

## Description

Subminiature magnetic receiver (Balanced Armature Type) for use in hearing aids.



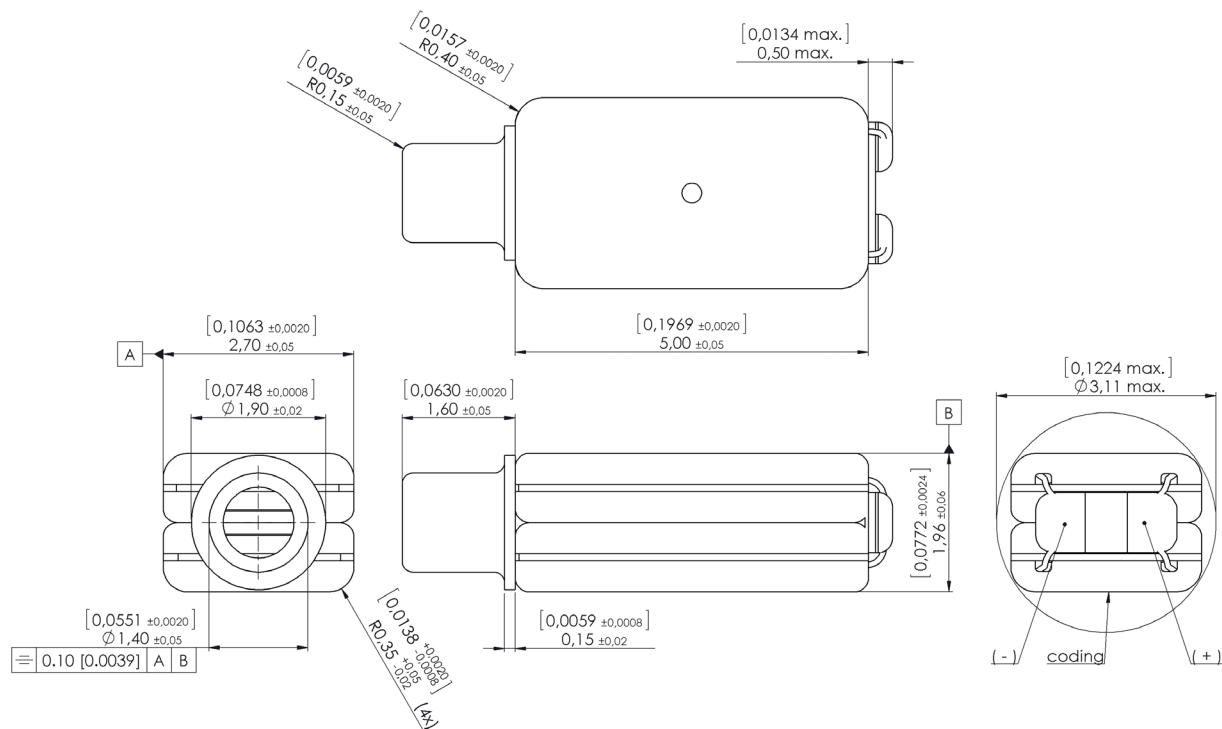
## Features

- Dual receiver, parallel connection
- Reduced mechanical vibration
- Improved shock performance
- Increased resistance provides flat LF response driven from voltage source

## Mechanical data

|                     |                          |
|---------------------|--------------------------|
| Weight              | 0.135 gr.                |
| Case material       | Ni48Fe52                 |
| 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

Acoustic loading: 10 mm x 1.0 mm ID into a 2 cc coupler versus 10 mm x 1.0 mm ID into a IEC 711 coupler. Constant voltage drive of 0.105 V RMS (0.35 mVA @ 500 Hz).

