

Description

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



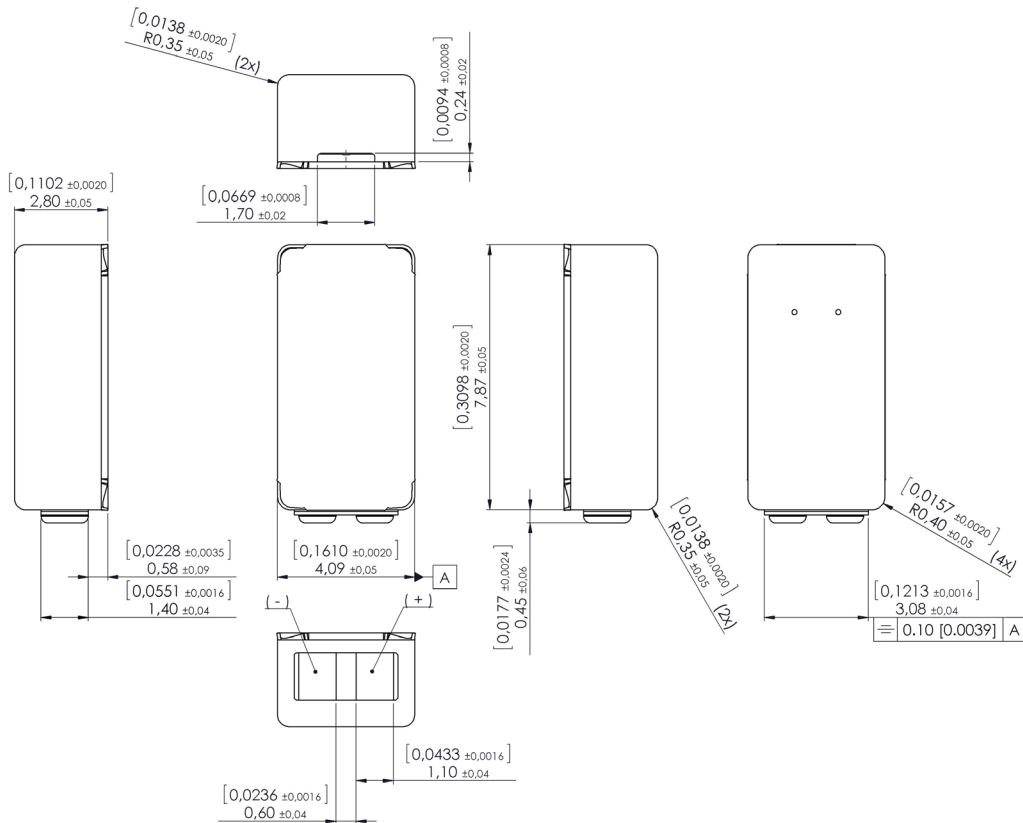
Features

- 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.

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 0.15 V RMS (0.35 mVA at 500 Hz) unless specified otherwise. Environmental conditions: 23 °C (73.4F), 50 % RH.

| Acoustic parameters | Min | Typ | Max | Unit | Comments | |
|---------------------------------|------------|-------|-------|-------|----------|-----------------|
| Sensitivity | @ 200 Hz | 103.5 | 106.5 | 109.5 | dB | |
| | @ 300 Hz | 103.5 | 106.5 | 109.5 | dB | |
| | @ 500 Hz | 103.5 | 106.5 | 109.5 | dB | |
| Peak 1 | frequency | 925 | 1075 | 1225 | Hz | |
| | output | 116 | 118.5 | 121 | dB | |
| Valley 1 | frequency | 1425 | 1675 | 1925 | Hz | |
| | output | 105.5 | 108.5 | | dB | |
| Peak 2 | frequency | 1975 | 2175 | 2375 | Hz | |
| | output | 112.5 | 115 | 117.5 | dB | |
| Valley 2 | frequency | 2575 | 2825 | 3075 | Hz | |
| | output | 101.5 | 104.5 | | dB | |
| Peak 3 | frequency | 3100 | 3400 | 3700 | Hz | |
| | output | 110 | 112.5 | 115 | dB | |
| Valley 3 | frequency | 3725 | 3975 | 4225 | Hz | |
| | output | 99 | 102 | | dB | |
| Peak 4 | frequency | 4250 | 4500 | 4750 | Hz | |
| | output | 103.5 | 106.5 | 109.5 | dB | |
| Valley 4 | frequency | 4900 | 5150 | 5400 | Hz | |
| | output | 95.5 | 98.5 | | dB | |
| Peak 5 | frequency | 5175 | 5575 | 5975 | Hz | |
| | output | 99 | 103.5 | 108 | dB | |
| THD | @ 1/3 peak | | | 5 | % | |
| | @ 1/2 peak | | | 5 | % | |
| Maximum output @ peak frequency | | | 136 | | dB | @ 100 mVA input |

