

Model Number DOC NO PERFORMANCE SPECIFICATIONS PS3059A 3059A IEPE ACCELEROMETER REV C, ECN 15841, 07/13/20



- HERMETICALLY SEALED
- HIGH SENSITIVITY

| | | ENGLIS | ENGLISH | | SI | |
|--------------------------------|-----------|---------------------|----------------|---------------------|----------------------|--|
| PHYSICAL | | | | | | |
| Weight, Max | | 2.59 | oz | 74.0 | grams | |
| Connector | Туре | 2 PIN, MIL 10SL- 4P | | 2 PIN, MIL 10SL- 4P | | |
| Mounting Provision | Thru Hole | 1/4-28 UNF-2B | | 1/4-28 UNF-2B | mm | |
| Material, Housing/Connector | | 300 Series S.S. | | 300 Series S.S. | | |
| Sensing Element | Ceramic | Shear | | Shear | | |
| PERFORMANCE | | | | | | |
| Sensitivity, ±10% [1] | | 100 | mV/g | 10 | mV/m/s ² | |
| Range for ± 5 Volts Output | | 50 | g pk | 491 | m/s² pk | |
| Frequency Response, ±3dB | | 0.3 - 8,000 | Hz | 0.3 - 8,000 | Hz | |
| Resonant Frequency | | 21 | kHz | 21 | kHz | |
| Broad Band Resolution, Max | | 0.0006 | g rms | 0.006 | m/s ² rms | |
| Linearity [2] | | 2 | % F.S. | 2 | % F.S. | |
| Maximum Transverse sensitivity | | 5 | % | 5 | % | |
| Strain Sensitivity @ 250με | | 0.001 | g/με | 0.01 | $m/s^2/\mu\epsilon$ | |
| ENVIRONMENTAL | | | | | | |
| Maximum Vibration | | 350 | g pk | 3434 | m/s² peak | |
| Maximum Shock | | 3000 | g pk | 29430 | m/s² peak | |
| Temperature Range | | -60 to +250 | °F | -51 to +121 | °C | |
| Seal | | Hermetic | | Hermetic | | |
| ELECTRICAL | | | | | | |
| Supply Current Range [3] | | 2 to 20 | mA | 2 to 20 | mA | |
| Compliance Voltage Range | | +20 to +30 | Volts | +20 to +30 | Volts | |
| Output Impedance, Nom. | | 200 | Ω | 200 | Ω | |
| Bias Voltage | | 11 to 13 | VDC | 11 to 13 | VDC | |
| Discharge Time Constant | | 0.5 to 1.2 | Sec | 0.5 to 1.2 | Sec | |
| Electrical Isolation | | 10 | $M\Omega$,min | 10 | $M\Omega$,min | |

| | This family also incl | is family also includes: | | | | | | |
|--|-----------------------|--------------------------|-------------------------|---------------------|---------------------|--|--|--|
| | Model | Sensitivity (mV/g) | Frequency Response (Hz) | Time Constant (Sec) | Operating Temp (°F) | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

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

Supplied Accessories:

1) Accredited calibration certificate (ISO 17025)

2) 6184 Mounting Bolt

[1] Measured at 100 Hz, 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 imrpovement, we reserve the right to change 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.



