ı	Model Number					
350B42						

TRIAXIAL ICP® ACCELEROMETER

Revision: NR ECN #: 50714

350B42			••
Performance	ENGLISH	SI	
Sensitivity(± 30 %)	.1 mV/g	.01 mV/(m/s²)	
Measurement Range	± 50,000 g pk	$\pm 440,000 \text{ m/s}^2 \text{ pk}$	
Frequency Range(± 1 dB)	4 to 10,000 Hz	4 to 10,000 Hz	
Frequency Range(+ 3 dB)	15,000 Hz	15,000 Hz	[1]
Resonant Frequency	> 50 kHz	> 50 kHz	
Electrical Filter Corner Frequency(- 3 dB)	17 kHz	17 kHz	[1][2]
Mechanical Filter Resonant Frequency	35 kHz	35 kHz	[1][3]
Broadband Resolution(1 to 10,000 Hz)	0.5 g rms	4.9 m/s ² rms	[1]
Non-Linearity(10,000 g, 98,100 m/s ²)	≤ 2.5 %	≤ 2.5 %	
Transverse Sensitivity	≤ 7 %	≤ 7 %	
Environmental			
Overload Limit(Shock)	± 150,000 g pk	± 1,471,500 m/s² pk	
Temperature Range(Operating)	-10 to +150 °F	-23 to +66 ℃	
Temperature Range(Storage)	-40 to +200 °F	-40 to +93 ℃	
Temperature Response	See Graph	See Graph	[1][4]
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	0.1 sec	0.1 sec	[1]
Settling Time(within 10% of bias)	< 1 sec	< 1 sec	
Electrical Isolation(Case)	> 10 ⁸ Ohm	> 10 ⁸ Ohm	
Physical			
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Height x Length x Width)	1.02 in x 1.02 in x 1.02 in	26.0 mm x 26.0 mm x 26.0	
		mm	
Weight(without cable)	0.95 oz	27 g	[1]
Electrical Connection Position	Side	Side	
Cable Termination	1/4-28 4-Pin Jack	1/4-28 4-Pin Jack	
Cable Length	5.0 ft	1.52 m	
Cable Type	034 4-cond Shielded	034 4-cond Shielded	
Mounting	Through Hole	Through Hole	

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]Electrical filter is a second order filter.

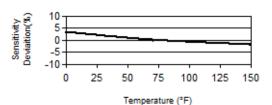
[3] Amplitude at resonance is +9 dB.

[4]Test performed on a shaker at 100Hz

[5]See PCB Declaration of Conformance PS023 for details.

Typical Sensitivity Deviation vs Temperature





SUPPLIED ACCESSORIES:

Model 034G05 4-cond. shielded cable, 5 ft (1.5M), 4-pin plug to (3) BNC plugs (1)

Model 100-16040-40 Metric mounting screws (M6x1.0 x 22mm long (1)

Model 100-6774-10 STD mounting screw (1/4-28 x .87 long) (1)

Model 100-8994-40 Coupling grease (1)

Model ACS-14T High G shock triaxial accelerometer calibration using Hopkinson bar (1)

Model ACS-22T NIST Traceable triaxial frequency response (100Hz to ±1 Db point (1)

Entered: LK	Engineer: LAB	Sales: RWM	Approved: NJF	Spec Number:
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