Data Sheet

Receiver 31D005/8



Description

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

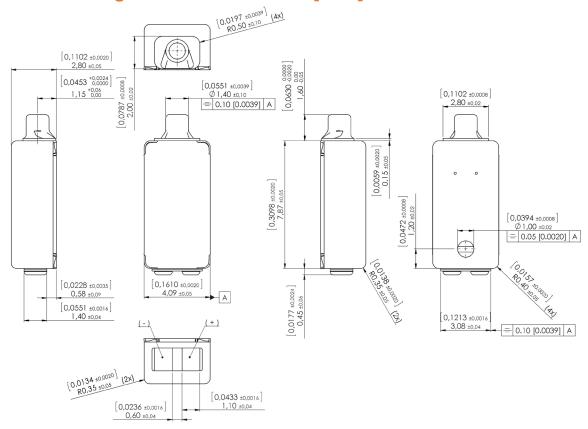
Features

- Ideal for ITE and BTE applications
- Specifically designed for digital applications
- ½ the size of a 3300 and 1900 receivers
- Broadband output
- Zero bias configurations

Mechanical data

Weight 0.31 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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3310-3014839

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Specifications

The acoustic termination consist of: 11x1.9mmID + 4.5 x 1.4 mm ID into IEC 711 coupler. Drive is voltage drive of 0.092 V RMS (0.35 mVA at 500 Hz) unless specified otherwise.

| Acoustic parameters | | Min | Тур | Max | Unit | Comments |
|---------------------------------|------------|-------|-------|-------|------|-----------------|
| Sensitivity | @ 50 Hz | 112.5 | 115.5 | 118.5 | dB | |
| | @ 300 Hz | 111.4 | 114.4 | 117.4 | dB | |
| | @ 800 Hz | 108.9 | 111.9 | 114.9 | dB | |
| | @ 1000 Hz | 109.8 | 112.8 | 115.8 | dB | |
| | @ 8000 Hz | 88.3 | 91.3 | 94.3 | dB | |
| Peak 1 | frequency | 1120 | 1370 | 1620 | Hz | |
| | output | 111.1 | 114.1 | 117.1 | dB | |
| Valley 1 | frequency | 2969 | 3219 | 3469 | Hz | |
| | output | 102.2 | 105.2 | | dB | |
| Peak 2 | frequency | 4207 | 4557 | 4907 | Hz | |
| | output | 107.3 | 110.3 | 113.3 | dB | |
| Valley 2 | frequency | 5030 | 5430 | 5830 | Hz | |
| | output | 102.8 | 106.8 | | dB | |
| THD | @ 1/3 peak | | 1.5 | 5 | % | |
| | @ 1/2 peak | | 1.5 | 5 | % | |
| Maximum output @ peak frequency | | 130 | | | dB | @ 100 mVA input |

| Electric parameters | Min | Тур | Max | Unit | Comments |
|-----------------------|-----------|------|------|------|----------|
| Impedance @ 1000 Hz | 52.8 | 65.9 | 79.1 | Ohm | |
| Impedance @ 500 Hz | 30.4 | 38 | 45.6 | Ohm | |
| DC resistance @ 20°C | 20.7 | 24.3 | 28 | Ohm | |
| DC bias current range | zero bias | | | | |

| Additional parameters | Min | Тур | Max | Unit | Comments |
|---------------------------|-------|-----|-----|------|---|
| Shock resistance | 12000 | | | 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.

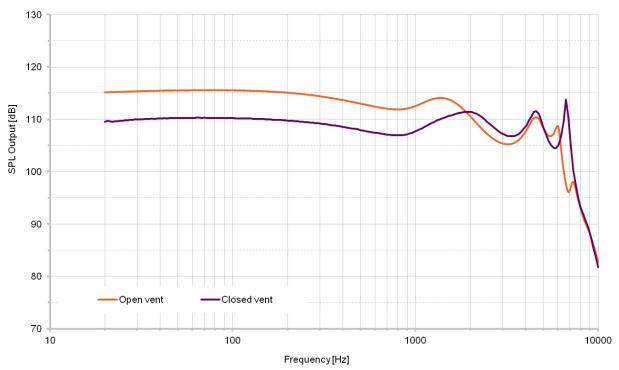
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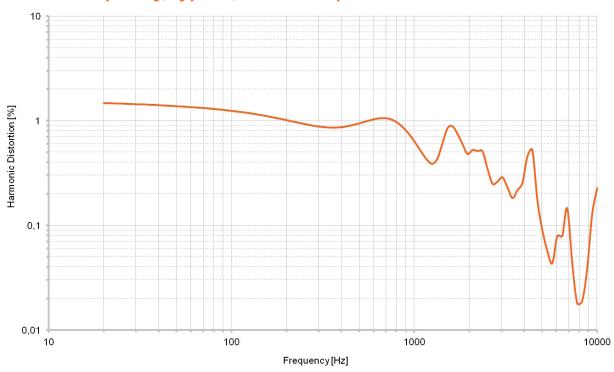




Typical response curve



THD vs Frequency, typical, nominal input



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Version date