

Model Number
339C31

TRIAxIAL ICP® ACCELEROMETER

Revision: NR
ECN #: 54773

Performance

	ENGLISH	SI	
Sensitivity(± 10 %)	10 mV/g	1.02 mV/(m/s ²)	
Measurement Range	± 500 g pk	± 4,905 m/s ² pk	
Frequency Range(+/- 5 %)	2 to 8,000 Hz	2 to 8,000 Hz	
Frequency Range(+/- 10 %)	1.5 to 11,000 Hz	1.5 to 11,000 Hz	
Resonant Frequency	≥ 50 kHz	≥ 50 kHz	
Filter Type(single pole)	Low Pass	Low Pass	
Electrical Filter Roll-off	6 dB/octave	6 dB/octave	
Electrical Filter Corner Frequency	> 14 kHz	> 14 kHz	
Broadband Resolution	.008 g rms	.078 m/s ² rms	[1]
Non-Linearity	≤ 0.5 %	≤ 0.5 %	
Transverse Sensitivity	≤ 5 %	≤ 5 %	

Environmental

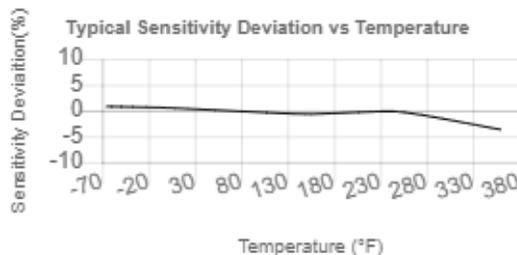
Overload Limit(Shock)	± 5,000 g pk	± 49,050 m/s ² pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	[2]
Temperature Response	See Graph	See Graph	[1][2]
Temperature Coefficient of Sensitivity	.012 %/°F	.022 %/°C	[1]

Electrical

Excitation Voltage	18 to 30 VDC	18 to 30 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	≤ 400 Ohm	≤ 400 Ohm	
Output Bias Voltage	9 to 14 VDC	9 to 14 VDC	
Discharge Time Constant	.3 to 2 sec	.3 to 2 sec	
Settling Time(within 10% of bias)	< 3 sec	< 3 sec	
Spectral Noise(1 Hz)	4,800 µg/√Hz	47,088 (µm/sec ²)/√Hz	[1]
Spectral Noise(10 Hz)	560 µg/√Hz	5,494 (µm/sec ²)/√Hz	[1]
Spectral Noise(100 Hz)	150 µg/√Hz	1,472 (µm/sec ²)/√Hz	[1]
Spectral Noise(1 kHz)	60 µg/√Hz	589 (µm/sec ²)/√Hz	[1]

Physical

Sensing Element	UHT-12™	UHT-12™	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Height x Length x Width)	.4 in x .4 in x .4 in	10.2 mm x 10.2 mm x 10.2 mm	
Weight	.15 oz	4.2 gm	[1]
Electrical Connector	1/4-28 4-Pin	1/4-28 4-Pin	
Electrical Connection Position	Side	Side	
Mounting	Stud	Stud	
Mounting Thread	10-32 Female	10-32 Female	



OPTIONAL VERSIONS

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

HT - High temperature, extends normal operation

temperatures		
Constant Current Excitation	2 to 8 mA	2 to 8 mA
Temperature	-65 to 325 °F	-54 to 163 °C
Range(Operating)		

NOTES:

- [1]Typical.
- [2]250° F to 325° F data valid with HT option only.
- [3]See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

- Model 080A Adhesive Mounting Base (1)
- Model 080A109 Petro Wax (1)
- Model 080A90 Quick Bonding Gel (1)
- Model 081B05 Mounting Stud (10-32 to 10-32) (1)
- Model ACS-1T NIST traceable triaxial amplitude response, 10 Hz to upper 5% frequency. (1)
- Model ACS-44T Triaxial extended amplitude response, upper 5% point to 10% point (requires ACS-1T or equivalent). (1)
- Model M081B05 Mounting Stud 10-32 to M6 X 0.75 (1)

Entered: ND	Engineer: MB	Sales: KK	Approved: BAM	Spec Number:
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All specifications are at room temperature unless otherwise specified.
In the interest of constant product improvement, we reserve the right to change specifications without notice.
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