

INDUSTRIAL ICP® ACCELEROMETER

Model Number
628F01

Revision: F
ECN #: 29661

Performance

Sensitivity(± 5%)
Measurement Range
Frequency Range(± 5%)
Frequency Range(± 10%)
Frequency Range(± 3 dB)
Resonant Frequency
Broadband Resolution(1 to 10,000 Hz)
Non-Linearity
Transverse Sensitivity
Environmental
Overload Limit(Shock)
Temperature Range
Temperature Response
Enclosure Rating

ENGLISH

100 mV/g
± 50 g
60 to 240,000 cpm
40 to 390,000 cpm
20 to 720,000 cpm
1080 kcpm
1000 µg
± 1%
± 5%
5000 g pk
-65 to +250 °F
See Graph
IP68

SI

10.2 mV/(m/s²)
± 490 m/s²
1 to 4000 Hz
0.67 to 6500 Hz
0.33 to 12,000 Hz
18 kHz
9810 µm/s²
± 1%
± 5%
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 Protection
Electrical Isolation(Case)

≤ 10 sec
≥ 0.5 sec
18 to 28 VDC
2 to 20 mA
<100 ohm
8 to 12 VDC
50 µg/√Hz
20 µg/√Hz
6 µg/√Hz
RFI/ESD
>10⁸ ohm

≤ 10 sec
≥ 0.5 sec
18 to 28 VDC
2 to 20 mA
<100 ohm
8 to 12 VDC
491 (µm/s²)/√Hz
196 (µm/s²)/√Hz
59 (µm/s²)/√Hz
RFI/ESD
>10⁸ ohm

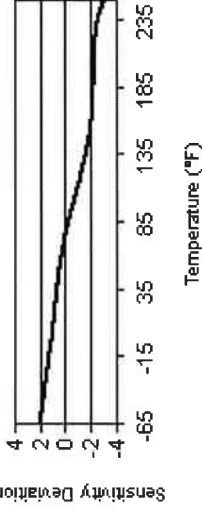
Physical

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

7/8 in x 2.06 in
3.3 oz
1/4-28 Female
2 to 5 ft-lb
Quartz
Shear
Stainless Steel
Welded Hermetic
2-Pin MIL-C-5015
Top

22 mm x 52.3 mm
94 gm
Not Applicable
2.7 to 6.8 N-m
Quartz
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.

CS - Canadian Standards Association Approved Intrinsically Safe

Hazardous Area Approval CI I, Div 1, Groups A, B, C, D; CI II, Div 1, Groups E, F, G; CI III, II, Div 1, Groups E, F, G; CI III, Div I

Hazardous Area Approval Exia IIC T4, AExia IIC, T4 Exia IIC T4, AExia IIC, T4
Hazardous Area Approval CI I, Div 2, Groups A, B, C, D; CI I, Div 2, Groups A, B, C, D; ExnL IIC T4, AExnA IIC T4

EX - ATEX, CSA, or ATEX and CSA Hazardous Area Approval

Hazardous Area Approval EEx ia IIC T4, -54°C to +121°C EEx ia IIC T4, -54°C to +121°C
C, II 1 G C, II 1 G

LB - Low Bias Voltage

Output Bias Voltage 6 to 8 VDC
Excitation Voltage 12 to 28 VDC
Measurement Range ± 343 m/s²

M - Metric Mount

Supplied Accessory : Model M081A61 Mounting Stud 1/4-28 to M6 X 1 (1) replaces Model 081A40

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 PS061 for details.

SUPPLIED ACCESSORIES:

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

Entered: BUS	Engineer: AEC	Sales: JA	Approved: NF	Spec Number:
Date: 11/10/08	Date: 11/17/08	Date: 11/10/08	Date: 11/7/08	8312

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