

Model Number  
**357B53**

# CHARGE OUTPUT ACCELEROMETER

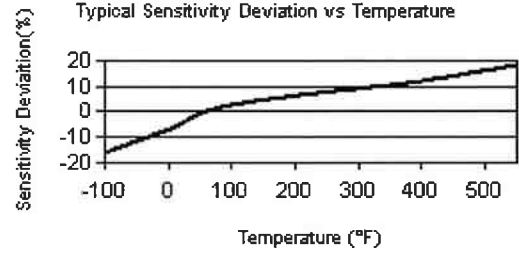
Revision: D  
ECN #: 29612

	ENGLISH	SI	
<b>Performance</b>			
Sensitivity(± 15 %)	100 pC/g	10.2 pC/(m/s <sup>2</sup> )	
Measurement Range	± 150 g pk	± 1470 m/s <sup>2</sup> pk	
Frequency Range(+5 %)	3 kHz	3 kHz	[2]
Frequency Range(+10 %)	3.5 kHz	3.5 kHz	[2]
Frequency Range(+3 dB)	5.5 kHz	5.5 kHz	[2]
Resonant Frequency	≥ 12 kHz	≥ 12 kHz	
Non-Linearity	≤ 1 %	≤ 1 %	[3]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
<b>Environmental</b>			
Overload Limit(Shock)	± 2000 g pk	± 19,600 m/s <sup>2</sup> pk	
Temperature Range	-95 to +550 °F	-71 to +288 °C	
Temperature Response	See Graph	See Graph	[1]
Base Strain Sensitivity	0.0002 g/με	0.002 (m/s <sup>2</sup> )/με	[1]
Radiation Exposure Limit(Integrated Gamma Flux)	≤ 10 <sup>8</sup> rad	≤ 10 <sup>8</sup> rad	
Radiation Exposure Limit(Integrated Neutron Flux)	≤ 10 <sup>10</sup> N/cm <sup>2</sup>	≤ 10 <sup>10</sup> N/cm <sup>2</sup>	
<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 550°F)	≥ 10 <sup>8</sup> ohm	≥ 10 <sup>8</sup> ohm	[1]
Output Polarity	Negative	Negative	
Electrical Isolation(Base)	≥ 10 <sup>8</sup> ohm	≥ 10 <sup>8</sup> ohm	
<b>Physical</b>			
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Hex x Height)	3/4 in x 1.13 in	3/4 in x 28.7 mm	
Weight	1.80 oz	51 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	

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

**SUPPLIED ACCESSORIES:**  
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)



Entered: <i>JH</i>	Engineer: <i>JH</i>	Sales: <i>WDC</i>	Approved: <i>EB</i>	Spec Number:
Date: <i>11-4-08</i>	Date: <i>9-26-08</i>	Date: <i>10-10-08</i>	Date: <i>10-29-08</i>	<b>30530</b>

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.  
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