

Model Number
HT628F01

INDUSTRIAL ICP® ACCELEROMETER

Revision B
ECN #: 27783

Performance

Sensitivity (±5 %) 10.2 mV/(m/s²)
 Measurement Range ±490 m/s²
 Frequency Range (±5 %) 2.4 to 3000 Hz
 Frequency Range (±10 %) 1.7 to 5000 Hz
 Frequency Range (±3 dB) 0.8 to 8000 Hz
 Resonant Frequency 18 kHz
 Broadband Resolution (1 to 10 kHz) 9.8 mm/s²
 Non-Linearity ±1 %
 Transverse Sensitivity ≤5 %

ENGLISH

100 mV/g
 ±50 g
 144 to 180000 cpm
 102 to 300000 cpm
 48 to 480000 cpm
 1080 kcpm
 1 mg
 ±1 %
 ≤5 %

SI

10.2 mV/(m/s²)
 ±490 m/s²
 2.4 to 3000 Hz
 1.7 to 5000 Hz
 0.8 to 8000 Hz
 18 kHz
 9.8 mm/s²
 ±1 %
 ≤5 %

Environmental

Overload Limit (Shock) 1000 g pk
 Temperature Range -65 to +325 °F
 Temperature Range (Survivable Limit) +350 °F
 Temperature Response See Graph
 Enclosure Rating IP68

[3]

[2]
[2]
[6]

Electrical

Settling Time (within 1% of bias) ≤3 sec
 Discharge Time Constant ≥0.5 sec
 Excitation Voltage 18 to 28 VDC
 Constant Current Excitation 2 to 10 mA
 Output Impedance <500 ohm
 Output Bias Voltage 8 to 12 VDC
 Spectral Noise (10 Hz) 50 µg/√Hz
 Spectral Noise (100 Hz) 20 µg/√Hz
 Spectral Noise (1 kHz) 6 µg/√Hz
 Electrical Isolation (Case) >10⁸ ohm
 Electrical Protection RF/ESD

[1]

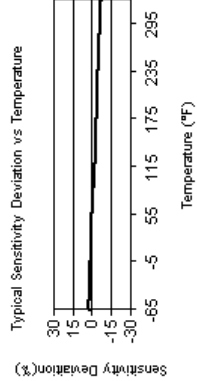
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Physical

Size (Hex x Height) 7/8 in x 2.06 in
 Weight 3.2 oz
 Mounting Thread 1/4-28 UNF
 Mounting Torque 2 to 5 ft-lb
 Sensing Element Quartz
 Sensing Geometry Shear
 Housing Material Stainless Steel
 Sealing Welded Hermetic
 Electrical Connector MIL-C-5015
 Electrical Connection Position Top

[7]

22.2 mm x 52.3 mm
 91 gm
 No Metric Equivalent
 2.7 to 6.8 N-m
 Quartz
 Shear
 Stainless Steel
 Welded Hermetic
 MIL-C-5015
 Top



All specifications are at room temperature unless otherwise specified. In the interest of constant product improvement, we reserve the right to change specifications without notice.

Optional Versions (Optional versions have identical specifications and accessories as listed for standard model except where noted below. More than one option may be used.)
M - Metric Mount
 Supplied Accessory: Model M081A61 Mounting stud, 1/4-28 to M6 x 1 replaces Model 081A40

Notes

- [1] Constant current should be reduced to ≤6 mA when operating sensor above 250°F.
- [2] Typical.
- [3] Not recommended for use with magnetic mounting base.
- [4] Conversion Factor 1g = 9.81 m/s².
- [5] The high frequency tolerance is accurate within ±10% of the specified frequency.
- [6] Zero-based, least-squares, straight line method.
- [7] 1/4-28 has no equivalent in S.I. units.
- [8] See PCB Declaration of Conformance PS023 for details.

Supplied Accessories

081A40 Mounting Stud (1)
 ICS-1 NIST-traceable single-axis amplitude response calibration from 600 cpm (10 Hz) to upper 5% frequency ()

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