Environmental conditions: 23°C (73.4F), 50% RH

| Acoustic parameters    |            | 10x1mm into 2cc |      |       | 10x1mm into 711 |       |       | Unit | Comments       |
|------------------------|------------|-----------------|------|-------|-----------------|-------|-------|------|----------------|
|                        |            | Min             | Typ  | Max   | Min             | Typ   | Max   |      |                |
| Sensitivity            | @ 200 Hz   | 95.5            | 98   | 100.5 | 99.5            | 102   | 104.5 | dB   |                |
|                        | @ 500 Hz   | 94.5            | 97   | 99.5  | 99              | 101.5 | 104   | dB   |                |
|                        | @ 1000 Hz  | 93.5            | 96   | 98.5  | 99.5            | 102   | 104.5 | dB   |                |
| Peak 1                 | frequency  | 2950            | 3150 | 3350  | 2950            | 3150  | 3350  | Hz   |                |
|                        | output     | 101             | 104  | 107   | 111.5           | 114.5 | 117.5 | dB   |                |
| Valley 1               | frequency  | 4800            | 5400 | 6000  | 4500            | 5100  | 5700  | Hz   |                |
|                        | output     | 86.5            | 90   |       | 99.5            | 103   |       | dB   |                |
| Peak 2                 | frequency  | 5900            | 6500 | 7100  | 5600            | 6200  | 6800  | Hz   |                |
|                        | output     | 88              | 91.5 | 95    | 104.5           | 108   | 111.5 | dB   |                |
| THD                    | @ 1/3 peak |                 |      | 5     |                 |       | 8     | %    |                |
|                        | @ 1/2 peak |                 |      | 5     |                 |       | 6     | %    |                |
| Max outp. @ peak freq. |            |                 | 122  |       |                 | 132   |       | dB   | @ 50 mVA input |

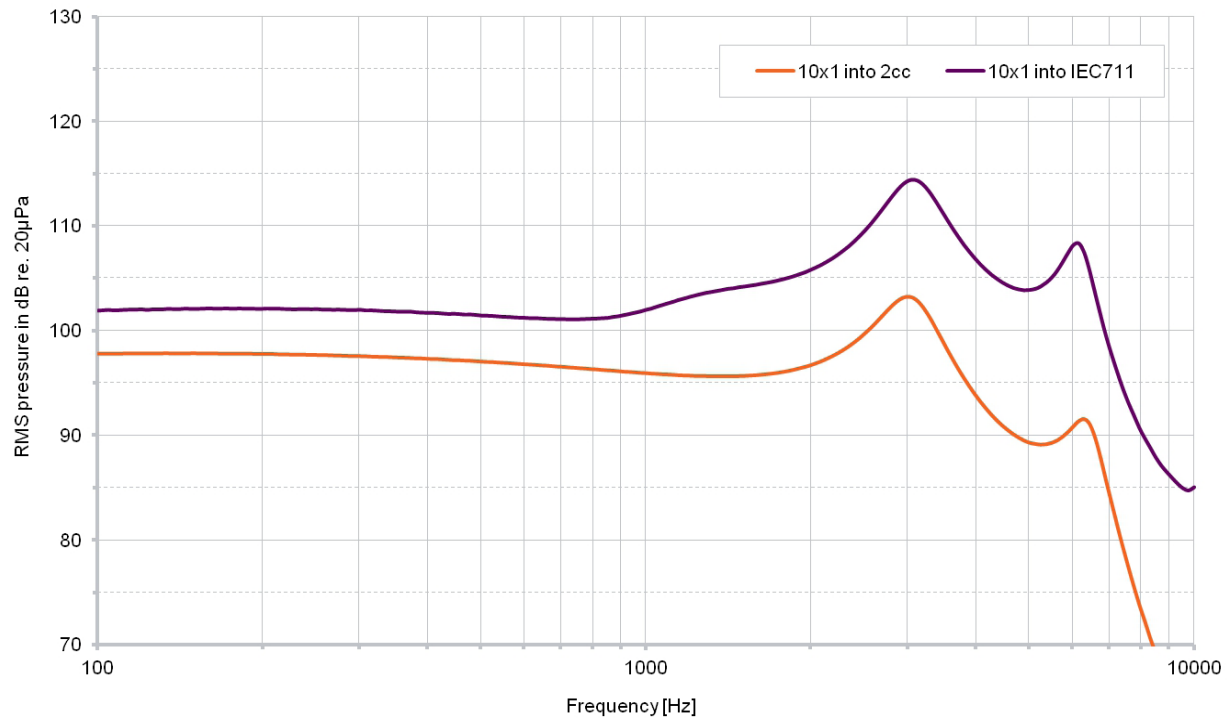
| Electric parameters   | Min       | Typ | Max | Unit | Comments |
|-----------------------|-----------|-----|-----|------|----------|
| Impedance @ 1000 Hz   | 30        | 38  | 46  | Ohm  |          |
| Impedance @ 500 Hz    | 25        | 31  | 37  | Ohm  |          |
| DC resistance @ 20°C  | 22        | 28  | 34  | Ohm  |          |
| DC bias current range | zero bias |     |     |      |          |

