

Model Number DOC NO PERFORMANCE SPECIFICATIONS 3097A1 PS3097A1 IEPE ACCELEROMETER REV E, ECN 13042, 10/28/16



- MINIATURE SIZE
- HERMETICALLY SEALED
- EXCELLENT LINEARITY

| | ENGLISH | | SI | |
|-----|-------------------------|----|-------------------------|-------|
| | 0.15 | OZ | 4.3 | grams |
| ole | 10-32 5-40 UNC-2B | | 10-32 5-40 UNC-2B | |
| | TITANIUM | | TITANIUM | |
| | CERAMIC PLANAR SHEAR | | CERAMIC PLANAR SHEAR | |

| ensitivity, ±5% [2] | |
|----------------------------|---------|
| lange for ± 5 Volts Output | |
| requency Response, ±5% | |
| ±15% | |
| Resonant Frequency | |
| road Band Resolution | |
| pectral Noise | 1Hz |
| | 10Hz |
| | 100Hz |
| | 1000Hz |
| | 10000HZ |
| inearity [2] | |

Type Tapped H

ENVIRONMENTAL

PHYSICAL Weight

Connector

Element Style

PERFORMANCE

Mounting Provision Material, Housing/Connector Sensing Element

Maximum Vibration Maximum Shock Temperature Range (<3% Sensitivity Deviation) Temperature Range Temperature Range (Storage)

ELECTRICAL

Supply Current Range [3] Compliance Voltage Range Output Impedence, Typ Bias Voltage Discharge Time Constant

| 10 | mV/G | 1 | mV/m/s ² |
|----------------|-------------|----------------|-----------------------------|
| 500 | G peak | 4905 | m/s ² |
| 0.3 to 5000 | Hz | 0.3 to 5000 | Hz |
| 0.15 to 10,000 | Hz | 0.15 to 10,000 | Hz |
| > 35 | kHz | > 35 | kHz |
| 0.0003 | G rms | 0.003 | m/s ² rms |
| 38.0 | μGrms/√(Hz) | 372.8 | μm/s ² rms/v(Hz) |
| 12.0 | μGrms/v(Hz) | 117.7 | μm/s ² rms/v(Hz) |
| 2.5 | μGrms/v(Hz) | 24.5 | μm/s² rms/√(Hz) |
| 1.5 | μGrms/v(Hz) | 14.7 | μm/s ² rms/v(Hz) |
| 1.0 | μGrms/v(Hz) | 9.8 | μm/s² rms/v(Hz) |
| ±1 | % F.S. | ±1 | % F.S. |
| 5 | % | 5 | % |
| 0.002 | G/με | 0.02 | m/s²/με |
| 5 to 3000 | Hz | 5 to 3000 | Hz |

| 600 | G peak |
|-------------|--------|
| 5000 | G peak |
| +50 to +100 | °F |
| -60 to 200 | °F |
| -60 to +250 | °F |
| HERMETIC | |

| | _ |
|------------|-------|
| 2 to 20 | mA |
| +18 to +30 | Volts |
| 100 | Ω |
| +11 to +13 | VDC |
| 1.5 to 2.5 | Sec |

| 5886 | m/s² peak |
|-------------|-----------|
| 49050 | m/s² peak |
| +10 to +38 | °C |
| -51 to 93 | °C |
| -51 to +121 | °C |
| HERMETIC | |
| | |

| 2 to 20 | mA |
|------------|-------|
| +18 to +30 | Volts |
| 100 | Ω |
| +11 to +13 | VDC |
| 1.5 to 2.5 | Sec |
| | |

This family also includes:

| Model | Sensitivity (mV/g) | Frequency Response ±5%, (Hz) | Time Constant (Sec) | Operating Temp (°F) |
|--------|--------------------|------------------------------|---------------------|---------------------|
| 3097A2 | 100 | 0.3 to 5,000 | 1.5 to 2.5 | -60 to 180 |
| 3097A3 | 500 | 0.3 to 5,000 | 1.5 to 2.5 | -60 to 150 |
| | | | | |

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

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Model 6580 mounting stud (5-40 to 5-40), qty 1

- [1] Coaxial, 10-32 connector, Mates with Dytran cable Model 6010AXX or 6011AXX
- [2] Measured at 100Hz, 1 Grms per ISA RP 37.2.
 [3] Measure using zero-based straight line method, % of F.S. or any lesser range.
- [5] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.
- [6] In the interest of constant product improvement, we reserve the right to change specifications without notice.



