

Model Number

333B40

# ICP® ACCELEROMETER

Revision: G

ECN #: 39069

	<u>ENGLISH</u>	<u>SI</u>	
<b>Performance</b>			
Sensitivity(± 10 %)	500 mV/g	51.0 mV/(m/s <sup>2</sup> )	
Measurement Range	± 10 g pk	± 98 m/s <sup>2</sup> pk	
Frequency Range(± 5 %)	0.5 to 3000 Hz	0.5 to 3000 Hz	
Resonant Frequency	≥ 20 kHz	≥ 20 kHz	
Phase Response(± 5 °)	2 to 3000 Hz	2 to 3000 Hz	
Broadband Resolution(1 to 10,000 Hz)	0.00005 g rms	0.0005 m/s <sup>2</sup> rms	[1]
Non-Linearity	≤ 1 %	≤ 1 %	[2]
Transverse Sensitivity	≤ 5 %	≤ 5 %	[3]
<b>Environmental</b>			
Overload Limit	± 5000 g pk	± 49,000 m/s <sup>2</sup> pk	
Temperature Range	0 to +150 °F	-18 to +66 °C	
Temperature Response	See Graph	See Graph	[1]
Base Strain Sensitivity	0.01 g/με	0.1 (m/s <sup>2</sup> )/με	[1]
<b>Electrical</b>			
Excitation Voltage	18 to 30 VDC	18 to 30 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	≤ 200 Ohm	≤ 200 Ohm	
Output Bias Voltage	7 to 12 VDC	7 to 12 VDC	
Discharge Time Constant	1.0 to 2.5 sec	1.0 to 2.5 sec	
Spectral Noise(10 Hz)	3.8 μg/√Hz	37 (μm/sec <sup>2</sup> )/√Hz	[1]
(100 Hz)	1.1 μg/√Hz	11 (μm/sec <sup>2</sup> )/√Hz	[1]
(1 kHz)	0.4 μg/√Hz	3.9 (μm/sec <sup>2</sup> )/√Hz	[1]
<b>Physical</b>			
Weight	0.26 oz	7.5 gm	[1]
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Length x Width)	0.68 in x 0.45 in	17.3 mm x 11.4 mm	
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack	
Electrical Connection Position	Side	Side	
Mounting Thread	5-40 Female	5-40 Female	
Mounting Torque	4 to 5 in-lb	45 to 56 N-cm	

### 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.

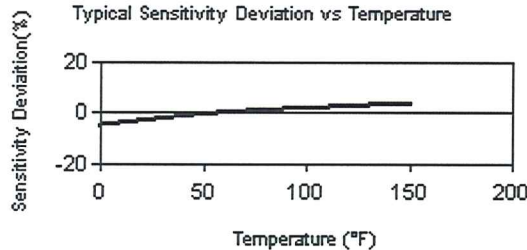
- T - TEDS Capable of Digital Memory and Communication Compliant with IEEE P1451.4
  - TLA - TEDS LMS International - Free Format
  - TLB - TEDS LMS International - Automotive Format
  - TLC - TEDS LMS International - Aeronautical Format
  - TLD - TEDS Capable of Digital Memory and Communication Compliant with IEEE 1451.4 [5]
- Output Bias Voltage                      7.5 to 13 VDC                      7.5 to 13 VDC

### NOTES:

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

### SUPPLIED ACCESSORIES:

- Model 080A109 Petro Wax (1)
- Model 080A25 Adhesive base, 0.438" hex, 5-40 tapped hole, aluminum hardcoat. (1)
- Model 080A90 Quick Bonding Gel (1)
- Model 081A27 Mounting Stud (5-40 to 5-40) (1)
- Model ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)
- Model M081A27 Metric mounting stud, 5-40 to M3 x 0.50 long (1)



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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Entered: <i>JH</i>	Engineer: <i>AG</i>	Sales: <i>WDC</i>	Approved: <i>BAM</i>	Spec Number:
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