



### Model 357B61

**Product Type:** Accelerometer, Vibration Sensor

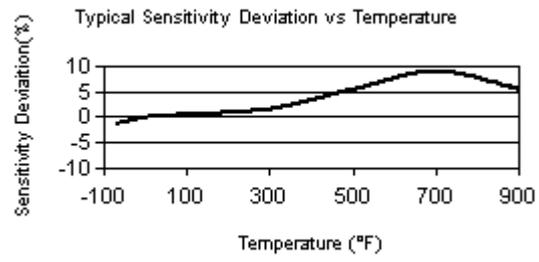
High temp., ceramic compression, charge output accel., 10 pC/g, 5kHz, 10-32 side conn. (-65°F to +900°F), supplied with 10-ft hardline cable

PERFORMANCE	ENGLISH	SI
Sensitivity(± 10 %)	10 pC/g	1.02 pC/(m/s <sup>2</sup> )
Measurement Range	± 1000 g pk	± 9810 m/s <sup>2</sup> pk
Frequency Range(+5 %)	5 kHz	5 kHz [2]
Resonant Frequency	≥ 24 kHz	≥ 24 kHz
Non-Linearity	≤ 1 %	≤ 1 % [3]
Transverse Sensitivity	≤ 3 %	≤ 3 %
<b>ENVIRONMENTAL</b>		
Overload Limit(Shock)	± 5000 g pk	± 49,050 m/s <sup>2</sup> pk
Temperature Response	See Graph	See Graph
Temperature Response	See Graph	See Graph [1]
Temperature Response	See Graph	See Graph
Base Strain Sensitivity	0.001 g/με	0.01 (m/s <sup>2</sup> )/με [1]
Radiation Exposure Limit(Integrated Neutron Flux)	1 E10 N/cm <sup>2</sup>	1 E10 N/cm <sup>2</sup>
Radiation Exposure Limit(Integrated Gamma Flux)	1 E8 rad	1 E8 rad
<b>ELECTRICAL</b>		
Capacitance	630 pF	630 pF [1]
Insulation Resistance(at 70° F [21° C])	>10 <sup>8</sup> ohm	>10 <sup>8</sup> ohm
Insulation Resistance(900° F [482° C])	>100 kohm	>100 kohm
Output Polarity	Negative	Negative
<b>PHYSICAL</b>		
Sensing Element	Ceramic	Ceramic
Sensing Geometry	Compression	Compression
Housing Material	Inconel	Inconel
Sealing	Hermetic	Hermetic
Size (Hex x Height)	5/8 in x 1.0 in	5/8 in x 25.4 mm
Weight	1.1 oz	30 gm [1]
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack
Electrical Connection Position	Side	Side
Mounting Thread	10-32 Female	10-32 Female
<b>SUPPLIED ACCESSORIES:</b>		
Model 023A10 Hardline cable, 10-ft, 10-32 plug to 10-32 jack (1)		
Model 081A107 Mounting stud (10-32 to 10-32) (1)		
Model ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)		
Model M081A107 Metric mounting stud (10-32 to M6 x 0.75) (1)		
<b>OPTIONAL VERSIONS</b>		
<b>P- Positive Output Polarity</b>		
Output Polarity	Positive	

*All specifications are at room temperature unless otherwise specified.*

**NOTES:**

- [1] Typical.
- [2] Low frequency response is determined by external signal conditioning electronics.
- [3] Zero-based, least-squares, straight line method.







**Model 357A09**

**Product Type:** Accelerometer, Vibration Sensor

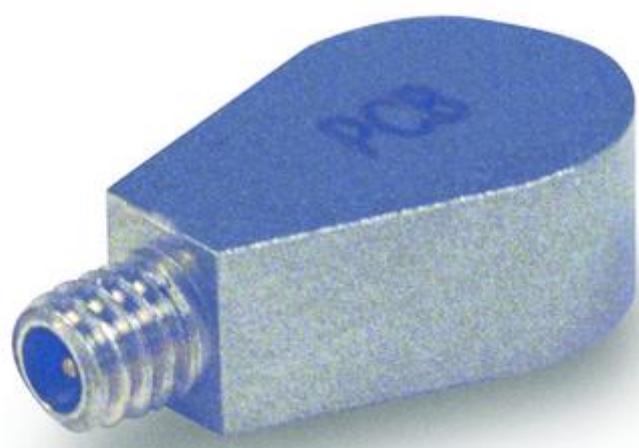
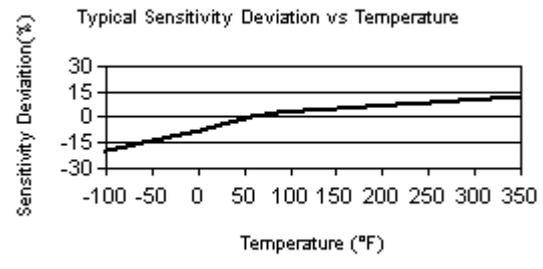
Miniature (0.6 gm) charge output accel., 1.7 pC/g, 10k Hz, titanium housing, 10-ft detachable cable

