

Model Number 633A01		PIEZOELECTRIC USB DIGITAL ACCELEROMETER			Revision: A ECN #: 48885	
Performance		ENGLISH	SI		OPTIONAL VERSIONS	
Sensitivity(Channel A)		334,566 counts/g	34,105 counts/(m/s ²)	[2][3]	Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.	
Sensitivity(Channel B)		664,689 counts/g	67,756 counts/(m/s ²)	[2][3]		
Measurement Range(Channel A)		± 20 g pk	± 196 m/s ² pk	[1]		
Measurement Range(Channel B)		± 10 g pk	± 98 m/s ² pk	[1]		
ADC Bandwidth(-3 dB)		9.3 to 1,374,000 cpm	0.155 to 22,900 Hz			
Frequency Range(± 5 %)		120 to 480,000 cpm	2 to 8000 Hz	[4][1]		
Frequency Range(± 10 %)		90 to 660,000 cpm	1.5 to 11,000 Hz	[4][1]		
Frequency Range(± 3 dB)		54 to 900,000 cpm	0.9 to 15,000 Hz	[4][1]		
Resonant Frequency		≥ 1500 kcpm	≥ 25 kHz			
Mounted Resonance		1044 kcpm	17.4 kHz	[1]		
Mounted Resonance Amplification		200 %	200 %	[1]		
Broadband Resolution(1 to 10,000 Hz)		0.0025 g pk	0.0245 m/s ² pk	[1][3]		
Non-Linearity		≤ 2 %	≤ 2 %	[5]		
Transverse Sensitivity		≤ 5 %	≤ 5 %			
Environmental					NOTES: [1] Typical. [2] Typical value. For actual calibrated sensitivity values, refer to calibration label. [3] Conversion Factor 1g = 9.81 m/s ² . [4] Frequency range at highest supported sample rate. [5] Zero-based, least-squares, straight line method. [6] 1/4-28 has no equivalent in S.I. units. [7] See PCB Declaration of Conformance PS194 for details.	
Overload Limit(Shock)		7000 g pk	68,647 m/s ² pk			
Temperature Range(Operating)		+14 to +158 °F	-10 to +70 °C			
Temperature Response(Coefficient)		0.10 %/°F	0.18 %/°C	[1]		
Electrical						
Communication Standard		USB 2.0 Full Speed	USB 2.0 Full Speed			
Power Consumption		≤ 45 mA	≤ 45 mA	[1]		
Internal ADC		24 bit	24 bit			
Supported Resolution Rates(Selectable)		24 bit 16 bit	24 bit 16 bit			
Supported Sample Rates(Selectable)		48 44.1 32 22.05 16 11.025 8 kHz	48 44.1 32 22.05 16 11.025 8 kHz			
Physical					SUPPLIED ACCESSORIES: Model 081A40 Mounting Stud	
Size (Hex x Height)		1.0 in x 2.6 in	25.4 mm x 66.0 mm			
Weight		4.62 oz	131 gm			
Mounting Thread		1/4-28 UNF	1/4-28 UNF	[6]		
Mounting Torque		2 to 5 ft-lb	2.7 to 6.8 Nm			
Sensing Element		Ceramic	Ceramic			
Sensing Geometry		Shear	Shear			
Housing Material		Stainless Steel	Stainless Steel			
Sealing		Welded Hermetic	Welded Hermetic			
Electrical Connector		Integral Cable	Integral Cable			
Electrical Connector		USB Type A Male	USB Type A Male			
Electrical Connection Position		Top	Top			
Cable Length		9.6 ft	2.9 m			