Model Number
333D01

PIEZOELECTRIC USB DIGITAL ACCELEROMETER

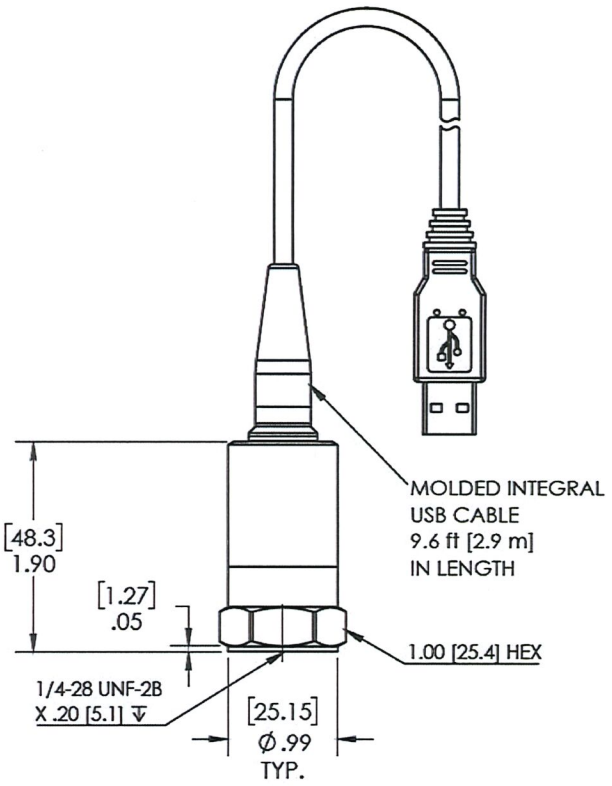
Revision: E
ECN #:

		ENGLISH	SI
PERFORMANCE			
Sensitivity[1,2,3]	Channel A	4.00 % FSV/g	0.408 % FSV/m/s²
	Channel B	7.96 % FSV/g	0.811 % FSV/m/s²
Measurement Range[5]	Channel A	± 20 g pk	± 196 m/s² pk
	Channel B	± 10 g pk	± 98 m/s² pk
ADC Bandwidth (-3dB)		9.3 cpm to 1374000 cpm	0.155 Hz to 22900 Hz
Frequency Range (± 5%)		120 cpm to 480000 cpm	2 Hz to 8000 Hz
Frequency Range (± 10%)[3]		90 cpm to 660000 cpm	1.5 Hz to 11000 Hz
Frequency Range (± 3 dB)[3]		54 cpm to 900000 cpm	0.9 Hz to 15000 Hz
Resonant Frequency		≥ 1500000 cpm	≥ 25000 Hz
Mounted Resonance[3]		1044000 cpm	17400 Hz
Mounted Resonance Amplification[3]		200%	200%
Broadband Resolution[1] (1 Hz to 10000 Hz)		0.0025 g pk	0.0245 m/s² pk
Non-Linearity[4]		≤ 2 %	≤ 2 %
Transverse Sensitivity		≤ 5 %	≤ 5 %
ENVIRONMENTAL			
Overload Limit (Shock)		7000 g pk	68647 m/s² pk
Temperature Range (Operating)		14 °F to 158 °F	-10 °C to +70 °C
Temperature Coefficient		0.10 % / °F	0.18 % / °C
ELECTRICAL			
Communication Standard		USB 2.0 Full Speed	USB 2.0 Full Speed
Power Consumption[3]		≤ 45 mA	≤ 45 mA
Internal ADC		24 bit	24 bit
Supported Sample Rates		**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	**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
MECHANICAL			
Size – Hex		1.0 in	25.4 mm
Size – Height		2.6 in	66.0 mm
Weight		4.62 oz	131 gram
Mounting Thread		1/4-28 UNF	1/4-28 UNF
Mounting Torque		2 lbf ft to 5 lbf ft	2.7 N m to 6.8 N m
Sensing Element		Piezoelectric Ceramic	Piezoelectric Ceramic
Sensing Geometry		Shear	Shear
Housing Material		Stainless Steel	Stainless Steel
Sealing		Welded Hermetic	Welded Hermetic
Electrical Connector		USB Type A Male	USB Type A Male
Electrical Connection Position		Top	Top
Cable (Integral) Length		9.6 ft	2.9 m

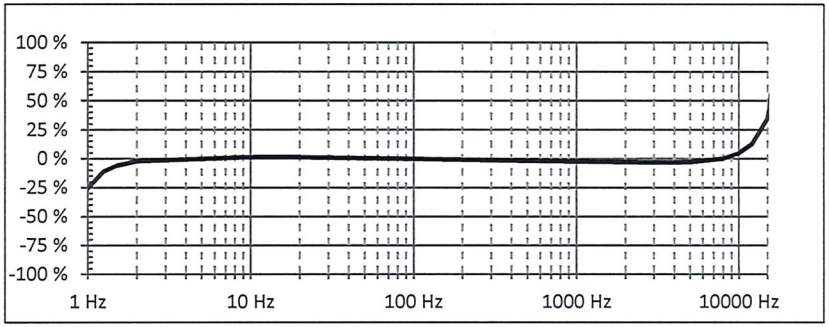
NOTES:
[1] Conversion Factor 1g = 9.80665 m/s²
[2] FSV = Full Scale Value
[3] Typical
[4] Zero-based, least square straight line method
[5] Minimum Range

OPTIONAL ACCESSORIES:
080A121 Flat Surface Magnet Base
080A131 Curved Surface Magnet Base

PRODUCT DRAWING



Typical Frequency Response



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

All specifications are at room temperature unless otherwise specified.

CE UKCA

Project Engineer:	Product Manager:	Mkt Team Leader:	Spec Number:
tCC	MAP	JMP	PS-0116
Date: 10/28/21	Date: 10/28/21	Date: 10/28/21	

SAM-F020 revC 10/20/20

THE MODAL SHOP
AN AMPHENOL COMPANY

10310 Aerohub Boulevard
Cincinnati, OH 45215, USA

info@modalshop.com
+1 513.351.9919

+1 800.860.4867
Fax: +1 513.458.2172