| Model Number  |   |                                    |       |  |  |                     | Rev                      | rision: G         |  |
|---|---|------------------------------------|-------|--|--|---------------------|--------------------------|-------------------|--|
| 354C10  | TRIAXIAL ICP® ACCELEROMETER                                   |                                    |       |  |  | ECI                 | N #: 42197               |                   |  |
| Performance   | ENGLISH   | SI                                 |       | 1  | 0  | PTIONAL VERS        |                          |                   |  |
| Sensitivity(± 15 %)   | 10 mV/g   | 1.02 mV/(m/s²)                     |       | Optional version                         |  |                     | essories as listed for t | he standard mod   |  |
| Measurement Range   | ± 500 g pk  | ± 4905 m/s <sup>2</sup> pk         |       |  |  |                     | one option may be us     |                   |  |
| Frequency Range(± 5)  | 2 to 8000 Hz  | 2 to 8000 Hz                       |       |  |  |                     |                          |                   |  |
| Resonant Frequency  | ≥ 40 kHz  | ≥ 40 kHz                           |       | HT - High tempe                          | erature, extends nor   | rmal operation temp | peratures                |                   |  |
| Broadband Resolution(1 to 10,000 Hz)  | 0.003 g rms   | 0.03 m/s <sup>2</sup> rms          | [1]   | Temperature Ra                           |  | ······              |                          | 54 to 163 °C      |  |
| Non-Linearity   | ≤ 1 %   | ≤1 %                               | [3]   | remperature rta                          | ngo(oporating)   |                     | 00100201                 |                   |  |
| Transverse Sensitivity  | ≤ 5 %   | ≤ 5 %                              | r - 1 | M - Metric Moun                          | t  |                     |                          |                   |  |
| Environmental   | _ 0 /0  | 20,0                               |       |  |  | 22 Allen wrench for | use with M3 thread (     | 1) replaces Mode  |  |
| Overload Limit(Shock)   | ± 10,000 g pk   | ± 98,100 m/s <sup>2</sup> pk       |       | 039A21                                   | ,  |                     |                          | ,                 |  |
| Temperature Range   | -65 to +250 °F  | -54 to +121 °C                     | [2]   |  |  |                     | rew, M3x0.5 thd x 1/2    | 2" long (for Mode |  |
| Temperature Response  | See Graph   | See Graph                          |       | M354C10) (1) re                          | places Model 081B  | 93                  |                          |                   |  |
| Electrical  |   |                                    |       |  |  |                     |                          |                   |  |
| Excitation Voltage  | 18 to 30 VDC  | 18 to 30 VDC                       |       |  |  |                     |                          |                   |  |
| Constant Current Excitation   | 2 to 20 mA  | 2 to 20 mA                         |       |  |  |                     |                          |                   |  |
| Output Impedance  | ≤ 200 Ohm   | ≤ 200 Ohm                          |       |  |  |                     |                          |                   |  |
| Output Bias Voltage   | 7 to 12 VDC   | 7 to 12 VDC                        |       |  |  |                     |                          |                   |  |
| Discharge Time Constant   | 0.3 to 1.0 sec  | 0.3 to 1.0 sec                     |       |  |  |                     |                          |                   |  |
| Settling Time(within 10% of bias)   | <3 sec  | <3 sec                             |       |  |  |                     |                          |                   |  |
| Spectral Noise(1 Hz)  | 1000 µg/√Hz   | 9810 (µm/sec <sup>2</sup> )/√Hz    | [1]   |  |  |                     |                          |                   |  |
| Spectral Noise(10 Hz)   | 300 µg/√Hz  | 2943 (µm/sec <sup>2</sup> )/√Hz    | [1]   | NOTES:                                   |  |                     |                          |                   |  |
| Spectral Noise(100 Hz)  | 80 µg/√Hz   | 785 (µm/sec <sup>2</sup> )/√Hz     | [1]   | [1] Typical.                             |  |                     |                          |                   |  |
| Spectral Noise(1 kHz)   | 25 µg/√Hz   | 308 (µm/sec <sup>2</sup> )/√Hz     | [1]   | [2] 250° F to 325                        | ° F data valid with H  | HT option only.     |                          |                   |  |
| Electrical Isolation  | >10 <sup>8</sup> Ohm  | >10 <sup>8</sup> Ohm               |       | [3] Zero-based, I                        | east-squares, straig   | ht line method.     |                          |                   |  |
| Physical  |   |                                    |       | [4] See PCB Dec                          | laration of Conform  | ance PS023 for de   | tails.                   |                   |  |
| Sensing Element   | Ceramic   | Ceramic                            |       |  |  |                     |                          |                   |  |
| Sensing Geometry  | Shear   | Shear                              |       |  |  |                     |                          |                   |  |
| Housing Material  | Titanium  | Titanium                           |       |  |  |                     |                          |                   |  |
| Sealing   | Hermetic  | Hermetic                           |       |  |  |                     |                          |                   |  |
| Size (Height x Length x Width)  | 0.30 in x 0.55 in x 0.55 in                                   | 7.6 mm x 14.0 mm x 14.0 mm         |       |  |  |                     |                          |                   |  |
| Weight(without cable)   | 0.18 oz   | 5.0 gm                             | [1]   |  |  |                     |                          |                   |  |
| Electrical Connector  | 1/4-28 4-Pin  | 1/4-28 4-Pin                       |       |  |  |                     |                          |                   |  |
| Electrical Connection Position  | Side  | Side                               |       |  |  |                     |                          |                   |  |
| Cable Length  | 5 ft  | 1.5 m                              |       |  |  |                     |                          |                   |  |
| Cable Type  | 034 4-cond Shielded   | 034 4-cond Shielded                |       |  |  |                     |                          |                   |  |
| Mounting  | Through Hole  | Through Hole                       |       |  |  |                     |                          |                   |  |
|   | ्रू Typical Sensitiv  | vity Deviation vs Temperature      |       |  |  |                     |                          |                   |  |
|   | Ę   |                                    |       |  | SUPPLIED ACCESSORIES:<br>Model 034G05 4-cond. shielded cable, 5 ft (1.5M), 4-pin plug to (3) BNC plugs (1) |                     |                          |                   |  |
|   | :읕 30 ┳━━━━   |                                    |       | Model 039421 Allen wrench, 3/32" hex (1) |  |                     |                          |                   |  |
|   | 5 10 <b></b>  |                                    |       |  |  |                     | (for Model 354C10)       | (1)               |  |
|   | ĕ ;;   − <b>−</b>   |                                    |       |  |  |                     | se, 10 Hz to upper 59    |                   |  |
|   | ÷ -10   |                                    |       |  |  |                     |                          |                   |  |
| [4]   | :ê -30 <del> </del>   |                                    | _     |  | n  | п                   |                          | Π                 |  |
| [']   | 30<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>1 | 50 90 130 170 210 250 290          | 330 ( | Entered: AP                              | Engineer: JJB  | Sales: WDC          | Approved: JJB            | Spec Numbe        |  |
|   |   | Temperature (°F)                   |       | Date: 11/8/2013                          | Date: 11/8/2013  | Date: 11/8/2013     | Date: 11/8/2013          | 17387             |  |
|   | , <u>,</u>  |                                    |       | _  |  |                     |                          |                   |  |
| All specifications are at room temperature<br>In the interest of constant product improve |   | na specifications without notice   |       | 1 Concr                                  |  | DONICC              |                          | 6-684-0001        |  |
|   |   | ige specifications without hotice. |       | WHLE                                     | PIEZOTI  | イレバリニン              | Fax: 716-6               |                   |  |
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