

Data Sheet



receiver 33AE011

3330 - 3011222
Version:1 05-MAR-2007

Description

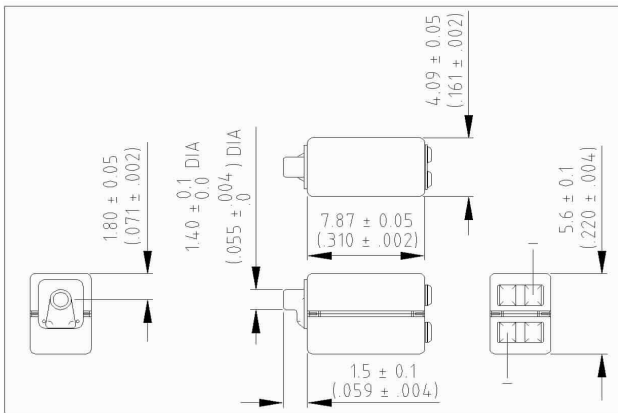
Miniature magnetic receiver (balanced armature type) for use in hearing aids.

Features

- Perfect for higher power premium BTE applications
- Tandem, twin-motor performance
- Significantly reduced mechanical vibration
- Specifically designed for digital applications
- Same size as a 1900 receiver
- Broadband output



Dimensions in mm (inch)

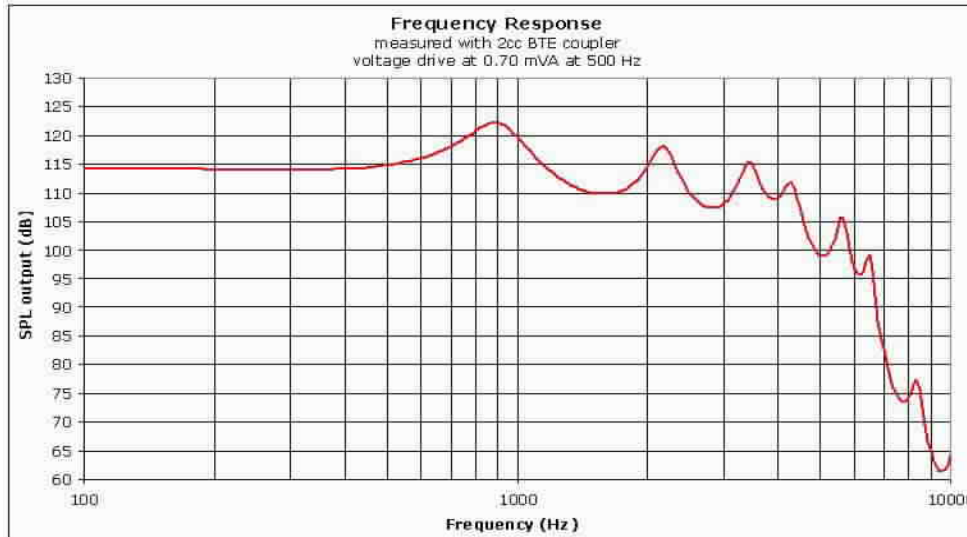


Mechanical Data

Weight 0.6 gr.
Case material Ni80Mo5Fe15
Solder pad content Sn96.5Ag3.0Cu0.5
Dimensions Refer to outline drawing

Typical response curve

Refer to specifications section for measurement conditions.



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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 RMS 0.7 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 | 110 | 113 | 116 | dB | |
| | @ 300 Hz | 110 | 113 | 116 | dB | |
| | @ 500 Hz | 110.5 | 113.5 | 116.5 | dB | |
| Peak 1 | frequency | 740 | 890 | 1040 | Hz | |
| | output | 119.5 | 122 | 124.5 | dB | |
| Valley 1 | frequency | 1325 | 1575 | 1825 | Hz | |
| | output | 106 | 109 | | dB | |
| Peak 2 | frequency | 1975 | 2175 | 2375 | Hz | |
| | output | 115.5 | 118 | 120.5 | dB | |
| Valley 2 | frequency | 2575 | 2825 | 3075 | Hz | |
| | output | 103 | 106 | | dB | |
| Peak 3 | frequency | 3100 | 3400 | 3700 | Hz | |
| | output | 112.5 | 115 | 117.5 | dB | |
| Valley 3 | frequency | 3650 | 3900 | 4150 | Hz | |
| | output | 106.5 | 109 | | dB | |
| Peak 4 | frequency | 4025 | 4275 | 4525 | Hz | |
| | output | 108 | 111 | 114 | dB | |
| Valley 4 | frequency | 4825 | 5075 | 5325 | Hz | |
| | output | 96 | 99 | | dB | |
| Peak 5 | frequency | 5175 | 5575 | 5975 | Hz | |
| | output | 100 | 104.5 | 109 | dB | |
| THD | @ 1/3 peak | | | 5 | % | |
| | @ 1/2 peak | | | 5 | % | |
| Maximum output @ peak frequency | | | 140 | | dB | 100 mVA input |

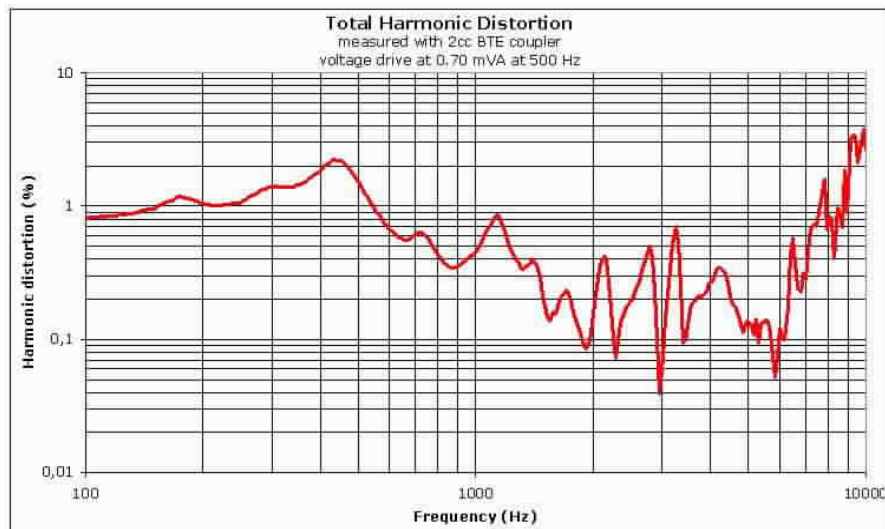
| Electric parameters | Min | Typ | Max | Unit | Comments |
|--------------------------------|-----|-----|-----|------|----------|
| Impedance @ 1000 Hz parallel | 25 | 31 | 37 | Ohm | |
| Impedance @ 1000 Hz series | 101 | 126 | 151 | Ohm | |
| Impedance @ 500 Hz parallel | 21 | 26 | 31 | Ohm | |
| Impedance @ 500 Hz series | 82 | 104 | 126 | Ohm | |
| DC resistance @ 20 °C parallel | 15 | 18 | 21 | Ohm | |
| DC resistance @ 20 °C series | 60 | 72 | 84 | Ohm | |

| Additional parameters | Min | Typ | Max | Unit | Comments |
|---------------------------|-------|-----|-----|------|---|
| Shock resistance | 12000 | | | g | 90% survival rate with THD @ 1/2 peak freq. < 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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THD vs Frequency, typical, nominal input



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