

Data Sheet



microphone 65GE31

3650 - 3021713
Version: 2 18-JUN-2010

Description

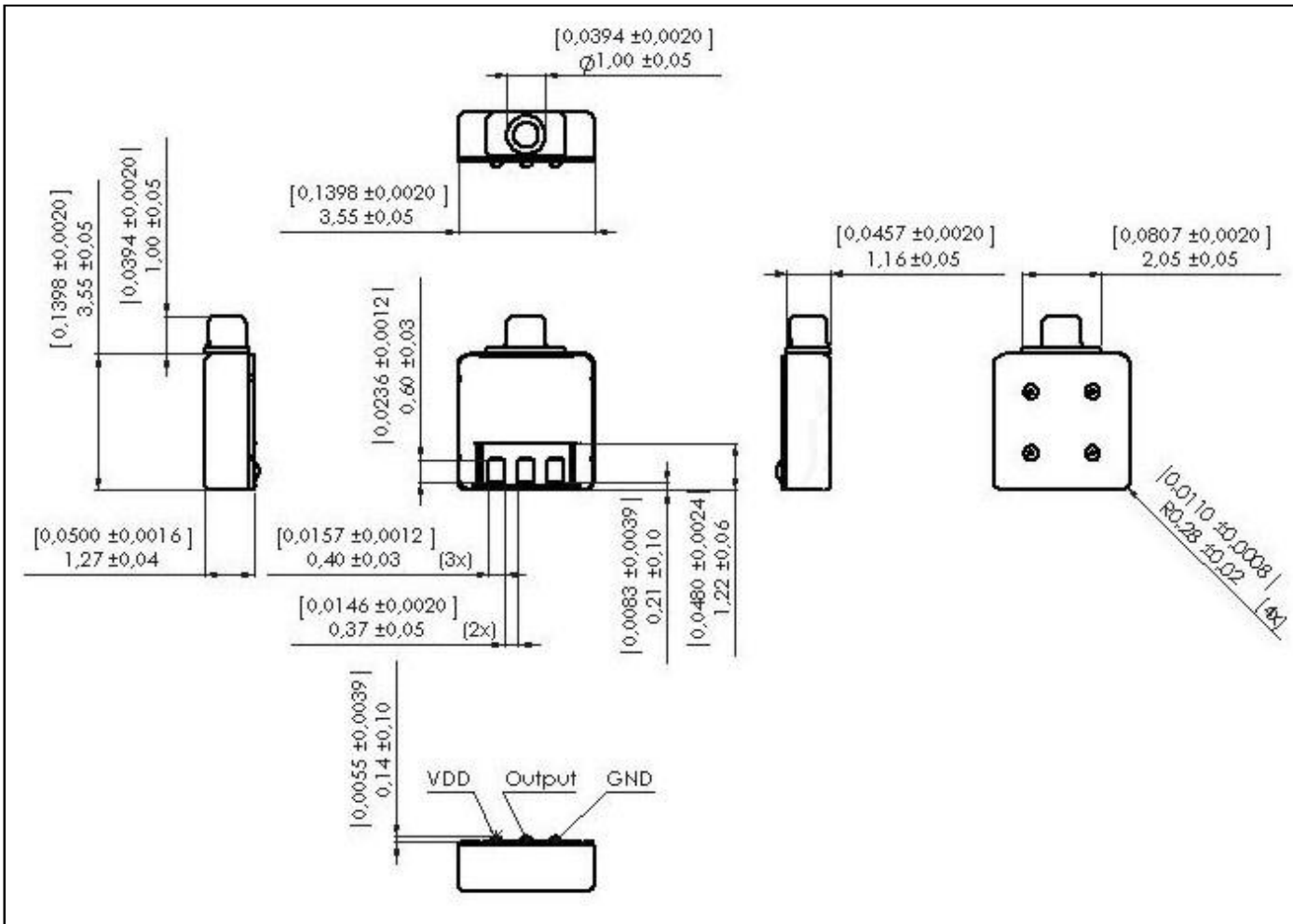
Miniature electret condenser microphone for hearing instruments.



Features

- High sensitivity
- Lowest noise in 6000-size
- Improved solderability

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.

