Model	Number
357	Δ 67

# TRIAXIAL CHARGE OUTPUT ACCELEROMETER

Revision: NR ECN #: 54747

331A01			
Performance	ENGLISH	SI	
Sensitivity(± 15 %)	3.0 pC/g	$0.306  pC/(m/s^2)$	
Measurement Range	± 1,000 g pk	± 9,800 m/s² pk	
Frequency Range(± 10 %)(x or y axis)	1 to 10,000 Hz	1 to 10,000 Hz	[1][2]
Frequency Range(± 10 %)(z axis)	1 to 12,800 Hz	1 to 12,800 Hz	[1][2]
Frequency Range(± 10 %)(x or y axis)	1 to 5,500 Hz	1 to 5,500 Hz	[3][2]
Resonant Frequency	≥ 45 kHz	≥ 45 kHz	
Non-Linearity	≤ 2 %	≤ 2 %	[4]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
Environmental			
Overload Limit(Shock)	± 5,000 g pk	± 49,000 m/s² pk	
Temperature Range	-76 to +392 °F	-60 to +200 ℃	
Temperature Range(Survivable Limit)	-76 to +500 °F	-60 to +260 ℃	
Temperature Response	See Graph	See Graph	[5]
Base Strain Sensitivity	0.05 g/με	0.5 (m/s²)/με	[5]
Electrical			
Capacitance	650 pF	650 pF	[5]
Insulation Resistance(at 70° F [21° C])	> 10 <sup>11</sup> Ohm	> 10 <sup>11</sup> Ohm	
Insulation Resistance(at 500°F [260°C])	> 10 <sup>8</sup> Ohm	> 10 <sup>8</sup> Ohm	[5]
Electrical Isolation(Case)	≥ 10 <sup>8</sup> Ohm	≥ 10 <sup>8</sup> Ohm	
Output Polarity	Negative	Negative	[6]
Physical	_	_	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Length x Height x Width)	0.78 in x 0.40 in x 0.45 in	19.8 mm x 10.2 mm x 11.4	
		mm	
Weight	0.17 oz	4.9 gm	[5]
Electrical Connector	1/4-28 4-Pin	1/4-28 4-Pin	
Mounting Thread	M3 x 0.50 Female	M3 x 0.50 Female	
Mounting Torque	4.0 to 5.0 in-lb	45 to 55 N-cm	

# **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] Mounted on base.
- [2]Low frequency response is determined by external signal conditioning electronics.
- [3] Verified amplitude response during calibration with reduced useful frequency response on the x and y axes due to mounting on a surface other than the base.
- [4]Zero-based, least-squares, straight line method.
- [5]Typical.
- [6] Accel from structure into sensor base.
- [7] See PCB Declaration of Conformance PS158 for details.

# **SUPPLIED ACCESSORIES:**

Model 081A134 Mounting Stud, M3 to 10-32 X 0.24 long (1)

Model ACS-1T NIST traceable triaxial amplitude response, 10 Hz to upper 5% frequency. (1) Model ACS-44T Triaxial extended amplitude response, upper 5% point to 10% point (requires ACS-1T or equivalent). (1)

Model M081A134 Mounting Stud, M3 to M3 X 0.19 long (1)

# **OPTIONAL ACCESSORIES:**

Model 523R10 Triple coax low noise cable, 10 ft, 4-pin plug to (3) 10-32 plugs

Entered: ND	Engineer: MJN	Sales: KK	Approved: NJF	Spec Number:
Date: 04/17/2024	Date: 04/17/2024	Date: 04/17/2024	Date: 04/17/2024	69462



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Sensitivity Deviaition(%) 20 10 0--10 -20 -100 100 200 300 400 500 Temperature (°F)

Typical Sensitivity Deviation vs Temperature

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.