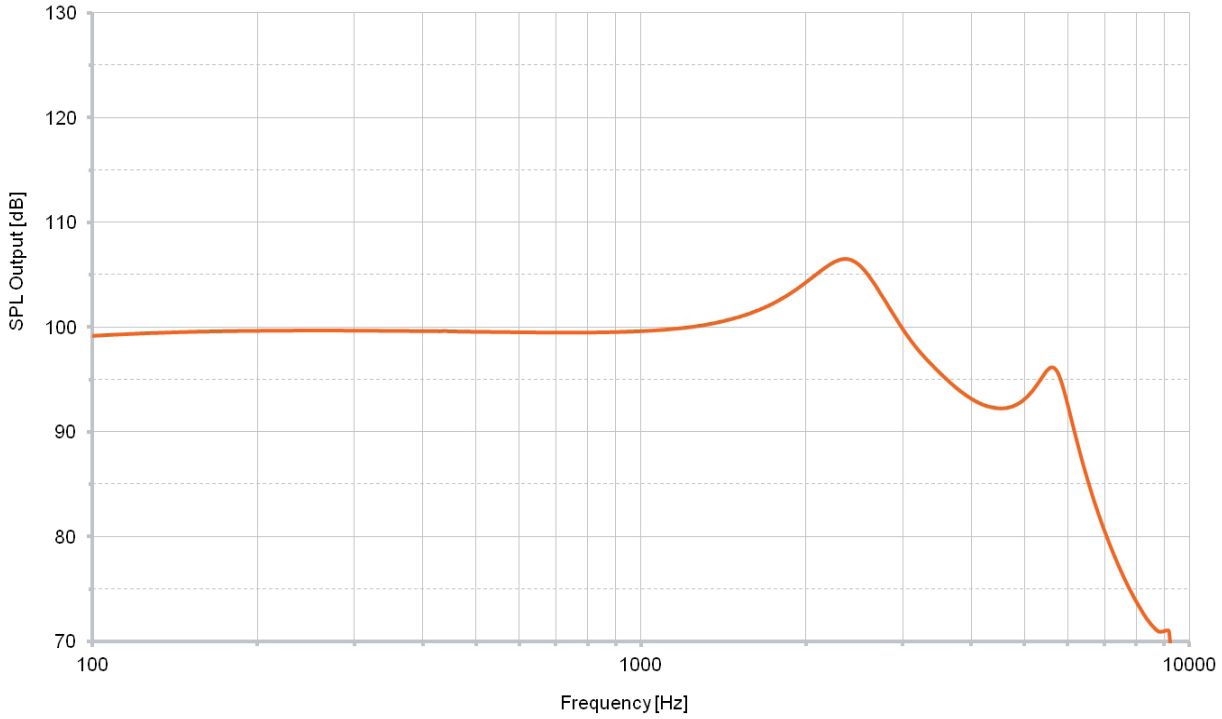
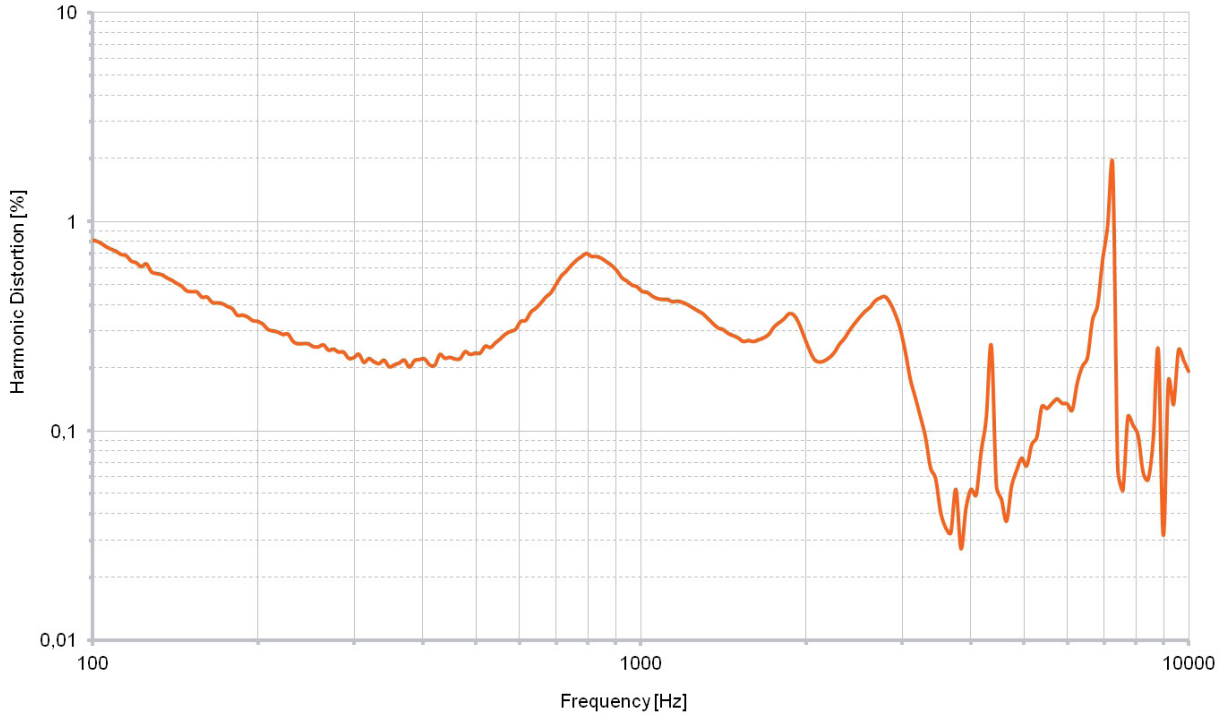
Typical response curve



THD vs Frequency, typical, nominal input



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