

## Description

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

## Features

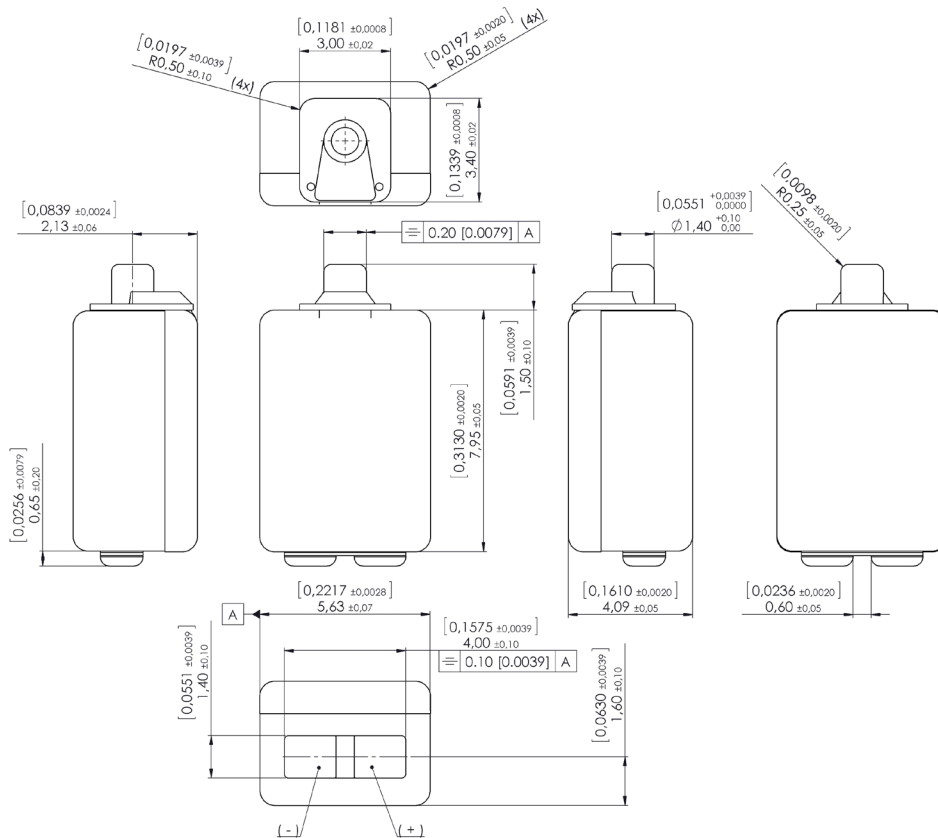
- Great BTE/ITE applications
- High output, maximum peak output 138 dB
- Low distortion



## Mechanical data

|                     |                          |
|---------------------|--------------------------|
| Weight              | 0.69 gr.                 |
| Case material       | Ni80Fe20                 |
| 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.

## 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. The electrical input is a 2.7 mA RMS constant current signal from a high impedance source. Environmental conditions: 23 °C (73.4F), 50 % RH.

| Acoustic parameters             |            | Min   | Typ   | Max   | Unit | Comments |
|---------------------------------|------------|-------|-------|-------|------|----------|
| Sensitivity                     | @ 200 Hz   | 105.5 | 108   | 110.5 | dB   |          |
|                                 | @ 700 Hz   | 114   | 116   | 118   | dB   |          |
| Peak 1                          | frequency  | 880   | 1030  | 1180  | Hz   |          |
|                                 | output     | 124.3 | 126.3 | 128.3 | dB   |          |
| Valley 1                        | frequency  | 1200  | 1400  | 1600  | Hz   |          |
|                                 | output     | 116   | 118   |       | dB   |          |
| Peak 2                          | frequency  | 1780  | 1930  | 2080  | Hz   |          |
|                                 | output     | 123.6 | 125.6 | 127.6 | dB   |          |
| Valley 2                        | frequency  | 2100  | 2400  | 2700  | Hz   |          |
|                                 | output     | 116   | 118   |       | dB   |          |
| Peak 3                          | frequency  | 2650  | 2800  | 2950  | Hz   |          |
|                                 | output     | 119.6 | 121.6 | 123.6 | dB   |          |
| Valley 3                        | frequency  | 3300  | 3600  | 3900  | Hz   |          |
|                                 | output     | 105   | 107   |       | dB   |          |
| Peak 4                          | frequency  | 3990  | 4140  | 4290  | Hz   |          |
|                                 | output     | 111   | 113   | 115   | dB   |          |
| Valley 4                        | frequency  | 4700  | 5000  | 5300  | Hz   |          |
|                                 | output     | 94    | 98    |       | dB   |          |
| Peak 5                          | frequency  | 5220  | 5520  | 5820  | Hz   |          |
|                                 | output     | 100.9 | 104.9 | 108.9 | dB   |          |
| THD                             | @ 1/3 peak |       |       | 9     | %    |          |
|                                 | @ 1/2 peak |       |       | 9     | %    |          |
| Maximum output @ peak frequency |            | 135   | 138   | 141   | dB   |          |

