

Model Number
9106C11

PRIMARY DOUBLE-ENDED TRANSFER STANDARD ACCELEROMETER SYSTEM ^[1]

Revision: NR
ECN #:

PERFORMANCE

	<u>English</u>	<u>SI</u>	
Sensitivity (±10%)	10 mV/g	1.02 mV/(m/s ²)	
Measurement Range	±500 g pk	±4905 m/s ² pk	
Frequency Range (±5%)	1 to 10,000 Hz	1 to 10,000 Hz	
Frequency Range (±10%)	0.7 to 20,000 Hz	0.7 to 20,000 Hz	
Resonant Frequency	≥70 kHz	≥70 kHz	
Broadband Resolution (1 to 10000 Hz)	0.005 g rms	0.05 m/s ² rms	[2]
Non-Linearity	≤1 %	≤1 %	[3]
Transverse Sensitivity	≤5 %	≤5 %	[4]

ENVIRONMENTAL

Overload Limit (Shock)	±10,000 g pk	±98,100 m/s ² pk	
Temperature Range (Operating)	-65 to 250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	[2]

ELECTRICAL

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	8 to 12 VDC	8 to 12 VDC	
Discharge Time Constant	0.5 to 2.0 Sec	0.5 to 2.0 Sec	
Setting Time (Within 10% of Bias)	<5 sec	<5 sec	
Spectral Noise (1 Hz)	3200 µg/√Hz	31392 (µm/s ²)/√Hz	[2]
Spectral Noise (10 Hz)	700 µg/√Hz	6867 (µm/s ²)/√Hz	[2]
Spectral Noise (100 Hz)	180 µg/√Hz	1766 (µm/s ²)/√Hz	[2]
Spectral Noise (1 kHz)	64 µg/√Hz	628 (µm/s ²)/√Hz	[2]

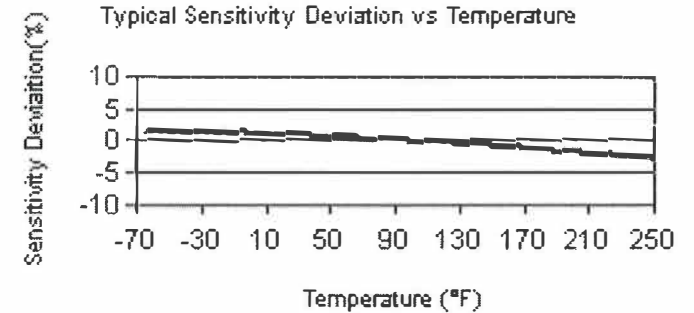
PHYSICAL

Sensing Element/Geometry	Quartz/Shear	Quartz/Shear	
Housing Material	Beryllium	Beryllium	
Sealing	Welded Hermetic	Welded Hermetic	
Size (Hex x Height)	1.05 in x 1.45 in	26.7 mm x 36.8 mm	
Weight (Without Cable)	1.66 oz	47.0 gm	[2]
Electrical Connector	10-32 Coaxial Plug	10-32 Coaxial Plug	
Mounting Thread (Shaker Mount)	4 x 8-32	4 x 8-32	
Mounting Thread (Unit Under Test Mount)	¼-28 Female	¼-28 Female	

ICP® SIGNAL CONDITIONER

Voltage Gain (±1%)	1:1	1:1	
Low Frequency Response (-5%)	<0.1 Hz	<0.1 Hz	
Universal Input Power	100-240 VAC; 50-60 Hz	100-240 VAC; 50-60 Hz	[5]
Discharge Time Constant (0 to +50%)	10 sec	10 sec	[6]
Electrical Connectors (Input, Output)	BNC Jack	BNC Jack	

All specifications are at room temperature unless otherwise specified.



LASER PRIMARY CALIBRATION UNCERTAINTY

MCS-A065 Calibration with K394A31 air bearing shaker.
Calibration data acquired from 5 to 20 kHz at 10 pts/decade plus 159 Hz.

Expanded uncertainties using a coverage factor of k=2:

5 Hz	1%
(5 < f < 100) Hz	0.5%
100 Hz, 159 Hz	0.2%
(159 < f ≤ 1000) Hz	0.5%
(1000 < f ≤ 5000) Hz	0.7%
(15000 < f ≤ 20000) Hz	2.0%

f represents calibration frequency

NOTES

- [1] For use with 396C10/C11 air bearing shaker.
- [2] Typical.
- [3] Zero-based, least squares, straight line method.
- [4] Transverse sensitivity is typically ≤3%.
- [5] Supplied external DC power supply 488B04.
- [6] With ≥ 1M ohm input impedance of readout device.

SUPPLIED ACCESSORIES

- 003C03 Sensor Cable (1)
- 012A03 Output Cable (1)
- K9525-1032-MACC or 9101C Mount Kit (1)
- 100-8623-00 Hex key 9/16 (1)
- 100-8092-40 8/32 x 1 screws (4)
- MCS-A065 Primary Calibration 5-20 kHz (1)

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In the interest of constant product improvement, specifications may change without notice.

Project Engineer: <i>[Signature]</i>	Product Manager: <i>EJS</i>	Mkt Team Leader: <i>[Signature]</i>	Spec Number: PS-0087
Date: 7/11/11	Date: 7/12/11	Date: 7/11/11	



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