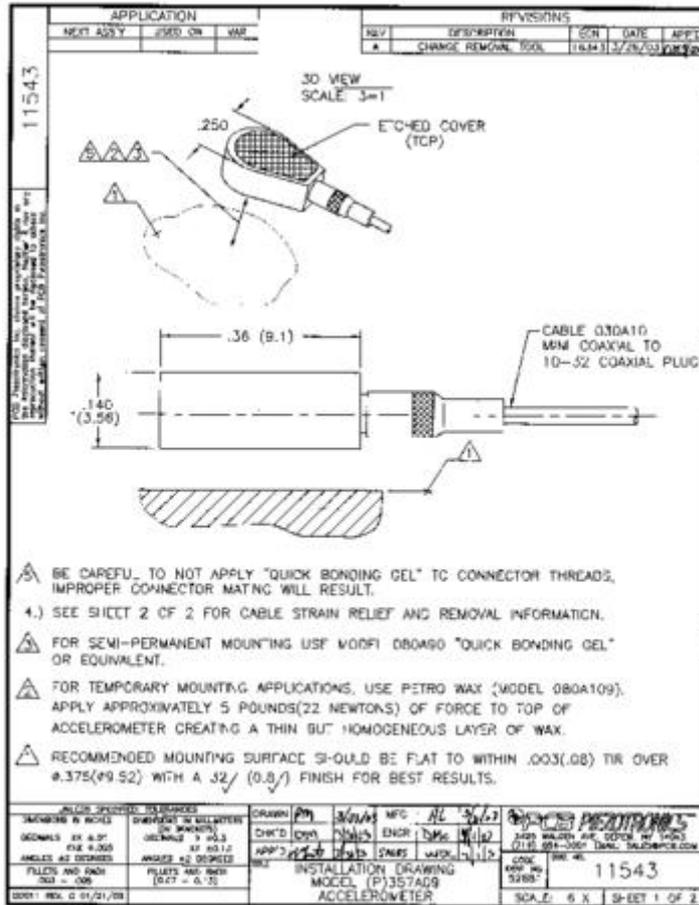
PERFORMANCE	ENGLISH	SI
Sensitivity(± 20 %)	1.7 pC/g	0.17 pC/(m/s <sup>2</sup> )
Measurement Range	± 2000 g pk	± 19,620 m/s <sup>2</sup> pk
Frequency Range(+5 %)	10 kHz	10 kHz [2]
Frequency Range(+10 %)	13 kHz	13 kHz [2]
Resonant Frequency	≥ 50 kHz	≥ 50 kHz
Non-Linearity	≤ 1 %	≤ 1 % [3]
Transverse Sensitivity	≤ 5 %	≤ 5 % [4]
<b>ENVIRONMENTAL</b>		
Overload Limit(Shock)	± 10,000 g pk	± 98,100 m/s <sup>2</sup> pk
Temperature Response	See Graph	See Graph
Temperature Response	See Graph	See Graph [1]
Temperature Response	See Graph	See Graph
Base Strain Sensitivity	≤ 0.10 g/με	≤ 1.0 (m/s <sup>2</sup> )/με [1]
<b>ELECTRICAL</b>		
Capacitance	310 pF	310 pF [1]
Insulation Resistance(at 70° F [21°C])	>10 <sup>10</sup> ohm	>10 <sup>10</sup> ohm
Output Polarity	Negative	Negative
<b>PHYSICAL</b>		
Sensing Element	Ceramic	Ceramic
Sensing Geometry	Shear	Shear
Housing Material	Titanium	Titanium
Sealing	Epoxy	Epoxy
Size (Height x Length x Width)	0.14 in x 0.45 in x 0.25 in	3.6 mm x 11.4 mm x 6.4 mm
Weight	0.02 oz	0.6 gm [1]
Electrical Connector	3-56 Coaxial Jack	3-56 Coaxial Jack
Electrical Connection Position	Side	Side
Mounting	Adhesive	Adhesive
<b>SUPPLIED ACCESSORIES:</b>		
Model 030A10 Coax Cable, 10 ft (3 m), 3-56 plug to 10-32 plug. (1)		
Model 039A27 One-piece removal tool for Models 352C22, 357C10, 352A21, & 357A09 (1)		
Model 080A109 Petro Wax (1)		
Model ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)		
<b>OPTIONAL VERSIONS</b>		
<b>P- Positive Output Polarity</b>		
Output Polarity	Positive	

