



High Temperature Miniature Triaxial ICP[®] Accelerometer

Operates up to +356 °F (180 °C)



Model HT356B01 and HTJ356B01 High Temperature Miniature Triaxial ICP[®] Accelerometer

The new PCB Model HT356B01 is able to withstand operating temperatures of up to 356 °F (180 °C) and uses the same 0.25 in (6.33 mm) cube housing, as its Model HT356A01 predecessor. The hermetically sealed accelerometer features improved strain relief with a larger, stronger crimp tube. The HT356B01 is compatible with an ICP[®] (IEPE) signal conditioner or readout device. It is a platinum stock product that is CE marked and supplied with a 5-foot mating cable assembly, Model 034G05. Model HTJ356B01 is permanently ground isolated to help reduce electrical noise and ground loops on your test article.

Highlights

- Operating temperature to +356 °F (+180 °C)
- 5 mV/g sensitivity in a miniature 0.25" (6.3 mm) cube
- Hermetically sealed titanium housing for enhanced reliability
- High 10,000 g overload limit
- Integral 5-foot cable to 4-pin connector and supplied mating cable assembly terminating in BNC plugs

Applications

- Gas turbine component qualification
- Engine vibration measurements
- Structural vibration
- Environmental Stress Screening (ESS)
- Noise vibration & harshness (NVH)
- High temperature vibration measurements with space restrictions



New Product Introduction

Technical Specifications

HTJ356B01 & HTJ356B01		
	English	SI
Sensitivity ($\pm 20\%$)	5 mV/g	0.51 mV/(m/s ²)
Measurement Range	± 1000 g pk	± 9810 m/s ² pk
Frequency Range ($\pm 5\%$)(y or z axis)	2 to 8000 Hz	
Frequency Range ($\pm 5\%$)(x axis)	2 to 5000 Hz	
Frequency Range (+1 dB)(x axis)	≥ 8 kHz	
Resonant Frequency	≥ 50 kHz	
Broadband Resolution (1 to 10,000 Hz)	0.003 g rms	0.03 m/s ² rms
Non-Linearity	$\leq 1\%$	
Transverse Sensitivity	$\leq 5\%$	
Environmental		
Overload Limit (Shock)	± 10000 g pk	$\pm 98,100$ m/s ² pk
Temperature Range (Operating)	-65 to +356 °F	-54 to +180 °C
Electrical		
Excitation Voltage	18 to 30 VDC	
Constant Current Excitation	2 to 20 mA	
Output Impedance	≤ 200 ohm	
Output Bias Voltage	7 to 12 VDC	
Discharge Time Constant	0.24 to 1.0 sec	
Settling Time (within 10% of bias)	< 3 sec	
Spectral Noise (1 Hz)	1200 μ g/ $\sqrt{\text{Hz}}$	11,772 ($\mu\text{m/sec}^2$)/ $\sqrt{\text{Hz}}$
Spectral Noise (10 Hz)	300 μ g/ $\sqrt{\text{Hz}}$	2943 ($\mu\text{m/sec}^2$)/ $\sqrt{\text{Hz}}$
Spectral Noise (100 Hz)	100 μ g/ $\sqrt{\text{Hz}}$	981 ($\mu\text{m/sec}^2$)/ $\sqrt{\text{Hz}}$
Spectral Noise (1 kHz)	30 μ g/ $\sqrt{\text{Hz}}$	294 ($\mu\text{m/sec}^2$)/ $\sqrt{\text{Hz}}$
Physical		
Sensing Element	Ceramic	
Sensing Geometry	Shear	
Housing Material	Titanium	
Sealing	Hermetic	
Size (Height x Length x Width) (HTJ356B01)	0.25 in x 0.25 in x 0.25 in	6.35 mm x 6.35 mm x 6.35 mm
Size (Height x Length x Width) (HTJ356B01)	0.28 in x 0.28 in x 0.28 in	7.10 mm x 7.10 mm x 7.10 mm
Weight (without cable)	0.04 oz	1.0 gm
Electrical Connector	Integral Cable	
Electrical Connection Position	Side	
Cable Length	5 ft	1.5 m
Cable Type	034 4-cond Shielded	
Mounting	Adhesive	
Electrical Isolation		
HTJ356B01 Only	> 100000000 Ohm	
Supplied Accessories:		
Model 034G05 4-cond. shielded cable, 5 ft (1.5M), 4-pin plug to (3) BNC plugs (1) Model 080A109 Petro Wax (1)	Model 080A90 Quick Bonding Gel (1) Model ACS-TT NIST traceable triaxial amplitude response, 10 Hz to upper 5% frequency, (1)	
All specifications are at room temperature unless otherwise specified		



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AS9100 CERTIFIED ■ ISO 9001 CERTIFIED ■ A2LA ACCREDITED to ISO 17025

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