

## Description

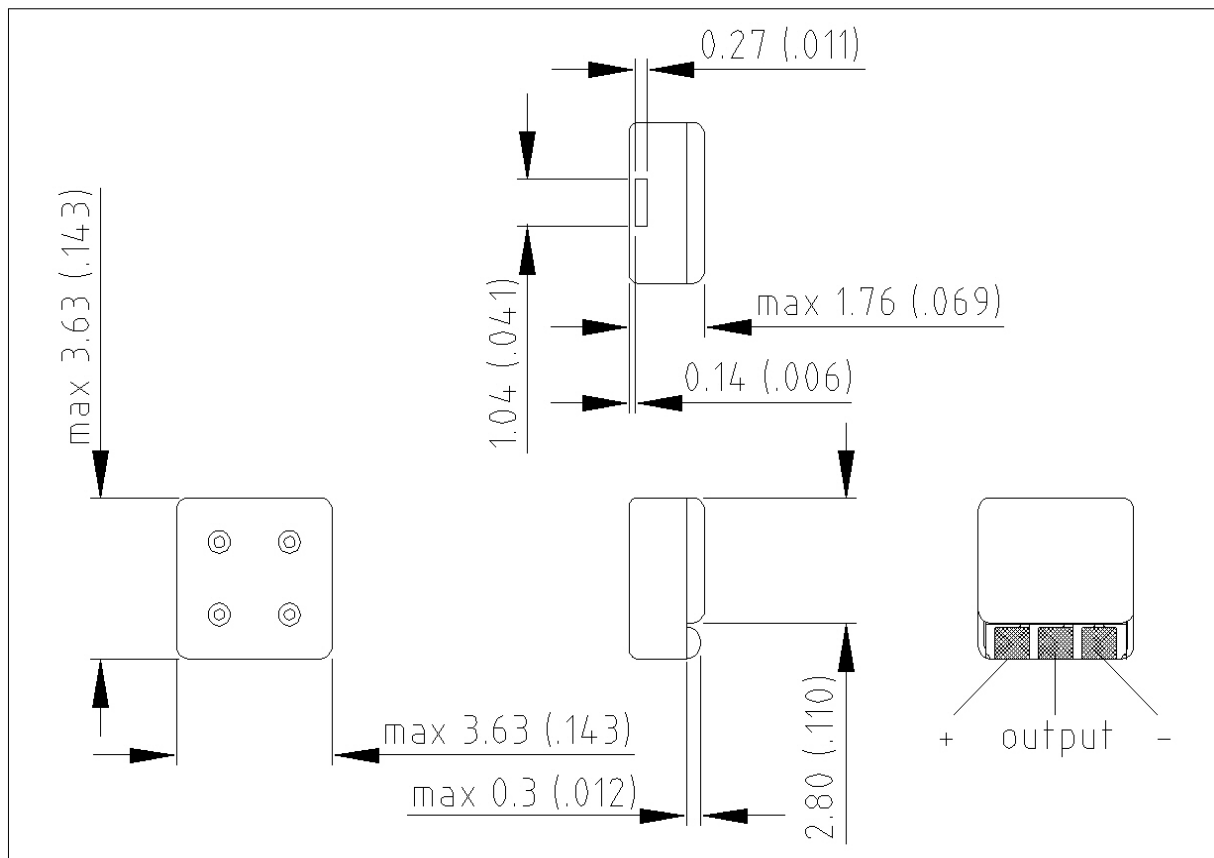
Microphone for hearing instruments provided with a special integrated amplifier to increase the sensitivity. It has a decreased sensitivity for high frequency spurious signals and an improved ESD protection.



