Model	Number	
350B43		

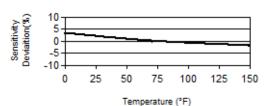
## TRIAXIAL ICP® ACCELEROMETER

Revision: B ECN #: 51341

350B43		TRIAMIAE IC	
Performance	ENGLISH	SI	
Sensitivity(± 30 %)	0.5 mV/g	$0.05 \text{ mV/(m/s}^2)$	
Measurement Range	± 10,000 g pk	± 98,000 m/s² 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	[1]
Resonant Frequency	> 50 kHz	> 50 kHz	
Electrical Filter Corner Frequency(- 3 dB)	17 kHz	17 kHz	[2][3]
Mechanical Filter Resonant Frequency	35 kHz	35 kHz	[2][4]
Broadband Resolution(1 to 10,000 Hz)	0.04 g rms	0.39 m/s <sup>2</sup> rms	[2]
Non-Linearity(per 1000 g (9810 m/s <sup>2</sup> ))	≤ 2.0 %	≤ 2.0 %	
Transverse Sensitivity	≤ 7 %	≤ 7 %	
Environmental			
Overload Limit(Shock)	± 50,000 g pk	± 490,000 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	[2][5]
Base Strain Sensitivity	0.002 g/με	0.02 (m/s²)/με	[2]
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	[2]
Settling Time(within 10% of bias)	< 10 sec	< 10 sec	
Electrical Isolation(Case)	> 10 <sup>8</sup> Ohm	> 10 <sup>8</sup> Ohm	
Physical	Ci-	Ci-	
Sensing Element	Ceramic Shear	Ceramic Shear	
Sensing Geometry	Snear Titanium	Snear Titanium	
Housing Material	Hermetic	Hermetic	
Sealing	1.02 in x 1.02 in x 1.02 in	26.0 mm x 26.0 mm x 26.0	
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	[2]
Electrical Connector	Integral Cable	Integral Cable	[2]
Electrical Connection Position	Side	Side	
Cable Termination	1/4-28 4-Pin Jack	1/4-28 4-Pin Jack	
Cable Termination Cable Length	5.0 ft	1,4-26 4-Pin Jack 1.52 m	
Cable Type	034 4-cond Shielded	034 4-cond Shielded	
Mounting	Through Hole	Through Hole	
wounting	i i i ough noie	i iliough noie	

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.  $ICP^{\circledast}$  is a registered trademark of PCB Piezotronics, 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.

## **NOTES:**

 $\label{thm:constraint} \mbox{[1]} \mbox{Typical corner frequency for coupled electrical and mechanical filters.}$ 

[2]Typical.

[3]Electrical filter is a second order filter.

[4]Amplitude at resonance is +9 dB.

[5]Test performed on a shaker at 100Hz

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

## **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: AJA	Sales: RWM	Approved: BAM	Spec Number:
Date: 12/17/2020	Date: 12/17/2020	Date: 12/17/2020	Date: 12/17/2020	67764



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