*All specifications are at room temperature unless otherwise specified.*

**NOTES:**

- [1] Typical.
- [2] Low frequency response is determined by external signal conditioning electronics.
- [3] Zero-based, least-squares, straight line method.
- [4] Transverse sensitivity is typically ≤ 3%.





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### Model 357B03

**Product Type:** Accelerometer, Vibration Sensor

High temp., ceramic shear, charge output accel., 10 pC/g, 9k Hz, 10-32 side conn. (-95°F to +500°F)

PERFORMANCE	ENGLISH	SI
Sensitivity(± 15 %)	10 pC/g	1.02 pC/(m/s <sup>2</sup> )
Measurement Range	± 2000 g pk	± 19,600 m/s <sup>2</sup> pk
Frequency Range(+5 %)	9 kHz	9 kHz [2]
Frequency Range(+10 %)	12 kHz	12 kHz [2]
Frequency Range(+3 dB)	18 kHz	18 kHz [2]
Resonant Frequency	≥ 38 kHz	≥ 38 kHz
Non-Linearity	≤ 1 %	≤ 1 % [3]
Transverse Sensitivity	≤ 5 %	≤ 5 %
<b>ENVIRONMENTAL</b>		
Overload Limit(Shock)	± 21,000 g pk	± 206,010 m/s <sup>2</sup> pk
Temperature Response	See Graph	See Graph
Temperature Response	See Graph	See Graph [1]
Temperature Response	See Graph	See Graph
Base Strain Sensitivity	0.0002 g/με	0.002 (m/s <sup>2</sup> )/με [1]
<b>ELECTRICAL</b>		
Capacitance	930 pF	930 pF [1]
Insulation Resistance(at 70° F [21°C])	≥ 10 <sup>12</sup> ohm	≥ 10 <sup>12</sup> ohm
Insulation Resistance(at 500°F)	≥ 10 <sup>9</sup> ohm	≥ 10 <sup>9</sup> ohm [1]
Output Polarity	Negative	Negative
<b>PHYSICAL</b>		
Sensing Element	Ceramic	Ceramic
Sensing Geometry	Shear	Shear
Housing Material	Titanium	Titanium
Sealing	Hermetic	Hermetic
Size (Hex x Height)	1/2 in x 0.81 in	1/2 in x 20.6 mm
Weight	0.39 oz	11 gm [1]
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack
Electrical Connection Position	Side	Side
Mounting Thread	10-32 Female	10-32 Female
<b>SUPPLIED ACCESSORIES:</b>		
Model 080A109 Petro Wax (1)		
Model 081B05 Mounting Stud (10-32 to 10-32) (1)		
Model ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)		
Model M081B05 Mounting Stud 10-32 to M6 X 0.75 (1)		
<b>OPTIONAL VERSIONS</b>		
<b>J- Ground Isolated</b>		
Frequency Range(+5 %)	7 kHz	7 kHz
Frequency Range(+10 %)	8 kHz	8 kHz
Resonant Frequency	≥ 30 kHz	≥ 30 kHz
Electrical Isolation(Base)	>10 <sup>9</sup> ohm	
Size - Hex x Height	0.5 in x 0.86 in	12.7 mm x 21.8 mm
<b>P- Positive Output Polarity</b>		
Output Polarity	Positive	
<b>W- Water Resistant Cable</b>		
Electrical Connector	Sealed Integral Cable	
Electrical Connection Position	Side	