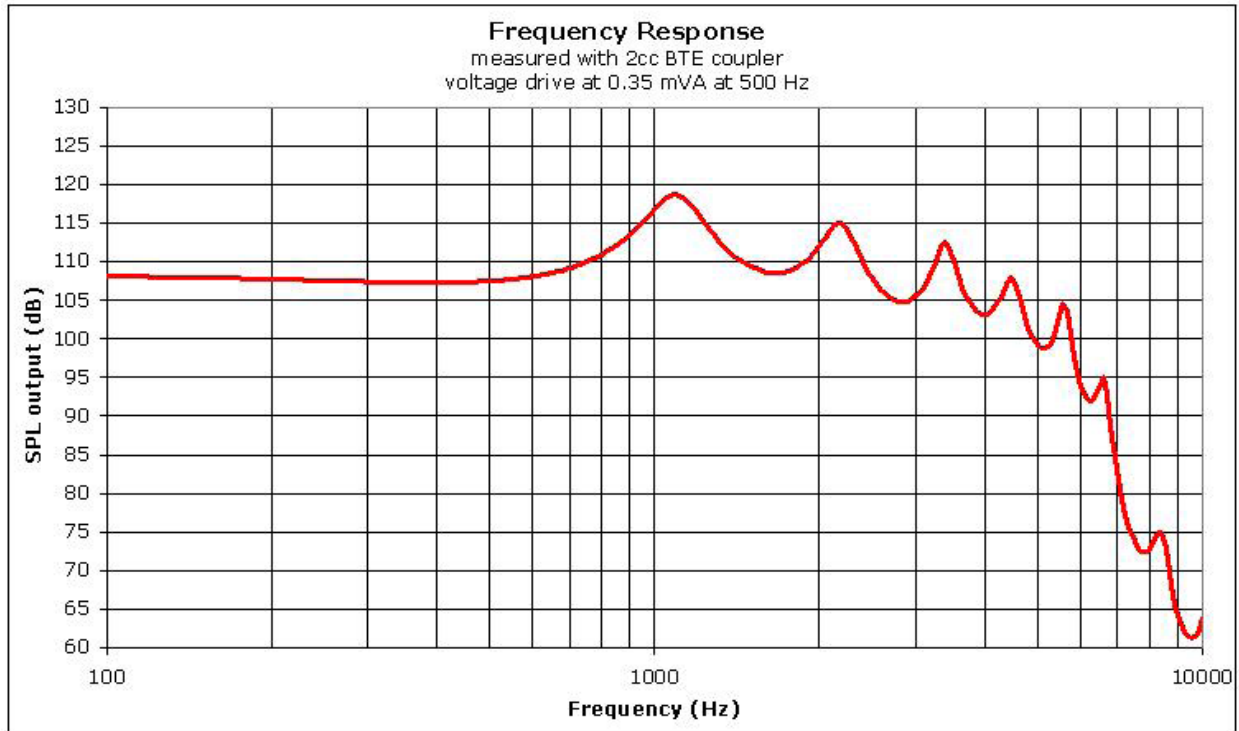
| Electric parameters | Min | Typ | Max | Unit | Comments |
|----------------------|-----|-----|-----|------|----------|
| Impedance @ 1000 Hz | 124 | 155 | 186 | Ohm | |
| Impedance @ 500 Hz | 54 | 68 | 82 | Ohm | |
| DC resistance @ 20°C | 43 | 50 | 57 | Ohm | |

