



| Model Number<br><b>3741E12200G</b>                                                                                                                                                                                                                                                   |                            | <b>DC RESPONSE ACCELEROMETER</b> |        | Revision: B<br>ECN #: 44052                                                                                                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Performance</b>                                                                                                                                                                                                                                                                   | <b>ENGLISH</b>             | <b>SI</b>                        |        | <b>OPTIONAL VERSIONS</b>                                                                                                                                                                                                        |
| Sensitivity(± 3 %)                                                                                                                                                                                                                                                                   | 20 mV/g                    | 2.04 mV/(m/s <sup>2</sup> )      | [6]    | Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.                                                                    |
| Measurement Range                                                                                                                                                                                                                                                                    | ± 200 g pk                 | ± 1962 m/s <sup>2</sup> pk       |        |                                                                                                                                                                                                                                 |
| Frequency Range(± 3 dB)                                                                                                                                                                                                                                                              | 0 to 1500 Hz               | 0 to 1500 Hz                     | [7]    |                                                                                                                                                                                                                                 |
| Frequency Range(± 3 dB)                                                                                                                                                                                                                                                              | 0 to 3000 Hz               | 0 to 3000 Hz                     | [2]    |                                                                                                                                                                                                                                 |
| Phase Response(100 Hz)                                                                                                                                                                                                                                                               | <10 °                      | <10 °                            |        |                                                                                                                                                                                                                                 |
| Broadband Resolution(0.5 to 100 Hz)                                                                                                                                                                                                                                                  | 5.6 mg rms                 | .055 m/s <sup>2</sup> rms        | [2]    |                                                                                                                                                                                                                                 |
| Non-Linearity                                                                                                                                                                                                                                                                        | ≤ 1 %                      | ≤ 1 %                            | [8]    |                                                                                                                                                                                                                                 |
| Transverse Sensitivity                                                                                                                                                                                                                                                               | ≤ 5 %                      | ≤ 5 %                            |        |                                                                                                                                                                                                                                 |
| <b>Environmental</b>                                                                                                                                                                                                                                                                 |                            |                                  |        |                                                                                                                                                                                                                                 |
| Overload Limit(Shock)                                                                                                                                                                                                                                                                | ± 5000 g pk                | ± 49,050 m/s <sup>2</sup> 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                                                                                                                                                                                                                                               | ± 3.0 %                    | ± 3.0 %                          | [4]    |                                                                                                                                                                                                                                 |
| Zero g Offset Temperature Coefficient                                                                                                                                                                                                                                                | ± 2.0 % FSO                | ± 2.0 % FSO                      | [5][4] |                                                                                                                                                                                                                                 |
| Base Strain Sensitivity(Measured at 250 µε)                                                                                                                                                                                                                                          | .0035 g/µε                 | .035 (m/s <sup>2</sup> )/µε      | [2]    |                                                                                                                                                                                                                                 |
| <b>Electrical</b>                                                                                                                                                                                                                                                                    |                            |                                  |        | <b>NOTES:</b>                                                                                                                                                                                                                   |
| Excitation Voltage                                                                                                                                                                                                                                                                   | 6 to 30 VDC                | 6 to 30 VDC                      |        | [1]Offset tolerance is based on manufacturers supplied cable length.                                                                                                                                                            |
| Current Consumption                                                                                                                                                                                                                                                                  | ≤ 10 mA                    | ≤ 10 mA                          |        | [2]Typical.                                                                                                                                                                                                                     |
| Output Impedance                                                                                                                                                                                                                                                                     | ≤ 120 Ohm                  | ≤ 120 Ohm                        |        | [3]Case and shield to mounting surface or cable leads.                                                                                                                                                                          |