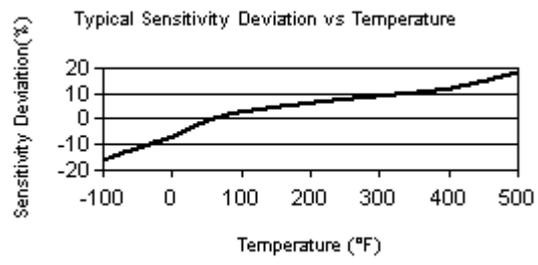
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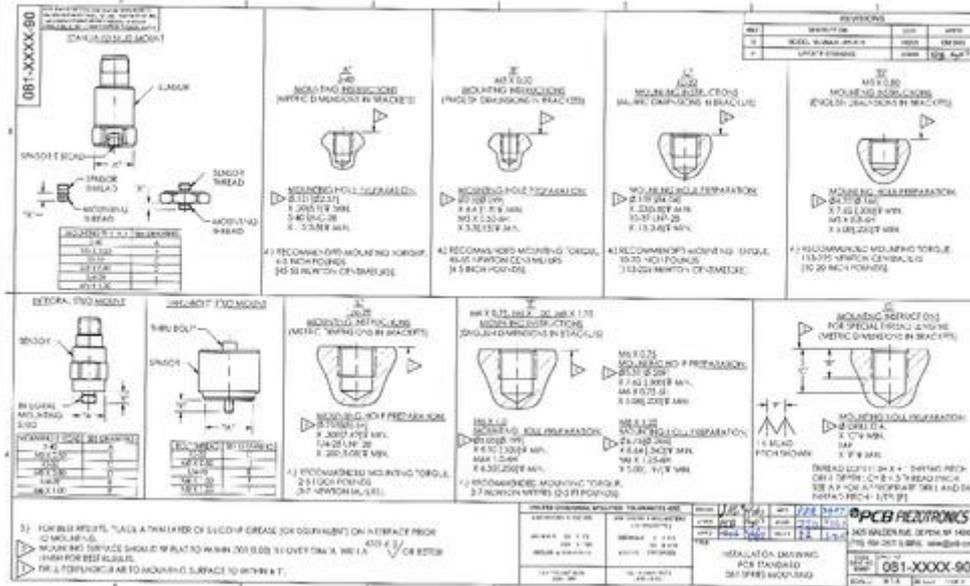
**NOTES:**

[1] Typical.

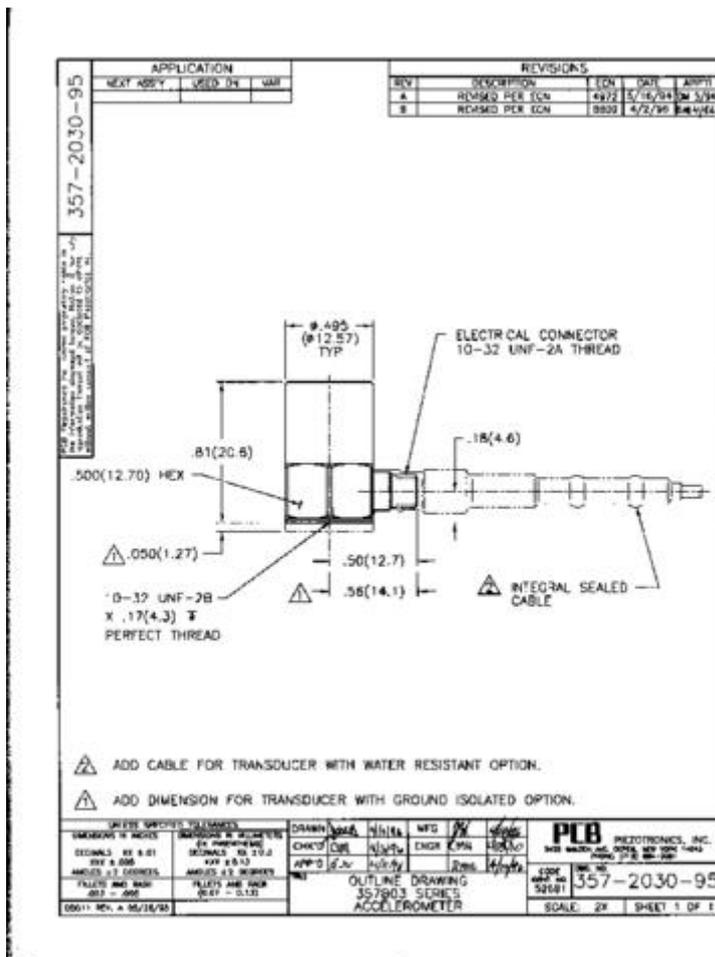
[2] Low frequency response is determined by external signal conditioning electronics.

[3] Zero-based, least-squares, straight line method.





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