# MCB211 Series

**High Frequency, Lightweight, Cost Effective Molded Sensor, Top Exit Molded Integral Cable, 10-32 Mounting, 10 mV/g, ±10%**

VIBRATION ANALYSIS HARDWARE

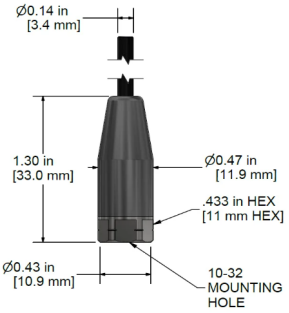
## Product Features

- Nylon Overmolded Accelerometer
- IP68 Rated
- High Frequency, 30 kHz Response

**MCB211**

CB127 Integral Cable

| Conductor | Polarity |
|---|---|
| Red | (+) Signal/Power |
| Black | (-) Common |

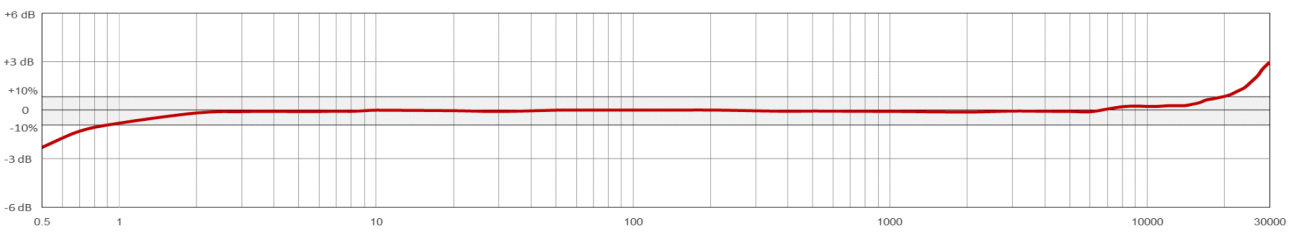



**Built To Order**

| Specifications | Standard | Metric |
|---|---|---|
| Part Number | MCB211 | MCB221 |
| Sensitivity (±10%) | 10 mV/g | |
| Frequency Response (±3dB) | 30-1,800,000 CPM | 0.5 Hz-30 kHz |
| Frequency Response (±10%) | 60-900,000 CPM | 1 Hz-15 kHz |
| Frequency Response (±5%) | 120-600,000 CPM | 2 Hz-10 kHz |
| Dynamic Range | ± 500 g, peak<br>*Vsource ≥ 22V, 12Vbias | |
| **Electrical** | | |
| Settling Time | < 2 Seconds | |
| Voltage Source (IEPE) | 18-30 VDC | |
| Constant Current Excitation | 2-10 mA | |
| Spectral Noise @ 10 Hz | 100 µg/√Hz | |
| Spectral Noise @ 100 Hz | 19 µg/√Hz | |
| Spectral Noise @ 1000 Hz | 5 µg/√Hz | |
| Output Impedance | < 100 ohm | |
| Bias Output Voltage | 10-14 VDC | |
| Case Isolation | >$10^8$ ohm | |

| Specifications | Standard | Metric |
|---|---|---|
| **Environmental** | | |
| Operating Temperature Range | -58 to 250°F | -50 to 121°C |
| Maximum Shock Protection | 10,000 g, peak | |
| Electromagnetic Sensitivity | CE Approved | |
| Sealing | IP68 | |
| SIL Rating | SIL 2 | |
| **Physical** | | |
| Sensing Element | PZT Ceramic | |
| Sensing Structure | Shear Mode | |
| Weight | 0.35 oz | 10 grams |
| Mounting Base | 316L Stainless Steel | |
| Mounting Thread | 10-32 UNF | |
| Cable Jacket Diameter | 0.14 in (3.6 mm) | |
| Cable Jacket Material | Polyurethane | |
| Cable Conductor | 26 AWG<br>Twisted Shielded Pair | |
| Resonant Frequency | 2,640,000 CPM | 44 kHz |
| Mounting Torque | 1.5 - 2.5 ft. lbs | 2,0 to 3,4 Nm |
| Mounting Hardware Supplied | 10-32 Stud | M5 Stud |
| Calibration Certificate | CA10 | |

## Typical Frequency Response




**Backed by our Unconditional Lifetime Warranty & Free Annual Recalibration Service**

www.ctconline.com | sales@ctconline.com | 585-924-5900