| 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   |                                                       |

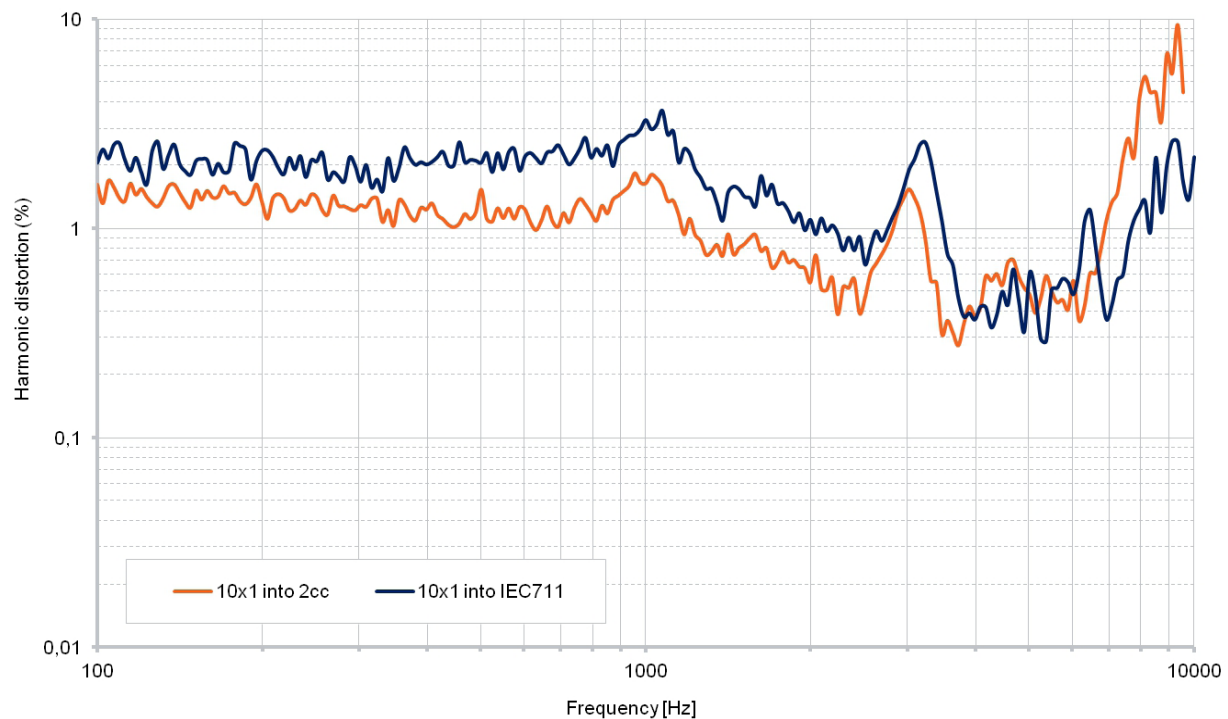
A positive voltage applied to the negative terminal (-) will result in an increase in pressure at the sound outlet.

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## Typical response curve



## THD vs Frequency, typical, nominal input



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