Senther 510A-10

Single axial IEPE accelerometer

Dynamic

Sensitivity, ±10%, 25°C..... 500 mV/g
Acceleration range .....10 g peak
Amplitude nonlinearity..... 1%
Frequency response:
± 5%.....2 - 4,000 Hz
±1dB.....1.5 - 10,000 Hz
± 3 dB.....0.6 - 12,000 Hz
Resonance frequency.....40 kHz
Transverse sensitivity, max.....5% of axial
Temperature response:
–50°C..... –10%
+120°C..... +10%

Electrical

Power requirement: voltage source .....18 - 30 VDC
current regulating diode .....2 - 10 mA
Electrical noise, Broadband Spectral(g):
1 Hz to 10 kHz..... 500 µg
Output impedance, max..... 100 Ω
Bias output voltage..... 10 VDC
Grounding.....Case grounded

Environmental

Temperature range..... –50 to 120°C
Vibration limit..... 500 g peak
Shock limit..... 5,000 g peak
Electromagnetic sensitivity, equiv g, max ..... 70 µg/gauss
Sealing .....Hermetic
Base strain sensitivity, max.....0.0002 g/µstrain

Physical

Sensing element design..... PZT ceramic/shear
Weight..... 5 grams
Case material.....SST
Output connector.....10-32

Accessories

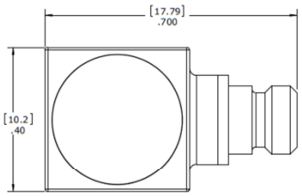
Mounting stud: M5(-M), 10-32(-E), or W/O
Mating cable with BNC output
Calibration certificate
Note: Frequency response limits spectral and noise values are typical

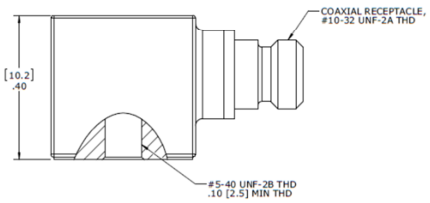
Features

- Miniature cube
- Size 10X10X10
- Adhesive or stud mounting
- Hermetic seal
- Annular shear mode
- Wide temperature range
- Wide frequency response

Application

- Vibration monitoring
- Shock testing
- Road testing
- Modal analysis
- Aircraft testing





Ordering Information

510A-10-M

- Mounting stud
- Range in g
- Output type
- Model