

Model 3713B122G

Product Type: Accelerometer, Vibration Sensor

Triaxial MEMS DC accelerometer, 1000 mV/g, +/- 2g, +6 to 30 VDC excitation, integral cable

View [photo](#) and [drawing](#) .

PERFORMANCE	ENGLISH	SI
Sensitivity(± 5 %)	1000 mV/g	101.9 mV/(m/s ²) [5]
Measurement Range	± 2 g pk	± 19.6 m/s ² pk
Frequency Range(± 5 %)	0 to 250 Hz	0 to 250 Hz
Frequency Range(± 10 %)	0 to 350 Hz	0 to 350 Hz
Resonant Frequency	≥ 1.3 kHz	≥ 1.3 kHz
Phase Response(10 Hz)	<2.5 °	<2.5 °
Broadband Resolution(0.5 to 100 Hz)	.25 mg rms	.0025 m/s ² rms [2]
Non-Linearity	≤ 1 %	≤ 1 % [6]
Transverse Sensitivity	≤ 3 %	≤ 3 %
ENVIRONMENTAL		
Overload Limit(Shock)	± 3000 g pk	± 29,420 m/s ² pk
Temperature Range(Operating)	-65 to +250 °F	-54.0 to +121 °C
Temperature Range(Storage)	-65 to +250 °F	-54.0 to +121 °C
Temperature Coefficient of Sensitivity	± 3 %	± 3 % [3]
Zero g Offset Temperature Coefficient	± 2 %FSO	± 2 %FSO [3][4]
Base Strain Sensitivity	.0001 g/με	.001 (m/s ²)/με [2]
Magnetic Sensitivity	43.7 μg/gauss	4.29 (m/s ²)/Tesla [2]
ELECTRICAL		
Excitation Voltage	6 to 30 VDC	6 to 30 VDC
Current Consumption	≤ 5 mA	≤ 5 mA
Output Impedance	≤ 100 ohm	≤ 100 ohm
Offset Voltage(0 g)	± 40 mVDC	± 40 mVDC [1]
Spectral Noise(1 to 100 Hz)	22.9 μg/√Hz	225 (μm/sec ²)/√Hz [2]
Electrical Isolation(Case)	>10 ⁸ ohm	>10 ⁸ ohm
PHYSICAL		
Housing Material	Titanium	Titanium
Sealing	Hermetic	Hermetic
Size (Length x Width x Height)	0.8 in x 0.8 in x 0.8 in	20.3 mm x 20.3 mm x 20.3 mm
Weight(with cable)	4.2 oz	119 gm
Electrical Connector	Integral Cable	Integral Cable
Electrical Connection Position	Side	Side
Cable Type	037 10-cond Shielded	037 10-cond Shielded
Cable Length	10 ft	3.05 m
Mounting Thread	10-32 Female	10-32 Female
SUPPLIED ACCESSORIES:		
Model 080A12 Adhesive Mounting Base (1)		
Model 081B05 Mounting Stud (10-32 to 10-32) (1)		
Model ACS-85T Triaxial Phase and Magnitude Calibration form 0.5 Hz to 5% pt on linear scale (1)		
Model M081B05 Mounting Stud 10-32 to M6 X0.75 (1)		

All specifications are at room temperature unless otherwise specified.

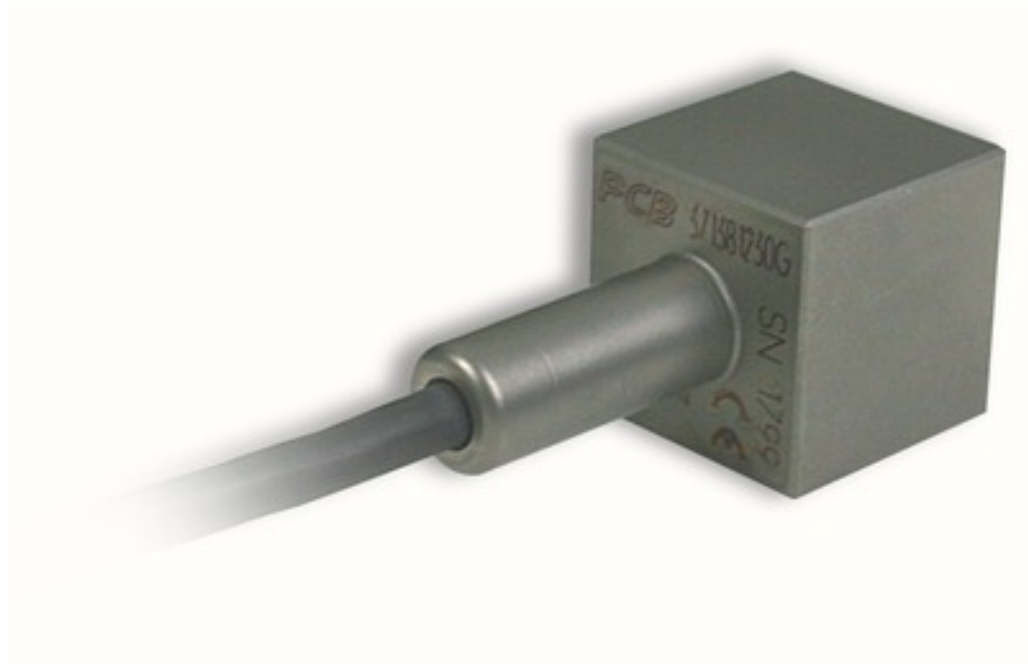
NOTES:

[1] Offset tolerance is based on 10 ft of 037 test cable.

[2] Typical.

[3] -65 to +250 °F, ref. 75 °F (-54 to +121 °C, ref. 24 °C)

- [4] FSO = Full Scale Output over the Measurement Range (4VDC).
- [5] Measured at 5 Hz, 0.5 grms.
- [6] Zero-based, least-squares, straight line method.
- [7] See PCB Declaration of Conformance PS027 for details.



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