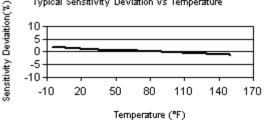
Mod	el N	lum	be
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# **ICP® SHOCK ACCELEROMETER**

Revision: NR ECN #: 45219

<u> </u>			
Performance	<u>ENGLISH</u>	<u>SI</u>	
Sensitivity(± 30 %)	0.1 mV/g	0.01 mV/(m/s <sup>2</sup> )	
Measurement Range	± 25,000 g pk	± 245,250 m/s² pk	
Frequency Range(± 1 dB)	4 to 10,000 Hz	4 to 10,000 Hz	
Frequency Range(-3 dB)	2 to 25,000 Hz	2 to 25,000 Hz	[2]
Electrical Filter Corner Frequency(-3 dB)	17 kHz	17 kHz	[1][3]
Mechanical Filter Resonant Frequency Resonant Frequency	35 kHz ≥ 100 kHz	35 kHz ≥ 100 kHz	[1][4]
Broadband Resolution(1 to 10,000 Hz)	0.5 g rms	4.9 m/s² rms	[1]
Non-Linearity(per 10,000 g (98,100 m/s²))	≤ 2.5 %	≤ 2.5 %	1.1
Transverse Sensitivity	≤ 7 %	≤ 7 %	
Environmental			
Overload Limit(Shock)	± 150,000 g pk	± 1,471,500 m/s² pk	
Temperature Range(Operating)	-6 to 150 °F	-21 to 66 °C	
Temperature Range(Storage)	-40 to 200 °F	-40 to 93 °C	
Temperature Response	See Graph	See Graph	[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	0.10 sec	0.10 sec	[1]
Settling Time(within 10% of bias)	<1 sec	<1 sec	
Electrical Isolation(Case)	>1,000,000 Ohm	>1,000,000 Ohm	
Physical	0	0	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Hex x Height)	0.375 in x 0.87 in	9.5 mm x 22.1 mm	
Weight(without cable)	0.16 oz	4.5 gm	[1]
Electrical Connector Electrical Connection Position	Integral Cable	Integral Cable	
	Top	Top	
Cable Termination	10-32 Coaxial Plug 10 ft	10-32 Coaxial Plug 3.05 m	
Cable Length		*********	
Cable Type	031 Twisted Pair	031 Twisted Pair	
Mounting Thread	1/4-28 Male	1/4-28 Male	
_	Typical Sensitivity De	existion as Temperature	

## Typical Sensitivity Deviation vs Temperature



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

### **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

#### 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 PS135 for details.

#### 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: LK	Engineer: BAM	Sales: WDC	Approved: BAM	Spec Number:
Date: 3/16/2016	Date: 3/16/2016	Date: 3/16/2016	Date: 3/16/2016	63934



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