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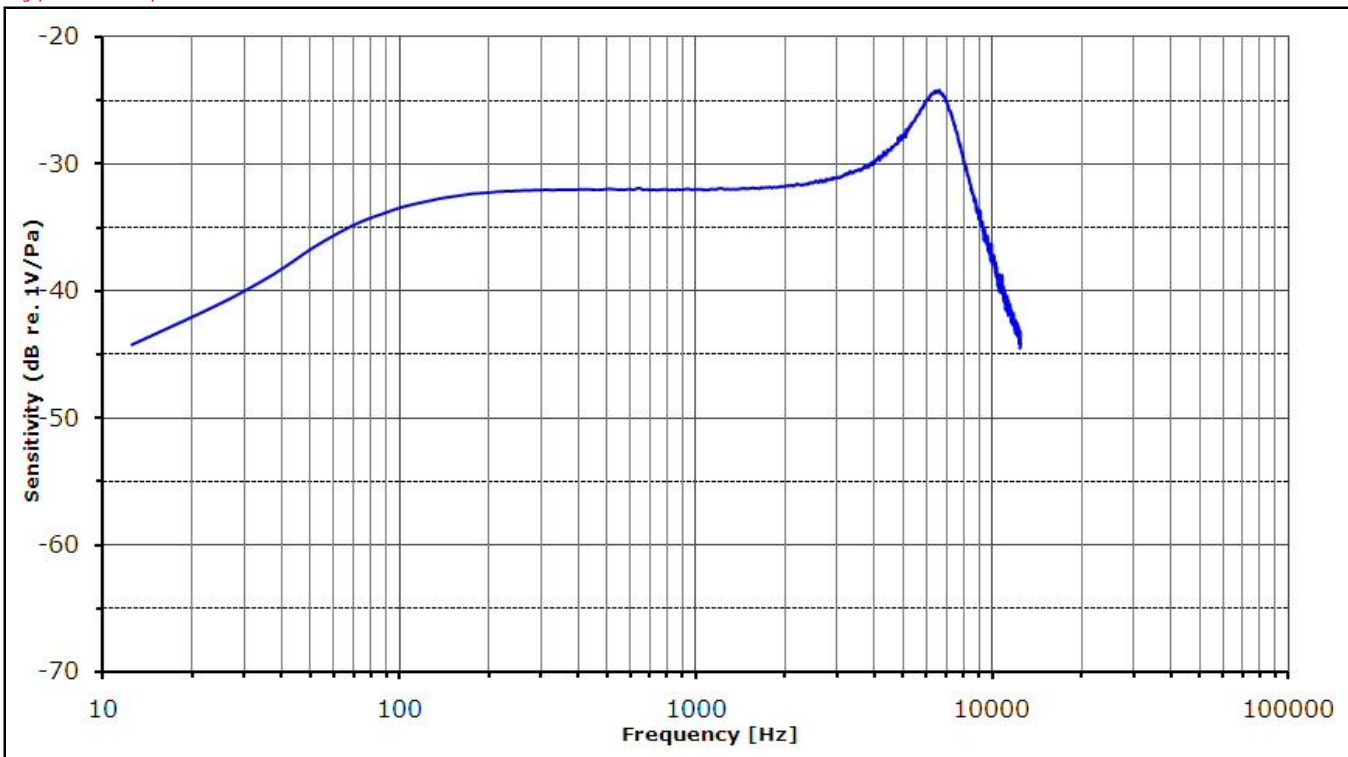
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Specification

All parameters are specified at 0.9 V and 1 MOhm // <200pF load impedance, AC-coupled with 1µF, unless specified otherwise. Environmental conditions: 23 °C (73.4F), 50% RH.

