

 Model Number
 DOC NO

 3056D2
 PERFORMANCE SPECIFICATIONS
 PS3056D2

 IEPE ACCELEROMETER
 REV.J. ECN 15687, 09/17/20



- HERMETICALLY SEALED
- BASE ISOLATED

|                                |             | ENGLI          | SH     | SI             |                      |
|--------------------------------|-------------|----------------|--------|----------------|----------------------|
| PHYSICAL                       |             |                |        |                |                      |
| Weight                         |             | 0.35           | OZ     | 10             | grams                |
| Connector                      | Type        | 10-32          |        | 10-32          |                      |
| Mounting Provision             | Tapped Hole | 10-32 X .150 ↓ |        | 10-32 X .150 ↓ |                      |
| Material, Housing/Connector    |             | Titanium       |        | Titanium       |                      |
| Sensing Element                |             | Ceramic        |        | Ceramic        |                      |
| Element Style                  |             | Planar Shear   |        | Planar Shear   |                      |
| PERFORMANCE                    |             |                |        |                |                      |
| Sensitivity, ±5% [1]           |             | 100            | mV/G   | 10.2           | mV/m/s <sup>2</sup>  |
| Range for ± 5 Volts Output     |             | 50             | G peak | 491            | m/s <sup>2</sup>     |
| Frequency Response, ±5%        |             | 1 to 7,000     | Hz     | 1 to 7,000     | Hz                   |
| Frequency Response, ±10%       |             | 1 to 10,000    | Hz     | 1 to 10,000    | Hz                   |
| Resonant Frequency             |             | > 36           | kHz    | > 36           | kHz                  |
| Broad Band Resolution          |             | 0.0004         | G rms  | 0.004          | m/s <sup>2</sup> rms |
| Linearity [2]                  |             | ±1             | % F.S. | ±1             | % F.S.               |
| Maximum Transverse Sensitivity |             | 5              | %      | 5              | %                    |
| Strain Sensitivity @ 250με     |             | 0.001          | G/με   | 0.01           | m/s²/με              |
| ENVIRONMENTAL                  |             |                |        |                |                      |
| Maximum Vibration              |             | 60             | G peak | 589            | m/s² peak            |
| Maximum Shock                  |             | 2000           | G peak | 19620          | m/s² peak            |
| Temperature Range              |             | -67 to 250     | °F     | -55 to 121     | °C                   |
| Seal                           |             | HERMETIC       |        | HERMETIC       |                      |
| ELECTRICAL                     |             |                |        |                |                      |
| Supply Current Range [3]       |             | 2 to 20        | mA     | 2 to 20        | mA                   |
| Compliance Voltage Range       |             | +18 to +30     | Volts  | +18 to +30     | Volts                |
| Output Impedence,Typ           |             | 100            | Ω      | 100            | Ω                    |
| Bias Voltage                   |             | +9 to +13      | VDC    | +9 to +13      | VDC                  |
| Discharge Time Constant        |             | .5 to 1.5      | Sec    | .5 to 1.5      | Sec                  |
| Electrical Isolation           |             | 10             | GΩ,min | 10             | $G\Omega$ ,min       |

| This family also includes: |                    |                         |                     |                     |  |  |  |  |
|----------------------------|--------------------|-------------------------|---------------------|---------------------|--|--|--|--|
| Model                      | Sensitivity (mV/g) | Frequency Response (Hz) | Time Constant (Sec) | Operating Temp (°F) |  |  |  |  |
| 3056D1                     | 10                 | 1 to 10000              | 0.5 to 1.5          | -67 to +250         |  |  |  |  |
| 3056D3                     | 500                | 1 to 10000              | 0.5 to 1.5          | -67 to +225         |  |  |  |  |
| 3056D4                     | 20                 | 1 to 10000              | 0.5 to 1.5          | -67 to +250         |  |  |  |  |
| 3056D5                     | 50                 | 1 to 10000              | 0.5 to 1.5          | -67 to +250         |  |  |  |  |
| 3056D6                     | 200                | 1 to 10000              | 0.5 to 1.5          | -67 to +225         |  |  |  |  |
| 3056D7                     | 1                  | 1 to 10000              | 0.5 to 1.5          | -67 to +250         |  |  |  |  |
| 3056D8                     | 5                  | 1 to 10000              | 0.5 to 1.5          | -67 to +250         |  |  |  |  |

Refer to the performance specifications of the products in this family for detailed description

## Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Model 6200 mounting stud, QTY 1

## Notes:

- [1] Measured at 100Hz, 1 Grms per ISA RP 37.2.
- [2] Measured using zero-based straight line method, % of F.S. or any lesser range.
- [3] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.
- [4] In the interest of constant product improvement, we reserve the right to change specifications without notice.
- [5] In the interest of constant product improvement, we reserve the rights to change the specifications without notice. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.





