

INDUSTRIAL ICP® ACCELEROMETER

Performance
 Sensitivity(± 5 %) 10.2 mV/(m/s²) [2]
 Measurement Range ± 50 g [2]
 Frequency Range(± 5 %) 30 to 300,000 cpm [3]
 Frequency Range(± 10 %) 22 to 420,000 cpm [3]
 Frequency Range(± 3 dB) 12 to 600,000 cpm [3]
 Resonant Frequency 1380 kcpm [1]
 Broadband Resolution(1 to 10,000 Hz) 100 µg [1]
 Non-Linearity ± 1% [1]
 Transverse Sensitivity ± 5% [4]
Environmental
 Overload Limit(Shock) 5000 g pk [1]
 Temperature Range -65 to +250 °F [1]
 Temperature Response See Graph [1]
 Enclosure Rating IP68 [1]

Electrical
 Settling Time(within 1% of bias) ≤ 5.0 sec
 Discharge Time Constant ≥ 1.0 sec
 Excitation Voltage 18 to 28 VDC
 Constant Current Excitation 2 to 20 mA
 Output Impedance <100 ohm
 Output Bias Voltage 8 to 12 VDC
 Spectral Noise(1 Hz) 15 µg/√Hz
 Spectral Noise(10 Hz) 4.0 µg/√Hz
 Spectral Noise(100 Hz) 1.5 µg/√Hz
 Spectral Noise(1 kHz) 0.7 µg/√Hz
 Electrical Isolation(Case) >10⁸ ohm
 Electrical Protection RFI/ESD

Physical
 Size (Hex x Height) 1 3/16 in x 2 3/16 in
 Weight 5.3 oz
 Mounting Thread 1/4-28 UNF
 Mounting Torque 2 to 5 ft-lb
 Sensing Element Ceramic
 Housing Geometry Shear
 Sealing Stainless Steel
 Electrical Connector Welded Hermetic
 Electrical Connection Position 2-Pin MIL-C-5015 Top

OPTIONAL VERSIONS
 Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.
M - Metric Mount
 Supplied Accessory : Model IM081A61 Mounting Stud 1/4-28 to M6 X 1 (1) replaces Model 081A40
TO - Temperature Output
 Temperature Output Range +36 to +250 °F
 Temperature Scale Factor 5.56 mV/°F + 32
 Electrical Connector 3-Pin
 Electrical Connections(Pin A) Acceleration Output
 Electrical Connections(Pin B) Ground
 Electrical Connections(Pin C) Temperature Output

NOTES:
 [1] Typical.
 [2] Conversion Factor 1g = 9.81 m/s².
 [3] The high frequency tolerance is accurate within ±10% of the specified frequency.
 [4] Zero-based, least-squares, straight line method.
 [5] 1/4-28 has no equivalent in S.I. units.
 [6] See PCB Declaration of Conformance P5023 for details.

SUPPLIED ACCESSORIES:
 Model 081A40 Mounting Stud (1)
 Model 085A31 Protective Thermal Jacket (1)
 Model ICS-1 NIST-traceable single-axis amplitude response calibration from 600 cpm (10 Hz) to upper 5% frequency

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CE [6]

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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.
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