Model	Number
320	C15

ICP® ACCELEROMETER

Revision: G

ECN #: 36906

020010				
Performance	E	NGLISH	<u>SI</u>	
Sensitivity(± 10 %)		10 mV/g	1.02 mV/(m/s²)	
Measurement Range		± 500 g pk	± 4900 m/s² pk	
Frequency Range(± 5 %)		to 10,000 Hz	1.0 to 10,000 Hz	
Frequency Range(± 10 %)	0.7	to 18,000 Hz	0.7 to 18,000 Hz	
Frequency Range(± 3 dB)		to 30,000 Hz	0.35 to 30,000 Hz	
Resonant Frequency		≥ 60 kHz	≥ 60 kHz	
Broadband Resolution(1 to 10,000 Hz)	0	.005 g rms	0.05 m/s ² rms	[1]
Non-Linearity		≤ 1 %	≤ 1 %	[2]
Transverse Sensitivity		≤ 5 %	≤ 5 %	[3]
Environmental				
Overload Limit(Shock)	± ′	10,000 g pk	± 98,100 m/s² pk	
Temperature Range(Operating)	-10	0 to +325 °F	-73 to +163 ℃	
Temperature Response	5	See Graph	See Graph	[1]
Base Strain Sensitivity	≤ (0.0005 g/με	≤ 0.005 (m/s²)/με	[1]
Electrical				
Excitation Voltage	18	to 30 VDC	18 to 30 VDC	
Constant Current Excitation	2	2 to 20 mA	2 to 20 mA	
Output Impedance	5	≤ 100 ohm	≤ 100 ohm	
Output Bias Voltage	8	to 12 VDC	8 to 12 VDC	
Discharge Time Constant	0.2	25 to 2.0 sec	0.25 to 2.0 sec	
Settling Time(within 10% of bias)		<5 sec	<5 sec	
Spectral Noise(1 Hz)	28	800 μg/√Hz	27,468 (µm/sec ²)/√Hz	[1]
Spectral Noise(10 Hz)	7	'00 μg/√Hz	6867 (µm/sec ²)/√Hz	[1]
Spectral Noise(100 Hz)	1	80 μg/√Hz	1766 (µm/sec ²)/√Hz	[1]
Spectral Noise(1 kHz)		64 µg/√Hz	628 (µm/sec ²)/√Hz	[1]
Physical	`	5 · µg/ · · · =	020 (μπ/300)/ 1112	
Sensing Element		Quartz	Quartz	
Sensing Geometry		Shear	Shear	
Housing Material		Titanium	Titanium	
Sealing		ded Hermetic	Welded Hermetic	
Size (Hex x Height)		6 in x 0.43 in	5/16 in x 10.9 mm	
Weight	3/ 1	0.07 oz	2.0 gm	[1]
Electrical Connector	5.	-44 Coaxial	5-44 Coaxial	1.1
Electrical Connection Position	3-	Side	Side	
Mounting Thread	1	5-40 Male	5-40 Male	
Mounting Tricad Mounting Torque		to 12 in-lb	90 to 135 N-cm	
incurring rolque	_ T ₁		ty Deviation vs Temperature	
CE	Sensitivity Deviation(%)	; 		
~ · ·		1 		,
[4]	Sens	100 -50 0	50 100 150 200 250 3	00 350
			Temperature (°F)	

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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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.

A - Adhesive Mount

Supplied Accessory: Model 080A90 Quick Bonding Gel (1)

J - Ground Isolated

Frequency Range(± 5 %)	1.0 to 8000 Hz	1.0 to 8000 Hz
, , ,		
Frequency Range(± 10 %)	0.7 to 12,000 Hz	0.7 to 12,000 Hz
Frequency Range(± 3 dB)	0.35 to 25,000 Hz	0.35 to 25,000 Hz
Resonant Frequency	≥ 50 kHz	≥ 50 kHz
Electrical Isolation(Base)	≥ 10 ⁸ ohm	≥ 10 ⁸ ohm
Size - Hex x Height	3/8 in x 0.38 in	3/8 in x 9.7 mm
Weight	0.11 oz	3.1 gm
vvoigin	0.11 02	5.1 giii

M - Metric Mount

Mounting Thread M3x0.50 Male M3x0.50 Male Supplied Accessory: Model M080A15 Adhesive Mounting Base (1) replaces Model 080A15

W - Water Resistant Cable

Electrical Connector	Sealed Integral Cable	Sealed Integral Cable
Flectrical Connection Position	Side	Side

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 080A15 Adhesive Mounting Base (1)

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

Entered: DMW	Engineer: SDS	Sales: WDC	Approved: BAM	Spec Number:
Date: 9/19/2011	Date: 9/19/2011	Date: 9/19/2011	Date: 9/19/2011	9961



Phone: 716-684-0001 Fax: 716-685-3886

E-Mail: vibration@pcb.com