Model Number
350B04

SHEAR ICP® SHOCK SENSOR

Revision: G

ECN #: 42036

Performance	<u>ENGLISH</u>	<u>SI</u>	
Sensitivity(± 30 %)	1.0 mV/g	$0.10 \text{ mV/(m/s}^2)$	
Measurement Range	± 5000 g pk	$\pm 49,000 \text{ m/s}^2 \text{ pk}$	
Frequency Range(± 1 dB)	0.4 to 10,000 Hz	0.4 to 10,000 Hz	
Frequency Range(-3 dB)	0.2 to 25,000 Hz	0.2 to 25,000 Hz	[2]
Electrical Filter Corner Frequency(-3 dB)	13 kHz	13 kHz	[1][3
Mechanical Filter Resonant Frequency	23 kHz	23 kHz	[1][4
Resonant Frequency	≥ 100 kHz	≥ 100 kHz	
Broadband Resolution(1 to 10,000 Hz)	0.02 g rms	0.20 m/s ² rms	[1]
Non-Linearity	≤ 2.0 %	≤ 2.0 %	
Transverse Sensitivity	≤ 7 %	≤ 7 %	
Environmental			
Overload Limit(Shock)	± 50,000 g pk	± 490,000 m/s ² pk	
Temperature Range(Operating)	0 to +150 °F	-18 to +66 °C	
Temperature Range(Storage)	-40 to +200 °F	-40 to +93 °C	
Temperature Response	See Graph	See Graph	
Base Strain Sensitivity	0.002 g/με	0.02 (m/s²)/με	[1]
Electrical			
Excitation Voltage	20 to 30 VDC	20 to 30 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	≤ 200 Ohm	≤ 200 Ohm	
Output Bias Voltage	8 to 14 VDC	8 to 14 VDC	
Discharge Time Constant	1.0 to 2.0 sec	1.0 to 2.0 sec	[1]
Settling Time(within 10% of bias)	<10 sec	<10 sec	
Physical			
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Hex x Height)	0.375 in x 1.02 in	9.5 mm x 25.9 mm	
Weight	0.16 oz	4.5 gm	[1]
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack	
Electrical Connection Position	Тор	Тор	
Mounting Thread	1/4-28 Male	1/4-28 Male	

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.

M - Metric Mount

Mounting Thread M6 x 0.75 Male M6 x 0.75 Male

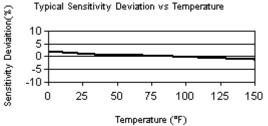
W - Water Resistant Cable

Electrical Connector Sealed Attached Cable Sealed Attached Cable

NOTES:

- [1] Typical
- [2] Typical corner frequency for coupled electrical and mechanical filters.
- [3] Electrical filter is a second order filter.
- [4] Amplitude at resonance is +9 dB.
- [5] See PCB Declaration of Conformance PS023 for details.

CE



SUPPLIED ACCESSORIES:

Model ACS-14 High G shock accelerometer calibration using Hopkinson bar. (1) Model ACS-22 NIST Traceable frequency response (100Hz to ±1 dB point) (1)

Entered: AP	Engineer: BAM	Sales: WDC	Approved: BAM	Spec Number:
Date: 9/17/2013	Date: 9/17/2013	Date: 9/17/2013	Date: 9/17/2013	11177



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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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