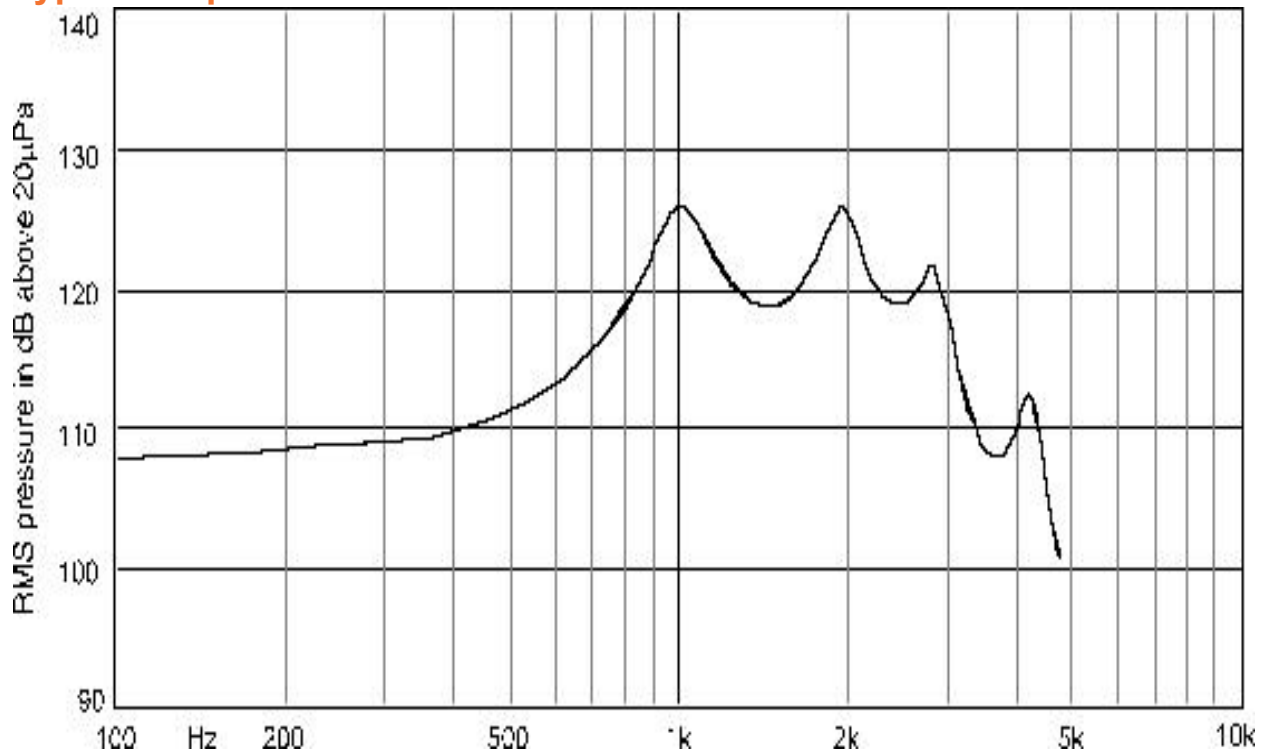
| Electric parameters   |  | Min       | Typ | Max | Unit | Comments |
|-----------------------|--|-----------|-----|-----|------|----------|
| Impedance @ 1000 Hz   |  | 109       | 137 | 164 | Ohm  |          |
| Impedance @ 500 Hz    |  | 57        | 72  | 86  | Ohm  |          |
| DC resistance @ 20°C  |  | 21        | 25  | 28  | 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 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



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