| Model Number |
|--------------|
| 3711E1110G   |

## DC RESPONSE ACCELEROMETER

Revision: B ECN #: 46334

| *****                                       |                             |                                |        |
|---|-----------------------------|--------------------------------|--------|
| Performance                                 | ENGLISH                     | <u>SI</u>                      |        |
| Sensitivity(± 5 %)                          | 200 mV/g                    | 20.4 mV/(m/s²)                 |        |
| Measurement Range                           | ± 10 g                      | ± 98.1 m/s² pk                 |        |
| Frequency Range(± 3 dB)                     | 0 to 1000 Hz                | 0 to 1000 Hz                   | [2]    |
| Frequency Range(± 3 dB)                     | 0 to 500 Hz                 | 0 to 500 Hz                    | [5]    |
| Phase Response(100 Hz)                      | <15 °                       | <15 °                          |        |
| Broadband Resolution(0.5 to 100 Hz)         | .2 mg rms                   | .002 m/s <sup>2</sup> rms      | [2]    |
| Non-Linearity                               | ≤ 1 %                       | ≤ 1 %                          | [6]    |
| Transverse Sensitivity                      | ≤ 5 %                       | ≤ 5 %                          |        |
| Environmental                               |                             |                                |        |
| Overload Limit(Shock)                       | ± 5000 g pk                 | ± 49,050 m/s² 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(Measured at 250 με) | .0004 g/με                  | .004 (m/s²)/με                 | [2]    |
| Magnetic Sensitivity                        | 100 μg/gauss                | 9.8 (m/s²)/Tesla               | [2]    |
| Electrical                                  |                             |                                |        |
| Excitation Voltage                          | 6 to 30 VDC                 | 6 to 30 VDC                    |        |
| Current Consumption                         | ≤ 10 mA                     | ≤ 10 mA                        |        |
| Output Impedance                            | ≤ 120 Ohm                   | ≤ 120 Ohm                      |        |
| Offset Voltage(0 g)                         | ± 80 mVDC                   | ± 80 mVDC                      | [1]    |
| Spectral Noise(1 to 100 Hz)                 | 45 μg/√Hz                   | 441 (µm/sec <sup>2</sup> )/√Hz | [2]    |
| Electrical Isolation(Case)                  | >10 <sup>8</sup> Ohm        | >10 <sup>8</sup> Ohm           |        |
| Physical                                    |                             |                                |        |
| Housing Material                            | Titanium                    | Titanium                       |        |
| Sealing                                     | Hermetic                    | Hermetic                       |        |
| Size (Height x Length x Width)              | 0.45 in x 0.85 in x 0.85 in | 11.4 mm x 21.6 mm x 21.6 mm    |        |
| Weight                                      | 0.58 oz                     | 16.3 gm                        |        |
| Electrical Connector                        | 4-Pin                       | 4-Pin                          |        |
| Electrical Connection Position              | Side                        | Side                           |        |
| Mounting                                    | Through Holes (2)           | Through Holes (2)              |        |
|   |                             |                                |        |



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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## **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] Offset tolerance is based on 10 ft of 010 test cable.

- [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] Minimum, verified with Calibration data.
- [6] Least-squares, straight line method, % FSO.
- [7] See PCB Declaration of Conformance PS027 for details.

## **SUPPLIED ACCESSORIES:**

Model 080A152 Easy Mount Clip (1)

Model 081A113 Mounting screw assembly (2)

Model ACS-145 Phase and Amplitude Calibration from 2 Hz to ±3 dB of frequency range (1) Model M081A113 Mounting screw assembly (2)

| Entered: LK      | Engineer: JJD    | Sales: WDC       | Approved: NJF    | Spec Number: |
|------------------|------------------|------------------|------------------|--------------|
| Date: 12/29/2016 | Date: 12/29/2016 | Date: 12/29/2016 | Date: 12/29/2016 | 60025        |



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