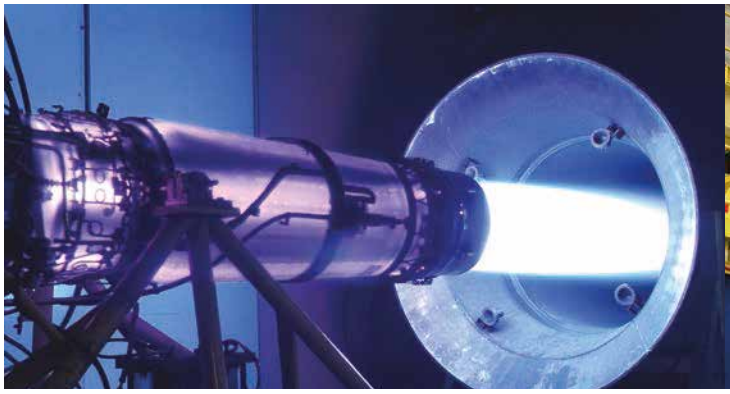


Models **357A63, 357A64 & 357M168**

VERY HIGH TEMPERATURE, CHARGE MODE ACCELEROMETERS WITH UHT-12™ ELEMENT

- Electrically-isolated case prevents noise issues without the added height or weight of an accessory isolation base
- Truly hermetically-sealed housing prevents risk of possible liquid or particulate infiltration
- Smaller, lighter design provides higher resonant frequency, higher usable frequency range and simplified installation in even the tightest of spaces
- Three mounting options (stud, screw tabs, weld tabs) provide installation flexibility

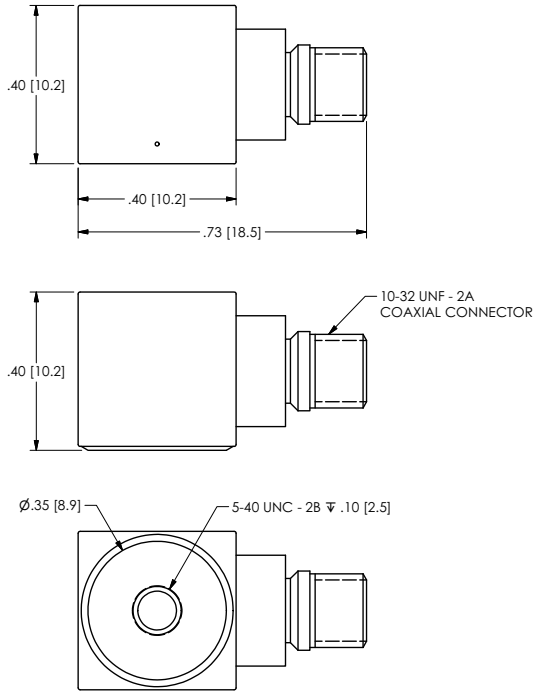
Typical Applications

- Aviation/Power Generation Turbine Research & Development
- Commissioning of Nuclear Power Plants
- Environmental Stress Screening
- Vehicle Exhaust System NVH

Provides More Consistent Sensitivity Over a Wide Temperature Range

PCB Piezotronics utilizes a UHT-12™ element that features a proprietary crystal technology sealed in a hermetic package for long-term reliability. The element has no pyroelectric output that provides accurate low-frequency measurements and reduced thermal noise spikes that eliminate false alarms during monitoring. The element also has a more consistent sensitivity over a wide temperature change to provide greater accuracy. The shear mode crystals prevent base strain and transverse measurement errors.

SPECIFICATIONS	
Model Number	**357A63**
Performance	
Sensitivity (±10%)	0.53 pC/g
	0.054 pC/(m/s²)
Measurement Range	±5,000 g pk
	±49,050 m/s² pk
Frequency Range (±10%)	Up to 10 kHz
Resonant Frequency	45 kHz
Transverse Sensitivity	≤ 3 %
Non-Linearity	≤ 1 %
Environmental	
Overload Limit (Shock)	±5,000 g pk
	±49,050 m/s² pk
Operating Temperature Range	-65 to +900 °F
	-54 to +482 °C
Base Strain Sensitivity	0.003 g/με
	0.02 (m/s²)/με
Radiation Exposure Limit (Integrated Neutron Flux)	1 E10 N/cm²
Radiation Exposure Limit (Integrated Gamma Flux)	1 E8 rad
Electrical	
Capacitance (Pole-to-Pole)	60 pF
Insulation Resistance (Room Temp)	>1 GOhm
Insulation Resistance (1000 °F / 538 °C)	>1 MOhm
Output Polarity	Positive
Electrical Isolation	Case Isolated
Physical	
Sensing Geometry	Shear
Sensing Element	UHT-12™
Housing Material	Nickel 600
Sealing	Hermetic Welded
Mounting Thread	5-40 Female
Electrical Connector	10-32 Coaxial Jack
Electrical Connector Position	Side
Weight	0.31 oz
	8.7 g