## Features

- Super thin design - Great CIC application
- Low noise CMOS amplifier
- Integrated cellular protection (superior EMI suppression)
- Superior ESD protection

## 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.

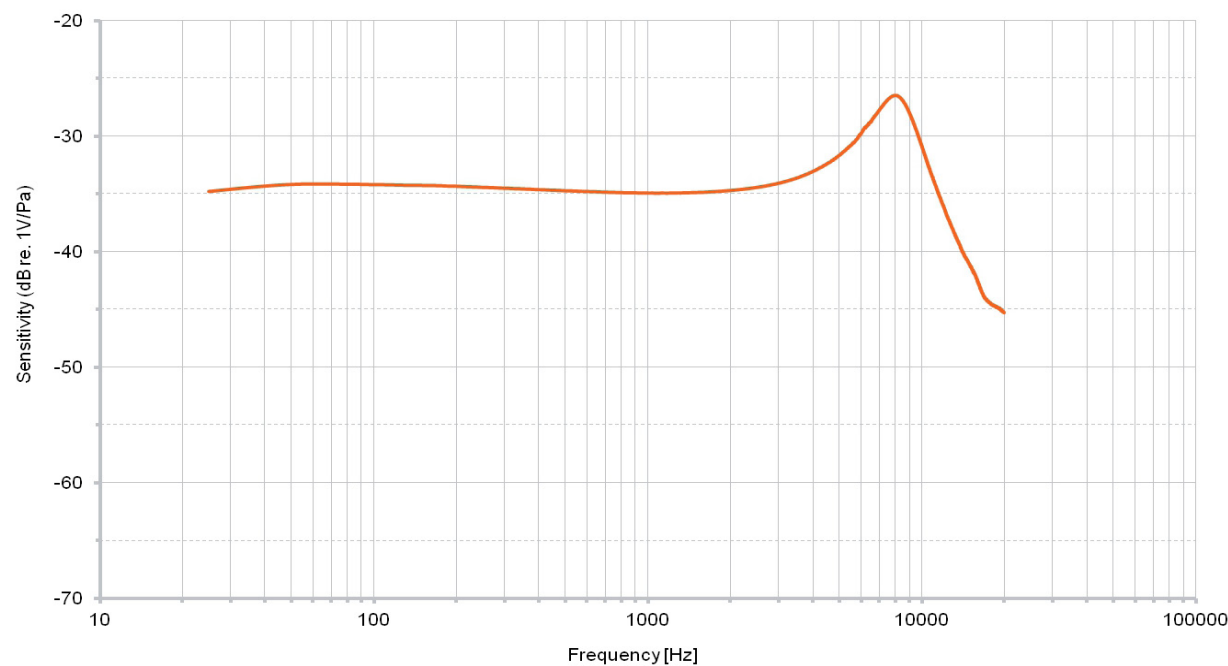
## Specifications

All parameters are specified at 1.3V and 1 MOhm // <200pF load impedance, AC-coupled with 1µF, unless specified otherwise. Environmental conditions: 23°C (73.4°F), 50 % RH.

