Model Number
355M102

## **ICP® ACCELEROMETER**

Revision: A ECN #:

333W102			
Performance	<u>ENGLISH</u>	<u>SI</u>	
Sensitivity(± 10 %)	10 mV/g	10 mV/g 1.02 mV/(m/s²)	
Measurement Range	± 500 g pk	± 4900 m/s² pk	
Frequency Range(± 5 %)	1 to 7000 Hz	1 to 7000 Hz	
Frequency Range(± 10 %)	0.75 to 10,000 Hz	0.75 to 10,000 Hz	
Frequency Range(± 3 dB)	0.35 to 17,000 Hz	0.35 to 17,000 Hz	
Filter Type(Low Pass)	single pole	single pole	
Electrical Filter Corner Frequency	≥ 17 kHz	≥ 17 kHz	
Resonant Frequency	≥ 35 kHz	≥ 35 kHz	
Broadband Resolution(1 to 10,000 Hz)	0.001 g rms	0.01 m/s <sup>2</sup> rms	[1]
Non-Linearity	≤ 1 %	≤ 1 %	[2]
Transverse Sensitivity	≤ 5 %	≤ 5 %	[3]
Environmental			
Overload Limit(Shock)	± 5000 g pk	$\pm 49,050 \text{ m/s}^2 \text{ pk}$	
Temperature Range(Operating)	-65 to 325 °F	-54 to 163 °C	
Temperature Response	See Graph	See Graph	[1]
Electrical			
Excitation Voltage	19 to 30 VDC	19 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	
Settling Time(within 10% of bias)	≤ 10 sec	≤ 10 sec	F41
Spectral Noise(1 Hz)	440 µg/√Hz	4320 (µm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise(10 Hz)	135 μg/√Hz	1325 (µm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise(100 Hz)	35 μg/√Hz	345 (µm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise(1 kHz)	10 μg/√Hz	98 (μm/sec²)/√Hz [1]	
Electrical Isolation(Base)	≥ 10 <sup>8</sup> Ohm	≥ 10 <sup>8</sup> Ohm	
Physical			
Size (Height x Length x Width)	0.40 in x 0.70 in x 0.63 in	10.2 mm x 17.8 mm x 15.9 mm	
Weight	0.29 oz	8.2 gm	[1]
Sensing Element	Quartz	Quartz	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack	
Electrical Connection Position	Side Side		
Mounting Through Hole		Through Hole	
	Typical Sensiti	ivity Deviation vs Temperature	
	· 5	<u> </u>	
	₽ ;; <del> </del>		$\Box$
	.≩ -5		
[4]	≨ -10 <del> </del>	<del></del>	$\dashv$

-70 -30 10 50 90 130 170 210 250 290 330 Temperature (°F)

## **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] Transverse sensitivity is typically ≤ 3%.
  [4] See PCB Declaration of Conformance PS023 for details.

## SUPPLIED ACCESSORIES:

Model 080A109 Petro Wax (1) Model 081M252 Allen Wrench M039A22 (1)

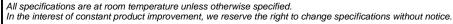
Model ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)

Model Mounting Screw (1)

Entered: AP	Engineer: jg	Sales: RM	Approved: BAM	Spec Number:
Date: 3/5/2014	Date: 3/5/2014	Date: 3/5/2014	Date: 3/5/2014	57407



Phone: 716-684-0001 Fax: 716-684-0987 E-Mail: info@pcb.com



ICP® is a registered trademark of PCB Group, Inc.

