

Model Number
603C05

INDUSTRIAL ICPI® ACCELEROMETER

Revision: NR
ECN #:

Performance

Sensitivity(± 20 %)
Measurement Range
Frequency Range(± 3 dB)
Resonant Frequency
Broadband Resolution(1 to 10,000 Hz)
Non-Linearity

ENGLISH

50 mV/g
± 100 g
72 to 600,000 cpm
1500 kcpm
750 µg
± 1 %
± 7 %

SI

[2] 5.1 mV/(m/s²)
± 981 m/s²
[3] 1.2 to 10,000 Hz
[1] 25 kHz
[1] 7358 µm/s²
[4] ± 1 %
± 7 %

Environmental

Overload Limit(Shock)
Temperature Range
Temperature Response
Enclosure Rating

5000 g pk
-65 to +250 °F
See Graph
IP68

[1] 49,050 m/s² pk
-54 to +121 °C
See Graph
IP68

Electrical

Settling Time(within 1% of bias)
Discharge Time Constant
Excitation Voltage
Constant Current Excitation
Output Impedance
Output Bias Voltage
Spectral Noise(10 Hz)
Spectral Noise(100 Hz)
Spectral Noise(1 kHz)
Electrical Isolation(Case)

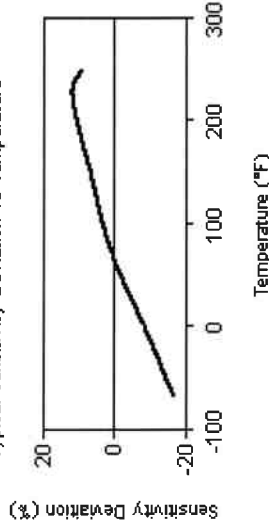
[1] ≤ 2.0 sec
≥ 0.4 sec
18 to 28 VDC
2 to 20 mA
<150 ohm
8 to 12 VDC
18 µg/√Hz
10 µg/√Hz
7 µg/√Hz
>10⁸ ohm

Physical

Size (Hex x Height)
Weight
Mounting Thread
Mounting Torque
Sensing Element
Sensing Geometry
Housing Material
Sealing
Electrical Connector
Electrical Connection Position

[5] 11/16 in x 1.65 in
1.8 oz
1/4-28 Female
2 to 5 ft-lb
Ceramic
Shear
Stainless Steel
Welded Hermetic
2-Pin MIL-C-5015
Top

Typical Sensitivity Deviation vs Temperature



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.
ICP® is a registered trademark of PCB Group, Inc.

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.

EX - ATEX and CSA Hazardous Area Approval
Hazardous Area Approval
Hazardous Area Approval
Hazardous Area Approval
Hazardous Area Approval
Hazardous Area Approval
EEx ia IIC T4, -40°CsTas121°
EEx ia IIC T4, -40°CsTas121°
EEx ia IIC T4, -40°CsTas121°
EEx nL IIC T4, -40°CsTas
121°C, II 3 G

M - Metric Mount
Supplied Accessory : Model M081A61 Mounting Stud 1/4-28 to M6 X 1 (1)

TO - Temperature Output

Temperature Output Range
Temperature Scale Factor
Electrical Connector
Electrical Connections(Pin A)
Electrical Connections(Pin B)
Electrical Connections(Pin C)
Size - Height
Weight
+36 to +250 °F
5.56 mV/°F + 32
3-Pin MIL-C-5015
Acceleration Output
Ground
Temperature Output
1.86 in
2.0 oz
+2 to +121 °C
+10 mV/°C
3-Pin MIL-C-5015
Acceleration Output
Ground
Temperature Output
47.2
56.7

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 PS023 or PS060 for details.

SUPPLIED ACCESSORIES:

Model 081A40 Mounting Stud
Model ICS-2 NIST-traceable single-axis single-point amplitude response calibration at 6000 cpm (100 Hz) (1)

Entered: <i>SA</i>	Engineer: <i>MJN</i>	Sales: <i>SM</i>	Approved: <i>SA</i>	Spec Number:
Date: <i>8-9-07</i>	Date: <i>8/13/07</i>	Date: <i>8/13/07</i>	Date: <i>8/13/07</i>	38270

IMI SENSORS
A PCB PIEZOTRONICS DIV.
3425 Walden Avenue, Depew, NY 14043

Phone: 800-959-4464
Fax: 716-684-3823
E-Mail: imi@pcb.com