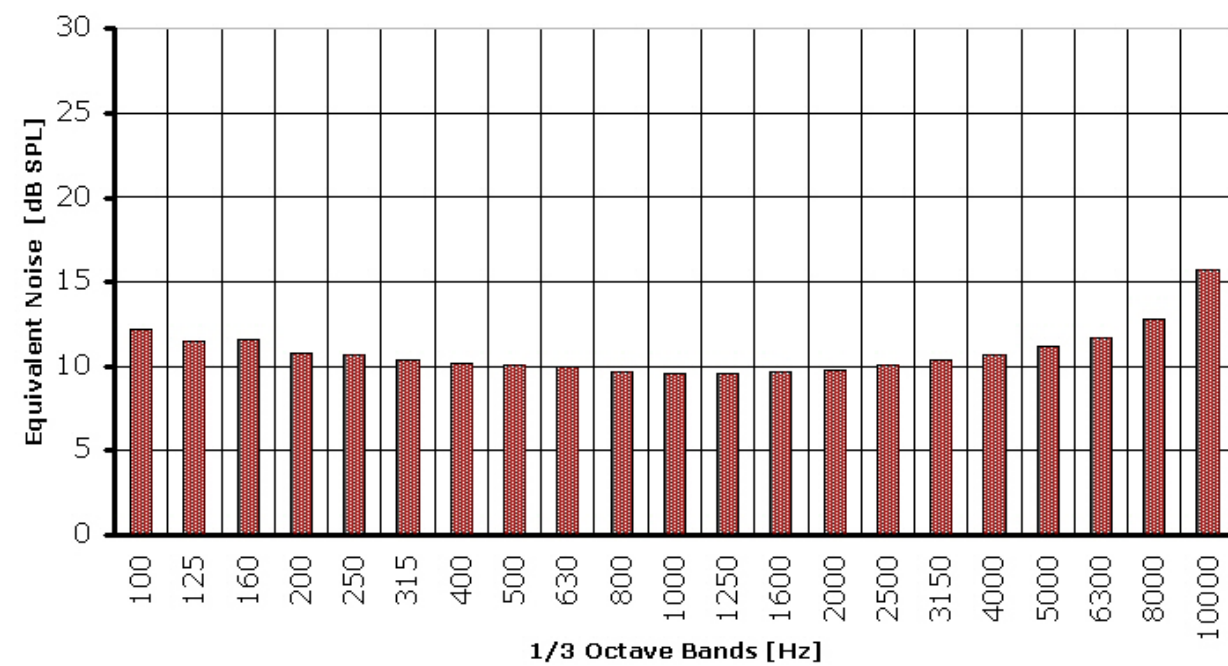
| Parameters                                                                   |              | Min | Typ   | Max  | Unit     | Comments                    |
|------------------------------------------------------------------------------|--------------|-----|-------|------|----------|-----------------------------|
| Sensitivity *                                                                | @ 100 Hz     | -3  | 0.5   | 3    | dB       | re. 1 kHz value             |
|                                                                              | @ 1 kHz      | -38 | -35   | -32  | dB       | re. 1V per Pascal           |
|                                                                              | @ 6 kHz      | 2   | 5     | 8    | dB       | re. 1 kHz value             |
| Peak frequency                                                               |              |     | 7.5   |      | kHz      | Approx.                     |
| Equivalent noise (A-weighted)                                                |              |     | 25.5  | 28.5 | dB SPL   |                             |
| Power supply feedthrough                                                     |              |     | -16   | -14  | dB       |                             |
| Battery voltage range                                                        |              | 0.9 | 1.3   | 5    | VDC      |                             |
| Battery drain **                                                             |              | 20  | 40    | 50   | µA       |                             |
| Output impedance ***                                                         |              | 2   | 3     | 5.5  | kOhm     |                             |
| Input-referred vibration sensitivity                                         |              |     | 67    |      | dB SPL/g |                             |
| Humidity coefficient of sensitivity                                          |              |     | 0.025 |      | dB/%RH   |                             |
| Input-referred EMI noise                                                     | 0.8-0.96 GHz |     |       | 35   | dB SPL   | according SMI 255, E-75 V/m |
|                                                                              | 1.8-2.0 GHz  |     |       | 35   | dB SPL   | according SMI 255, E-50 V/m |
| Operating temperature range                                                  |              | -17 | 23    | 63   | °C       |                             |
| Storage temperature range                                                    |              | -40 |       | 63   | °C       |                             |
| ESD protection level: Class 2 according to MIL-STD-750D, test method 1020,2. |              |     |       |      |          |                             |
| Apply protection in accordance with IEC 61340-5-1 and 61340-5-2.             |              |     |       |      |          |                             |
| * Sensitivity change on reducing supply to 0.9 VDC: 3 dB max.                |              |     |       |      |          |                             |
| ** Battery drain at 0,9 VDC supply voltage: 20 µA typ.                       |              |     |       |      |          |                             |
| *** Output impedance at 0.9 VDC supply: 7.5 kOhm max.                        |              |     |       |      |          |                             |

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Typical response curve



Typical 1/3 octave equivalent noise



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