

Model Number DOC NO PERFORMANCE SPECIFICATIONS 3143D PS3143D IEPE TRIAXIAL ACCELEROMETER REV A, ECN 11933, 06/09/15



- HERMETICALLY SEALED

| EXCELLENT LINEARITY | |
|---------------------|--|
| | |
| | |

| PHYSICAL | |
|-----------------------------|-----------|
| Weight, Max. | |
| Connector [1] | Type |
| Mounting Provision | Thru Hole |
| Material, Housing/Connector | |
| Sensing Element | |
| Element Style | |
| | |

| PERFORMANCE |
|-------------|
|-------------|

Sensitivity, ±5% [2] Range for ± 5 Volts Output Frequency Response, ±5% Resonant Frequency Broad Band Resolution Linearity [3] Maximum Transverse sensitivity Strain Sensitivity @ 250µε

ENVIRONMENTAL

Maximum Vibration Maximum Shock Operating Temperature Range Survival Temperature Range Seal

ELECTRICAL

Supply Current Range [4] Compliance Voltage Range Output Impedence,Typ Bias Voltage Discharge Time Constant Electrical Isolation

| ENGLISH | | SI | | |
|---------------------|------------|---------------------|---------------------|--|
| | | | | |
| 0.49 | oz | 14 | grams | |
| 4-Pin | | 4-Pin | 1 | |
| 6-32 Mounting Screw | | 6-32 Mounting Screw | 1 | |
| Titanium | | Titanium | 1 | |
| Ceramic | | Ceramic | 1 | |
| Planar Shear | | Planar Shear | 1 | |
| | | | | |
| 10 | mV/g | 1 | mV/m/s ² | |
| ±500 | g peak | ±4905 | m/s ² | |
| 0.5 to 3000 | Hz | 0.5 to 3000 | Hz | |
| > 25 | kHz | > 25 | kHz | |
| 0.007 | g rms | 0.07 | m/s² rms | |
| ± 1 | % F.S. | ± 1 | % F.S. | |
| 5 | % | 5 | % | |
| 0.012 | g/με | 0.12 | m/s²/με | |
| | | | | |
| ±600 | g peak | ±5886 | m/s² peak | |
| ±1500 | g peak | ±14715 | m/s² peak | |
| -60 to 185 | °F | -51 to 85 | °C | |
| -100 to 225 | °F | -73 to 107 | °C | |
| Hermetic | | Hermetic | Ī | |
| | <u>-</u> ' | | • | |
| 2 to 20 | l mA | 2 to 20 | T mA | |
| +18 to +30 | Volts | +18 to +30 | Volts | |
| 100 | Ω | 100 | Ω | |
| +11 to +13 | VDC | +11 to +13 | VDC | |
| 0.8 to 2.0 | Sec | 0.8 to 2.0 | Sec | |
| 10 | GΩ,min | 10 | GΩ,min | |
| | - | | _ | |

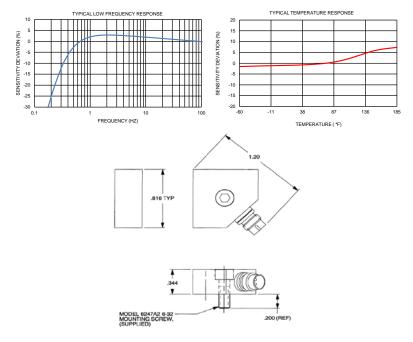
| This family also includes: | | | | | | | |
|----------------------------|--------------------|-------------------------|---------------------|---------------------|--|--|--|
| Model | Sensitivity (mV/g) | Frequency Response (Hz) | Time Constant (Sec) | Operating Temp (°F) | | | |
| 3143D1 | 100 mV/g | 0.5 to 3000 | 0.8 to 2.0 | -60 to 185 | | | |
| 3143D2 | 50 mV/g | 0.5 to 3000 | 0.8 to 2.0 | -60 to 185 | | | |

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

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mounting screw Model 6247A2

- [1] Radially mounted 4-pin connector. Mates with Dytran cable Model 6811A.
- [2] Measured at 100Hz, 1 Grms per ISA RP 37.2.
- [3] Measured using zero-based straight line method, % of F.S. or any lesser range.
- [4] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the amplifier.
- [5] In the interest of constant product improvement, we reserve the right to change specifications without notice.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3143D for more information.