| Offset Voltage(0 g)                                                                                                                                                                                                                                                                  | ± 160 mVDC                 | ± 160 mVDC                       | [1]    | [4]-65 to +250 °F, ref. 75 °F (-54 to +121 °C, ref. 24 °C)                                                                                                                                                                      |
| Common Mode Voltage(± 0.1 VDC)                                                                                                                                                                                                                                                       | +2.5 VDC                   | +2.5 VDC                         |        | [5]FSO = Full Scale Output over the Measurement Range (8VDC).                                                                                                                                                                   |
| Spectral Noise(1 to 100 Hz)                                                                                                                                                                                                                                                          | 800 µg/√Hz                 | 7848 (µm/sec <sup>2</sup> )/√Hz  | [2]    | [6]Measured at 100 Hz, 1 grms.                                                                                                                                                                                                  |
| Electrical Isolation(Case)                                                                                                                                                                                                                                                           | >10 <sup>8</sup> Ohm       | >10 <sup>8</sup> Ohm             | [3]    | [7]Minimum, verified with Calibration data.                                                                                                                                                                                     |
| <b>Physical</b>                                                                                                                                                                                                                                                                      |                            |                                  |        | [8]Least-squares, straight line method, % FSO.                                                                                                                                                                                  |
| Housing Material                                                                                                                                                                                                                                                                     | Anodized Aluminum          | Anodized Aluminum                |        | [9]See PCB Declaration of Conformance PS027 for details.                                                                                                                                                                        |
| Sealing                                                                                                                                                                                                                                                                              | Epoxy                      | Epoxy                            |        | <b>SUPPLIED ACCESSORIES:</b>                                                                                                                                                                                                    |
| Size (Height x Length x Width)                                                                                                                                                                                                                                                       | 0.30 in x 1.00 in x .85 in | 7.5 mm x 25.4 mm x 21.6 mm       |        | Model 081A103 Mounting screw (2)                                                                                                                                                                                                |
| Weight(without cable)                                                                                                                                                                                                                                                                | 0.35 oz                    | 9.92 gm                          | [2]    | Model ACS-145 Phase and Amplitude Calibration from 2 Hz to ±3 dB of frequency range (1)                                                                                                                                         |
| Electrical Connector                                                                                                                                                                                                                                                                 | Integral Cable             | Integral Cable                   |        | Model M081A103 Mounting screw and washer, M3 x 0.5 thread (2)                                                                                                                                                                   |
| Electrical Connection Position                                                                                                                                                                                                                                                       | Side                       | Side                             |        | <b>OPTIONAL ACCESSORIES:</b>                                                                                                                                                                                                    |
| Cable Termination                                                                                                                                                                                                                                                                    | Pigtail Ends               | Pigtail Ends                     |        | Model 080A208 Triaxial mounting block                                                                                                                                                                                           |
| Cable Type                                                                                                                                                                                                                                                                           | 010 4-cond Shielded        | 010 4-cond Shielded              |        |                                                                                                                                                                                                                                 |
| Cable Length                                                                                                                                                                                                                                                                         | 10 ft                      | 10 ft                            |        |                                                                                                                                                                                                                                 |
| Mounting                                                                                                                                                                                                                                                                             | Through Holes (2)          | Through Holes (2)                |        |                                                                                                                                                                                                                                 |
|                                                                                                                                                                                                                                                                                      |                            |                                  |        | Entered: AP    Engineer: JJD    Sales: RM    Approved: NJF    Spec Number:                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                      |                            |                                  |        | Date: 4/9/2015    Date: 4/9/2015    Date: 4/9/2015    Date: 4/9/2015 <b>60431</b>                                                                                                                                               |
|  <p>All specifications are at room temperature unless otherwise specified.<br/>In the interest of constant product improvement, we reserve the right to change specifications without notice.</p> |                            |                                  |        |  <p><b>Phone: 716-684-0001</b><br/><b>Fax: 716-684-0987</b><br/><b>E-Mail: info@pcb.com</b></p> <p>3425 Walden Avenue, Depew, NY 14043</p> |



Represented in India by  
**Structural Solutions Pvt Ltd. | Phone: 040 2322 2380 | Email: sales@stsols.com**  
 #4th Floor, Sudheer Tapani Towers, Himayath Nagar, Hyderabad - 500 029