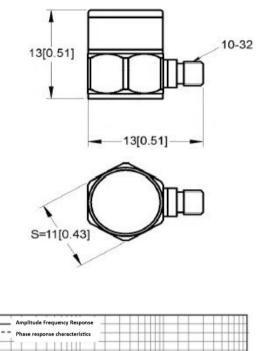
• Miniature cube IEPE Accelerometer

R

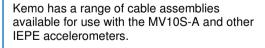
- Shear design
- Piezoelectric ceramic PZT-5
- Sensitivity 10mV/g
- Mass 3.8grams
- 10/32UNF side entry connector
- Flat adhesive mount base

The MV10S-A is a miniature monoaxial IEPE accelerometer with a side entry 10/32UNF microdot connector and a flat base for adhesive mounting. The low mass and standard microdot connector allow for the use of standard cables but reduced mass loading. Featuring a shear design PZT-5 sensing element the MV10S-A provides high accuracy with wide bandwidth up to 10kHz, this depends on correct mounting.

| Specification               | Metric                   | Imperial      |
|-----------------------------|--------------------------|---------------|
| Sensitivity                 | 1.02mV/(m/s²)            | 10mV/g        |
| Measurement Range (pk)      | ±4900m/s <sup>2</sup>    | ±500g         |
| Frequency Range ±10%        | 1 to 10000 Hz            |               |
| Resonant Frequency          | ≥40 kHz                  |               |
| Non-Linearity               | <b>≤1 %</b>              |               |
| Transverse Sensitivity      | <b>≤5 %</b>              |               |
| Electrical Noise Floor      | 0.01m/s² rms             | 0.001g rms    |
| Overload Limit (Shock)      | ±49000(m/s²)pk           | ±5000gpk      |
| Operating Temp. Range       | -55 to +125°C            | -67 to +257°F |
| Polarity ↑                  | Positive                 |               |
| Compliance Voltage (Supply) | +18 to +28 VDC           |               |
| Current range               | 2 – 10mA                 |               |
| Output Bias Voltage         | 11VDC ± 1.5VDC           |               |
| Size (excluding connector)  | 11x13mm                  | 0.43"x0.51"   |
| Weight                      | 3.8gm                    | 0.134oz       |
| Sensing Geometry            | Shear                    |               |
| Sensing Element Material    | PZT-5                    |               |
| Case Material               | Titanium                 |               |
| Connector Position          | Side                     |               |
| Case sealing                | Hermetic                 |               |
| Electrical Connection Type  | 10/32UNF Microdot        |               |
| Mounting                    | Flat adhesive mount base |               |







 $\begin{array}{l} 1B2\text{-}30-3m(10\text{ft})\ 10/32\text{UNF}\ \text{microdot}\ \text{to}\ BNC\ \text{plug}\\ 1B2\text{-}50-5m(15\text{ft})\ 10/32\text{UNF}\ \text{microdot}\ \text{to}\ BNC\ \text{plug}\\ 1B1\text{-}30-3m(10\text{ft})\ 10/32\text{UNF}\ \text{mdot}\ \text{to}\ 10/32\text{UNF}\text{mdot}\\ 1B1\text{-}50-5m(15\text{ft})\ 10/32\text{UNF}\ \text{mdot}\ \text{to}\ 10/32\text{UNF}\text{mdot}\\ \end{array}$ 

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20

50

100 200 500

1k

2k

5k

11k (Hz)

1 10

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