PIEZOELECTRIC USB DIGITAL ACCELEROMETER

Revision: E ECN #:

PERFORMANCE

Sensitivity^{1,2,3} Channel A
Channel B
Measurement Range⁵ Channel A
Channel B

ADC Bandwidth (-3dB)
Frequency Range (± 5%)
Frequency Range (± 10%)³
Frequency Range (± 3 dB)³
Resonant Frequency
Mounted Resonance³

Mounted Resonance Amplification³
Broadband Resolution¹ (1 Hz to 10000 Hz)

Non-Linearity⁴ Transverse Sensitivity

ENVIRONMENTAL

Overload Limit (Shock) Temperature Range (Operating)

Temperature Coefficient ELECTRICAL

Communication Standard

Power Consumption³ Internal ADC

Supported Sample Rates

MECHANICAL

Size – Hex
Size – Height
Weight
Mounting Thread
Mounting Torque
Sensing Element
Sensing Geometry
Housing Material
Sealing
Electrical Connector
Electrical Connection Position

NOTES:

Onversion Factor 1g = 9.80665 m/s²

² FSV = Full Scale Value ³ Typical

Cable (Integral) Length

⁴ Zero-based, least square straight line method

5. Minimum Range
In the interest of constant product improvement, specifications may change without notice.

Channel B 7.96 % FSV/g

nnel B

± 20 g pk ± 10 g pk 9.3 cpm to 1374000 cpm 120 cpm to 480000 cpm 90 cpm to 660000 cpm 54 cpm to 900000 cpm ≥ 1500000 cpm 1044000 cpm

ENGLISH

4.00 % FSV/g

200% 0.0025 g pk ≤ 2 % ≤ 5 %

7000 g pk 14 °F to 158 °F 0.10 % / °F

USB 2.0 Full Speed ≤ 45 mA 24 bit

24 bit @ 48, 44.1, 32, 22.05, 16, 11.025, 8 kHz 16 bit @ 48, 44.1, 32, 22.05, 16, 11.025, 8 kHz

1.0 in
2.6 in
4.62 oz
1/4-28 UNF
2 lbf ft to 5 lbf ft
Piezoelectric Ceramic
Shear
Stainless Steel
Welded Hermetic
USB Type A Male

9.6 ft
OPTIONAL ACCESSORIES:

Top

080A121 Flat Surface Magnet Base 080A131 Curved Surface Magnet Base

SI

0.408 % FSV/m/s²
0.811 % FSV/m/s²
± 196 m/s² pk
± 98 m/s² pk
0.155 Hz to 22900 Hz
2 Hz to 8000 Hz
1.5 Hz to 11000 Hz
0.9 Hz to 15000 Hz
≥ 25000 Hz
17400 Hz
200%
0.0245 m/s² pk
≤ 2 %

68647 m/s² pk -10 °C to +70 °C 0.18 % / °C

≤ 5 %

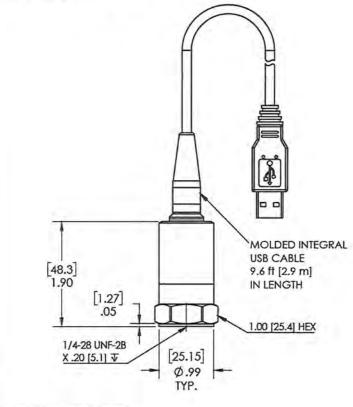
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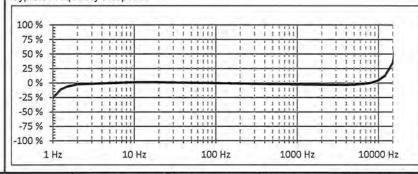
25.4 mm 66.0 mm 131 gram 1/4-28 UNF 2.7 N m to 6.8 N m Piezoelectric Ceramic Shear Stainless Steel Welded Hermetic USB Type A Male Top

2.9 m

PRODUCT DRAWING



Typical Frequency Response



CE EK

Project Engineer: Product Manager:

Date: 10/22/2

Mkt Team Leader:

Spec Number: PS-0116

All specifications are at room temperature unless otherwise specified.



10310 Aerohub Boulevard Cincinnati, OH 45215, USA info@modalshop.com +1 513.351.9919 +1 800.860.4867 Fax: +1 513.458.2172

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