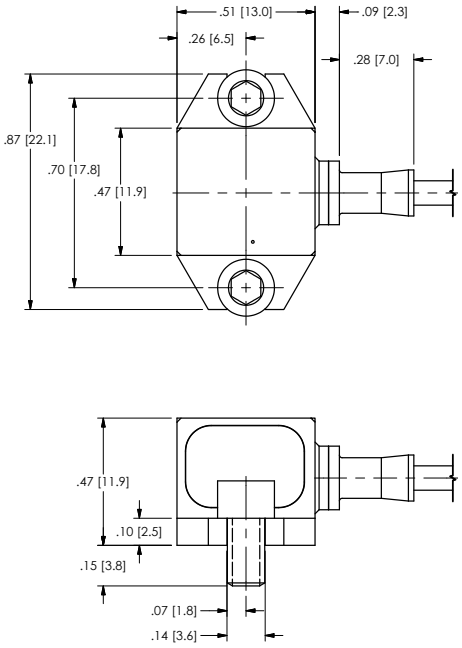


Model 357A63

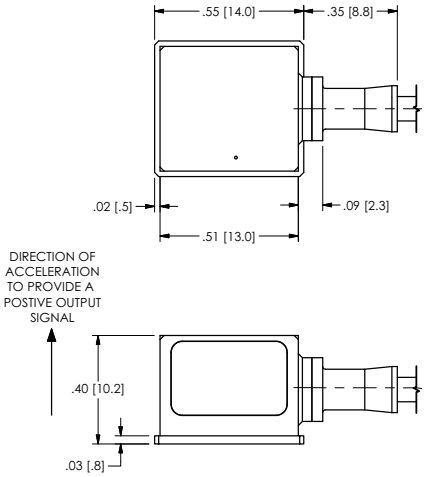
SENSOR CHAIN COMPONENTS		
	Non-Radiation Environment	**Radiation Environment**
Sensor	 357A63 357A64 357M168	
Hardline Cable	 023FZXXXGA (023A10 = 10ft)	
Softline Cable	 003EBXXXEB (003A10 = 10ft)	
Charge Amplifier	 422E35 (1 mV/pC) 422E36 (10 mV/pC)	 422E65/A (1 mV/pC) 422E66/A (10 mV/pC)

nbn Austria GmbH
Riesstraße 146, 8010 Graz
Tel. +43 316 40 28 05 | Fax +43 316 40 25 06
nbn@nbn.at | www.nbn.at

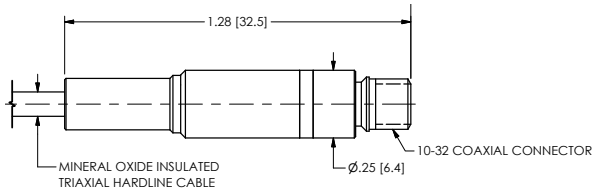
SPECIFICATIONS		
Model Number	**357A64**	**357M168**
Performance		
Sensitivity (±10%)	1.15 pC/g	
	0.117 pC/(m/s2)	
Measurement Range	±1,000 g pk	
	±9,800 m/s2 pk	
Frequency Range (±10%)	Up to 10 kHz	
Resonant Frequency	45 kHz	
Transverse Sensitivity	≤ 1 %	
Non-Linearity	≤ 5 %	
Environmental		
Overload Limit (Shock)	±2,000 g pk	
	±19,600 m/s^2 pk	
Operating Temperature Range	-65 to +1200 °F	
	-54 to +649 °C	
Operating Temperature Range (Terminating Connector)	-65 to +900 °F	
	-54 to +482 °C	
Base Strain Sensitivity	N/A	
	N/A	
Radiation Exposure Limit (Integrated Neutron Flux)	1 E10 N/cm2	
Radiation Exposure Limit (Integrated Gamma Flux)	1 E8 rad	
Electrical		
Capacitance (Pole-to-Pole)	1,000 pF	
Insulation Resistance (Room Temp)	>50 kOhm	>30 kOhm
Insulation Resistance (1000 °F / 538 °C)	>100 MOhm	>1 GOhm
Output Polarity	Positive	
Electrical Isolation	Case Isolated	
Physical		
Sensing Geometry	Shear	
Sensing Element	UHT-12™	
Housing Material	Nickel 600	
Sealing	Hermetic Welded	
Mounting Thread	Two 6-32 Thru-hole screws	Weld tabs
Cable Length	10.0 ft	
	3.0 m	
Cable Type	Hardline	
Electrical Connector	10-32 Coaxial Jack	
Weight	0.35 oz	0.35 oz
	10.0 g	10.0 gm



Model 357A64 (Sensor)



Model 357M168 (Sensor)



Models 357A64 & 357M168 (Connector)

nbn Austria GmbH
Riesstraße 146, 8010 Graz
Tel. +43 316 40 28 05 | Fax +43 316 40 25 06
nbn@nbn.at | www.nbn.at

PCB PIEZOTRONICS INC.
MTS SYSTEMS CORPORATION

3425 Walden Avenue, Depew, NY 14043-2495 USA

| VISIT US AT WWW.PCB.COM |

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nbn Austria GmbH
Riesstraße 146, 8010 Graz
Tel. +43 316 40 28 05 | Fax +43 316 40 25 06
nbn@nbn.at | www.nbn.at