

Model Number
354B05

TRIAxIAL ICP® ACCELEROMETER

Revision: A
ECN #: 54323

Performance

	ENGLISH	SI	
Sensitivity(± 5 %)	100 mV/g	10.2 mV/(m/s ²)	
Measurement Range	± 50 g pk	± 491 m/s ² pk	
Frequency Range(± 5 %)	0.6 to 10,000 Hz	0.6 to 10,000 Hz	
Resonant Frequency	≥ 25 kHz	≥ 25 kHz	
Broadband Resolution(1 to 10,000 Hz)	0.0003 g rms	0.003 m/s ² rms	[1]
Non-Linearity	≤ 1 %	≤ 1 %	[2]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
TEDS Compliant(Per IEEE 1451.4)	Yes	Yes	[3]

Environmental

Overload Limit(Shock)	± 5,000 g pk	± 49,050 m/s ² pk	
Temperature Range(Operating)	-65 to +200 °F	-54 to +93 °C	
Temperature Response	See Graph	See Graph	[1]
Base Strain Sensitivity	.003 g/µε	.03 (m/s ²)/µε	[1]

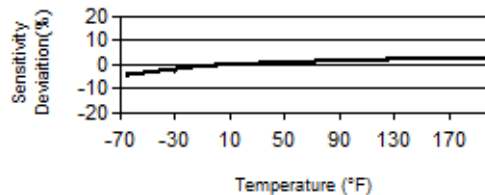
Electrical

Excitation Voltage	20 to 30 VDC	20 to 30 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	≤ 100 Ohm	≤ 100 Ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Discharge Time Constant	0.8 to 2.4 sec	0.8 to 2.4 sec	
Settling Time(within 10% of bias)	< 3 sec	< 3 sec	
Spectral Noise(1 Hz)	55 µg/√Hz	540 (µm/sec ²)/√Hz	[1]
Spectral Noise(10 Hz)	15 µg/√Hz	147 (µm/sec ²)/√Hz	[1]
Spectral Noise(100 Hz)	6 µg/√Hz	59 (µm/sec ²)/√Hz	[1]
Spectral Noise(1 kHz)	3 µg/√Hz	29 (µm/sec ²)/√Hz	[1]
Spectral Noise(10 kHz)	2 µg/√Hz	20 (µm/sec ²)/√Hz	[1]
Electrical Isolation(Case)	> 10 ⁸ Ohm	> 10 ⁸ Ohm	

Physical

Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Height x Width x Length)	.38 in x .82 in x .82 in	9.7 mm x 20.7 mm x 20.7 mm	
Weight	0.51 oz	14.5 gm	[1]
Electrical Connector	1/4-28 4-Pin	1/4-28 4-Pin	
Electrical Connection Position	Side	Side	
Mounting Screw	6 - 32	6 - 32	

Typical Sensitivity Deviation vs Temperature



[4]

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.

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.

NOTES:

- [1]Typical.
- [2]Zero-based, least-squares, straight line method.
- [3]TEDS Capable Digital Memory and Communication, compliant with IEEE 1451.4
- [4]See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

- Model 039A22 Allen wrench, 7/64" hex
- Model 081A105 Mounting screw (6-32 x 1/2" shcs 18-8) (1)
- Model ACS-1T NIST traceable triaxial amplitude response, 10 Hz to upper 5% frequency. (1)
- Model M039A22 Allen wrench for use with M3 thread (1)
- Model M081A103 Mounting screw and washer, M3 x 0.5 thread (1)

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