

Model Number  
352C03

# ICP® ACCELEROMETER

Revision: E  
ECN #: 25274

	ENGLISH	SI	
<b>Performance</b>			
Sensitivity (± 10 %)	10 mV/g	1.02 mV/(m/s <sup>2</sup> )	
Measurement Range	± 500 g pk	± 4900 m/s <sup>2</sup> pk	
Frequency Range (± 5 %)	0.5 to 10,000 Hz	0.5 to 10,000 Hz	
Frequency Range (± 10 %)	0.3 to 15,000 Hz	0.3 to 15,000 Hz	
Resonant Frequency	≥ 50 kHz	≥ 50 kHz	
Broadband Resolution (1 to 10,000 Hz)	0.0005 g rms	0.005 m/s <sup>2</sup> rms	[1]
Non-Linearity	≤ 1 %	≤ 1 %	[4]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
<b>Environmental</b>			
Overload Limit (Shock)	± 5000 g pk	± 49,000 m/s <sup>2</sup> pk	
Temperature Range (Operating)	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	[1][3]
Base Strain Sensitivity	0.003 g/με	0.029 (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	≤ 100 ohm	≤ 100 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	
Settling Time (within 10% of bias)	<10 sec	<10 sec	
Spectral Noise (1 Hz)	110 μg/√Hz	1080 (μm/s <sup>2</sup> )/√Hz	
Spectral Noise (10 Hz)	25 μg/√Hz	245 (μm/s <sup>2</sup> )/√Hz	[1]
Spectral Noise (100 Hz)	8 μg/√Hz	78 (μm/s <sup>2</sup> )/√Hz	[1]
Spectral Noise (1 kHz)	4 μg/√Hz	39 (μm/s <sup>2</sup> )/√Hz	[1]
<b>Physical</b>			
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Hex x Height)	0.44 in x 0.62 in	11.2 mm x 15.7 mm	
Weight	0.20 oz	5.8 gm	[1]
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack	
Electrical Connection Position	Side	Side	
Mounting Thread	10-32 Female	10-32 Female	
Mounting Torque	10 to 20 in-lb	113 to 226 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.

<b>HT</b> - High temperature, extends normal operation temperatures		[3]
Excitation Voltage	22 to 30 VDC	22 to 30 VDC
Frequency Range (± 5 %)	5 to 10,000 Hz	5 to 10,000 Hz
Frequency Range (± 10 %)	3 to 15,000 Hz	3 to 15,000 Hz
Temperature Range (Operating)	-65 to +325 °F	-54 to +163 °C
Discharge Time Constant	0.1 to 0.3 sec	0.1 to 0.3 sec
Spectral Noise (1 Hz)	200 μg/√Hz	1962 (μm/s <sup>2</sup> )/√Hz
Spectral Noise (10 Hz)	30 μg/√Hz	294 (μm/s <sup>2</sup> )/√Hz
Output Bias Voltage	10 to 15 VDC	10 to 15 VDC
Supplied Accessory : Model ACS-68 Single Axis Amplitude Response Calibration from 5 Hz to upper 5% plotted on dB scale replaces Model ACS-1		[2]

<b>J</b> - Ground Isolated		
Frequency Range (5 %)	9 kHz	9 kHz
Frequency Range (10 %)	14 kHz	14 kHz
Resonant Frequency	≥ 40 kHz	≥ 40 kHz
Electrical Isolation (Base)	>10 <sup>8</sup> ohm	>10 <sup>8</sup> ohm
Size - Hex x Height	0.44 in x 0.67 in	11.2 mm x 17.0 mm
Weight	0.21 oz	6.0 gm

**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

Excitation Voltage	20 to 30 VDC	20 to 30 VDC
Temperature Range (Memory Access)	-10 to +250 °F	-23 to +121 °C
Output Bias Voltage	7.5 to 13 VDC	7.5 to 13 VDC

**TLD** - TEDS Capable of Digital Memory and Communication Compliant with IEEE 1451.4

Excitation Voltage	20 to 30 VDC	20 to 30 VDC
Output Bias Voltage	7.5 to 13.0 VDC	7.5 to 13.0 VDC
Temperature Range (Memory Access)	-10 to +250 °F	-23 to +121 °C

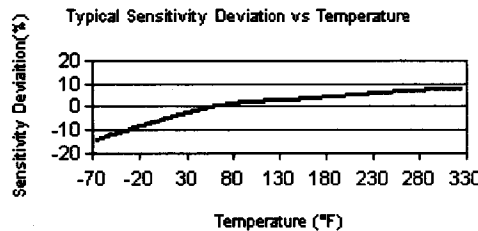
<b>W</b> - Water Resistant Cable	
Electrical Connector	Sealed Integral Cable
Electrical Connection Position	Side

**NOTES:**

- [1] Typical.
- [2] TEDS option adds 1.0 VDC to bias voltage.
- [3] 250° F to 325° F data valid with HT option only.
- [4] Zero-based, least-squares, straight line method.
- [5] See PCB Declaration of Conformance PS023 for details.

**SUPPLIED ACCESSORIES:**

Model 080A Adhesive Mounting Base (1)  
 Model 080A109 Petro Wax (1)  
 Model 081B05 Mounting Stud (10-32 to 10-32) (1)  
 Model ACS-1 NIST traceable frequency response (10 Hz to upper 5% point).  
 Model M081B05 Mounting Stud 10-32 to M6 X 0.75 (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>[Signature]</i>	Engineer: <i>[Signature]</i>	Sales: <i>[Signature]</i>	Approved: <i>[Signature]</i>	Spec Number:
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