| Additional parameters | Min | Typ | Max | Unit | Comments |
|---------------------------|-------|-----|-----|------|---|
| Shock resistance | 12000 | | | g | 90% survival rate with THD @ 1/2 peak frequency < 10% |
| Storage temperature range | -40 | | 63 | °C | |

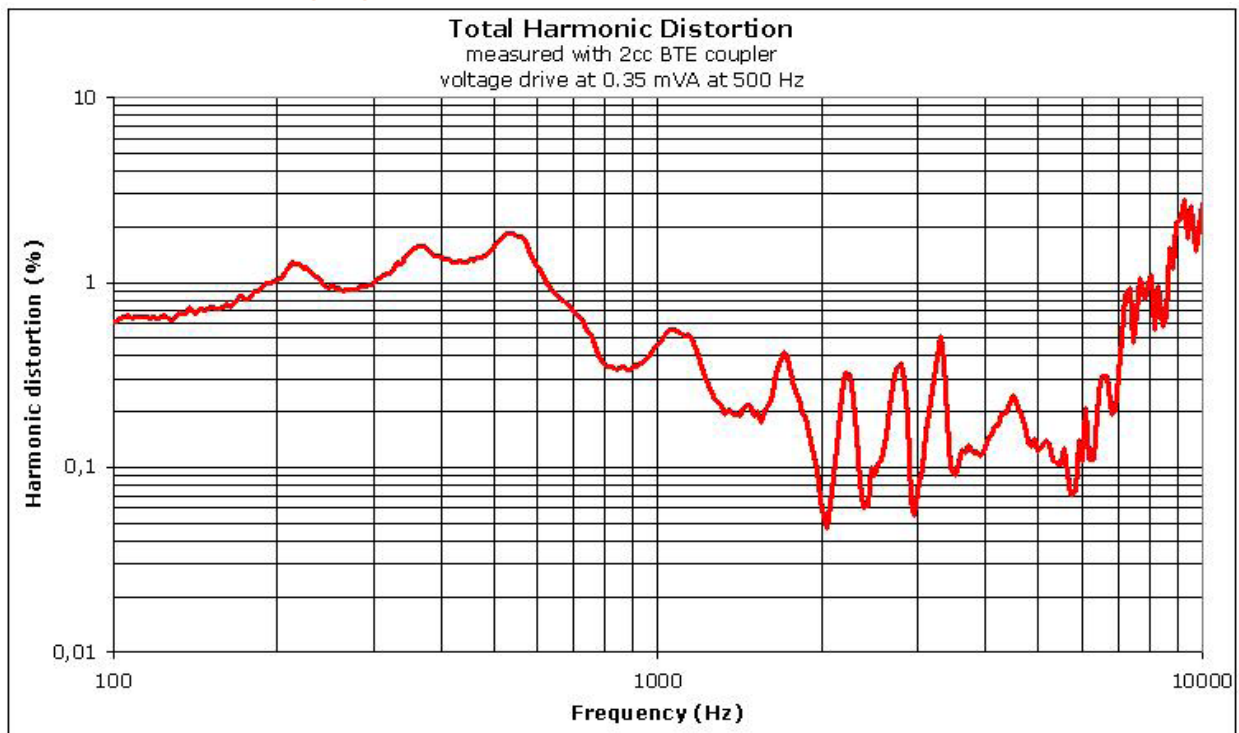
A positive voltage applied to the negative terminal (-) will result in an increase in pressure at the sound outlet.

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Typical response curve



THD vs Frequency, typical, nominal input



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