| Parameters | Mn | Typ | Max | Unit | Comments | |
|--|--------------|------|-----|----------|------------------------------------|-------------------|
| Sensitivity * | @ 75 Hz | -5 | -3 | -1 | dB | re. 1 kHz value |
| | @ 1 kHz | -35 | -32 | -29 | dB | re. 1V per Pascal |
| | @ 6.5 kHz | 4.5 | 7.5 | 10.5 | dB | re. 1 kHz value |
| Peak frequency | | 6.5 | | kHz | Approx. | |
| Equivalent noise (A-weighted) | | 24 | 26 | dB SPL | | |
| Power supply feedthrough | | -12 | -10 | dB | | |
| Battery voltage range | 0.8 | 0.9 | 5 | VDC | | |
| Battery drain | 10 | 17 | 30 | µA | | |
| Output impedance ** | 3 | 4.5 | 6 | kOhm | | |
| Input-referred vibration sensitivity | | 67 | | dB SPL/g | 1 kHz ref. acc. in axial direction | |
| Sensitivity change with humidity variation | | 0.02 | | dB/%RH | | |
| Input-referred EM noise | 0.8-0.96 GHz | | 25 | dB SPL | according SM 255, E=75 V/m | |
| | 1.8-2.0 GHz | | 25 | dB SPL | according SM 255, E=75 V/m | |
| | 1.4-2.0 GHz | | 25 | dB SPL | according SM 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 ML-STD-750D, test method 1020.2. Apply protection in accordance with IEC 61340-5-1 and 61340-5-2. | | | | | | |
| * 1 kHz sensitivity at 1.3 VDC supply: -32 dB re. 1V/Pa typ. | | | | | | |
| ** Output impedance at 1.3 VDC supply: 3 kOhm typ. | | | | | | |

Typical response curve



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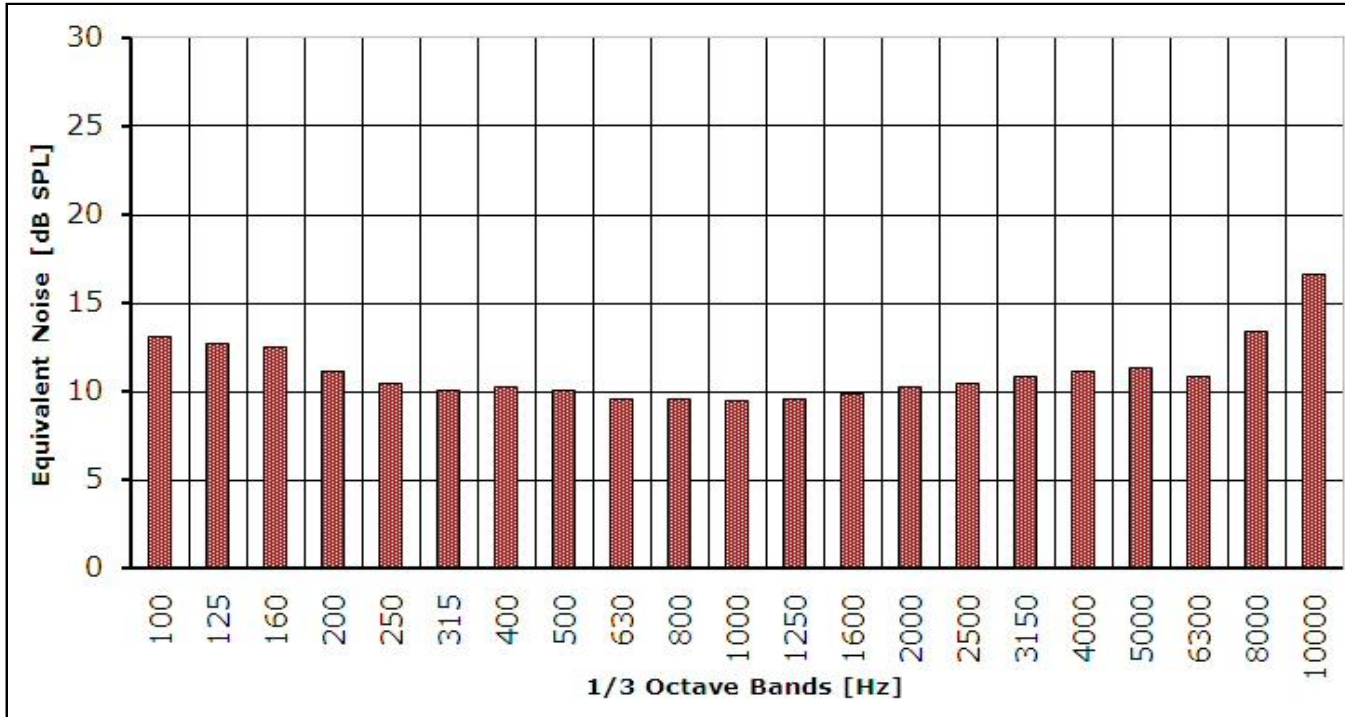
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Typical 1/3 octave equivalent noise



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