



MODELS 356A01, 356A03
HTJ356B01 & J356A03

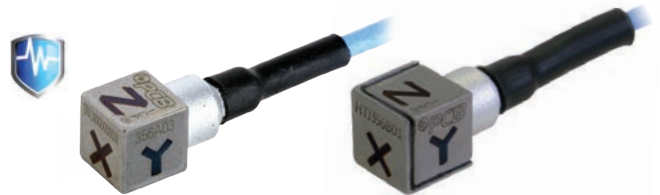
MINIATURE TRIAxIAL ICP® ACCELEROMETER

- Small 1/4 inch (6.4 mm) adhesive mount cube
- Ground isolated models available
- High overload limit 5000 g or 10000 g
- 5 ft (1.5 m) mating cable assembly with triaxial BNC plug termination included (except /NC models)

TYPICAL APPLICATIONS

- Small component qualification
- Structural vibration
- Environmental Stress Screening
- Noise Vibration & Harshness
- Vibration measurements with space restrictions

CE



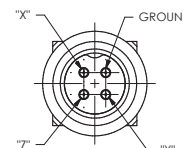
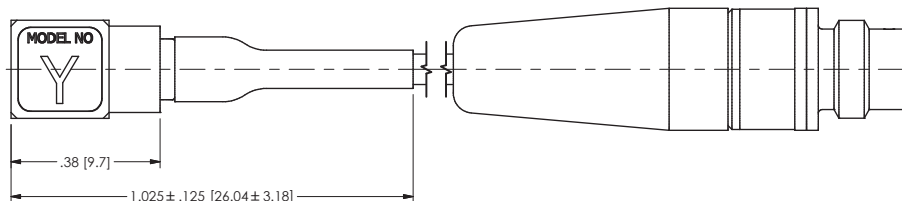
MINIATURE TRIAXIAL ICP® ACCELEROMETER

Models 356A01 and 356A03 provide 5 mV/g and 10 mV/g with 1000 g and 500 g full scale range respectively for general testing. They include a lower noise floor and higher shock limit than competitive offerings with hermetic sealed titanium housings. Their integral cable includes a rugged strain relief in addition to a robust crimp tube that provides excellent shear resistance and high tensile strength.

When applications have potential for ground loop noise, models HTJ35601 and J356A03 are available with integral ground isolation. Isolation is accomplished with the addition of an external titanium shell adhered to the three mounting surfaces via high temperature, electrically non-conductive epoxy. HTJ356B01 is also suitable for higher temperature applications up to 356 °F (180 °C). All of these models are compatible with any ICP® signal conditioner or readout device that includes ICP® power but note of current limitations at elevated temperatures. This product is CE marked for sale globally.

SPECIFICATIONS

Model Number	356A01 & 356A01/NC		HTJ356B01/NC		356A03 & 356A03/NC		J356A03/NC	
	English	SI	English	SI	English	SI	English	SI
Performance								
Sensitivity ($\pm 20\%$)	5 mV/g	0.51 mV/(m/s ²)	5 mV/g	0.51 mV/(m/s ²)	10 mV/g	1.02 mV/(m/s ²)	10 mV/g	1.02 mV/(m/s ²)
Measurement Range	± 1000 g pk	± 9810 m/s ² pk	± 1000 g pk	± 9810 m/s ² pk	± 500 g pk	± 4905 m/s ² pk	± 500 g pk	± 4905 m/s ² pk
Frequency Range ($\pm 5\%$)	2 to 8000 Hz (y or z axis) 2 to 5000 Hz (x axis)							
Frequency Range (+1 dB)(x axis)	≥ 8 kHz							
Resonant Frequency	≥ 50 kHz							
Broadband Resolution (1 to 10000 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	± 98100 m/s ² pk	± 10000 g pk	± 98100 m/s ² pk	± 5000 g pk	± 49050 m/s ² pk	± 5000 g pk	± 49050 m/s ² pk
Temperature Range (Operating)	-65 to +250 °F	-54 to +121 °C	-65 to +356 °F	-54 to +180 °C	-65 to +250 °F	-54 to +121 °C	-65 to +250 °F	-54 to +121 °C
Electrical								
Excitation Voltage	18 to 30 VDC				22 to 30 VDC			
Constant Current Excitation	2 to 20 mA		2 to 20 mA $\leq +250$ °F (+121 °C) ≤ 2 to 4 mA		2 to 20 mA			
Output Impedance	≤ 200 ohm				≤ 100 ohm			
Output Bias Voltage	7 to 12 VDC				9 to 16 VDC			
Discharge Time Constant	0.24 to 1.0 sec							
Settling Time (within 10% of bias)	<3 sec							
Spectral Noise (1 Hz)	1200 $\mu\text{g}/\sqrt{\text{Hz}}$ (11772 ($\mu\text{m}/\text{sec}^2$)/ $\sqrt{\text{Hz}}$)							
Spectral Noise (10 Hz)	300 $\mu\text{g}/\sqrt{\text{Hz}}$ (2943 ($\mu\text{m}/\text{sec}^2$)/ $\sqrt{\text{Hz}}$)							
Spectral Noise (100 Hz)	100 $\mu\text{g}/\sqrt{\text{Hz}}$ (981 ($\mu\text{m}/\text{sec}^2$)/ $\sqrt{\text{Hz}}$)							
Spectral Noise (1 kHz)	30 $\mu\text{g}/\sqrt{\text{Hz}}$ (294 ($\mu\text{m}/\text{sec}^2$)/ $\sqrt{\text{Hz}}$)							
Physical								
Element / Housing Materials	Shear Ceramic / Hermetic Titanium							
Size (Height x Length x Width)	0.25 x 0.25 x 0.25 in	6.35 x 6.35 x 6.35 mm	0.28 x 0.28 x 0.28 in	7.10 x 7.10 x 7.10 mm	0.25 x 0.25 x 0.25 in	6.35 x 6.35 x 6.35 mm	0.28 x 0.28 x 0.28 in	7.10 x 7.10 x 7.10 mm
Weight (without cable)	0.04 oz	1.0 gm	0.04 oz	1.2 gm	0.04 oz	1.0 gm	0.04 oz	1.2 gm
Electrical Connector	Integral 034 4-Conductor Shielded Cable, Side Exit							
Cable Termination	1/4-28 4-Pin Jack							
Cable Length	5 ft (1.5 m)							
Mounting	Adhesive							
Electrical Isolation	None				Ground Isolated >10000000 ohm			
Accessories								
Model 080A109 Petro Wax Model 080A90 Quick Bonding Gel Calibration per ACS-1T, NIST traceable triaxial amplitude response, 10 Hz to upper 5% frequency Model 034G05 4-cond. Shielded cable, 5 ft (1.5M), 4-pin plug to (3) BNC plugs Not included with /NC models								



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