

Model Number 3713A1T

PERFORMANCE SPECIFICATIONS

PS3713A1T

Triaxial Accelerometer, IEPE

REV A, ECN 15001, 10/08/19



- HERMETICALLY SEALED
- CASE ISOLATED
- TEDS FEATURE

| | | | | 1 | |
|------------------------------|----------|-----------------|--------|-------------------|----------------------|
| | | ENGLISH | | SI | |
| PHYSICAL | | | | | |
| Weight, Max. | | 1.8 | oz | 52 | grams |
| Mounting | | Ø.195 Thru Hole | | Ø4.95mm Thru Hole | |
| Connector [1] | | 4-Pin | | 4-Pin | |
| Material | | 300 Series S.S. | | 300 Series S.S. | |
| Sensing Element | Material | Quartz | | Quartz | |
| | Mode | Shear | | Shear | |
| PERFORMANCE | | | | | |
| Sensitivity [2], ±20% | | 1.0 | mV/g | 0.1 | mV/m/s ² |
| Acceleration Range | | 5000 | Gpeak | 49050 | m/s² peak |
| Frequency Range, (±5%) | | 0.6 to 3,000 | Hz | 0.6 to 3,000 | Hz |
| Frequency Range, (±10%) | | 0.4 to 4,000 | Hz | 0.4 to 4,000 | Hz |
| Frequency Range, (±3dB) | | 0.2 to 6,000 | Hz | 0.2 to 6,000 | Hz |
| Resonance Frequency | | >30 | kHz | >30 | kHz |
| Transverse Sensitivity | | <6 | % | <6 | % |
| Electrical Noise Floor, Max. | | 0.02 | Grms | 0.2 | m/s ² rms |
| Linearity [3] | | ± 1% | % F.S. | ± 1% | % F.S. |
| ELECTRICAL | | | | | |
| Compliance Voltage | | +18 to +30 | VDC | +18 to +30 | VDC |
| Current Range [4] | | 2 to 20 | mA | 2 to 20 | mA |
| Output Impedance, Typ. | | 100 | Ω | 100 | Ω |
| Output Bias Voltage | | 7.0 to 12 | VDC | 7.0 to 12 | VDC |
| Discharge Time Const | ant | 0.8 to 2.0 | sec | 0.8 to 2.0 | sec |
| Ground Isolation | | >1 | GΩ | >1 | GΩ |
| TEDS | | IEEE 1451.4 | | IEEE 1451.4 | |
| Base Strain Sensitivity | , | 0.003 | g/με | 0.03 | $m/s^2/\mu\epsilon$ |
| ENVIRONMENTAL | | | | | |
| Maximum Shock | | 7,000 | Gpeak | 68,670 | m/s ² |
| Maximum Vibration | | 6,000 | Gpeak | 58,860 | m/s ² |
| Operating Temperature | | -67 to +302 | °F | -55 to +150 | °C |
| TEDS Operating Temperature | | -40 to +185 | °F | -40 to +85 | °C |
| Seal | | Hermetic | • | Hermetic | - |
| 1 | | | | | |

| his family also includes: |
|---------------------------|
|---------------------------|

| Model | Sensitivity (mV/g) | Range (Gpeak) | Time Constant (Sec) | Operating Temp (°F) |
|---------|--------------------|---------------|---------------------|---------------------|
| 3713A2T | 0.5 | 10,000 | 0.8 to 2.0 | -67 to +302 |
| 3713A3T | 5.0 | 1,000 | 0.5 to 2.0 | -67 to +302 |
| 3713A4T | 10 | 500 | 0.3 to 2.0 | -67 to +302 |

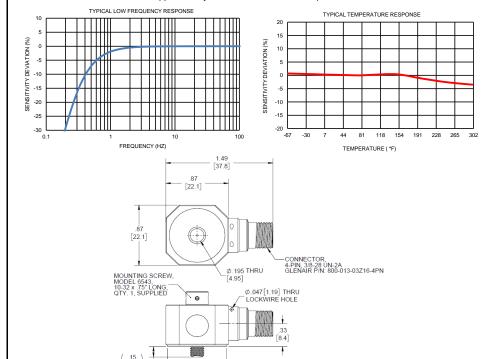
Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mounting screw, model 6543, 10-32 x .75" long, Qty. 1

Notes:

- [1] Mates with Glenair connector 800-006-16-Z16-4SN. Dytran cable model 6380AXX
- [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.
- [4] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.
- [5] In the interest of constant product improvement, 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.





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