IMI SENSORS
A PCB DIVISION

Model 66162ANZ1

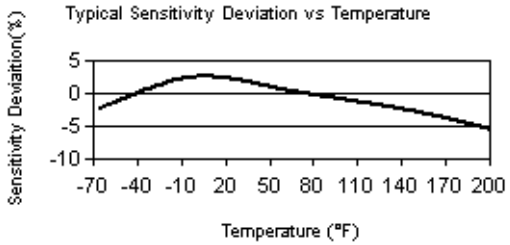
Installation and Operating Manual

**For assistance with the operation of this product,
contact the PCB Piezotronics, Inc.**

Toll-free: 800-959-4464
24-hour SensorLine: 716-684-0001
Fax: 716-684-3823
E-mail: imi@pcb.com
Web: www.imi-sensors.com

Model Number 66162ANZ1	ICP® LOW-PROFILE TO-5 ACCELEROMETER	Revision: A ECN #: 55512

Performance	ENGLISH	SI	
Sensitivity(± 20 %)	1 mV/g	0.10 mV/(m/s²)	[1][2]
Measurement Range	± 5,000 g pk	± 50,000 m/s² pk	
Frequency Range(± 3 dB)	0.5 to 10,000 Hz	0.5 to 10,000 Hz	[3][4]
Resonant Frequency	> 25 kHz	> 25 kHz	[4]
Broadband Resolution	4.6 µg	45 µm/sec²	[5]
Non-Linearity	≤ 1 %	≤ 1 %	[6]
Transverse Sensitivity	≤ 7 %	≤ 7 %	
Environmental			
Overload Limit(Shock)	5,000 g pk	49,000 m/s² pk	
Temperature Range(Operating)	-65 to +185 °F	-54 to +85 °C	
Temperature Response	See Graph	See Graph	[5]
Electrical			
Settling Time(within 1% of bias)	≤ 2 sec	≤ 2 sec	
Discharge Time Constant	≥ 0.3 sec	≥ 0.3 sec	
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	< 100 Ohm	< 100 Ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise(10 Hz)	229 µg/√Hz	2,246 (µm/sec²)/√Hz	[5]
Spectral Noise(100 Hz)	61 µg/√Hz	598 (µm/sec²)/√Hz	[5]
Spectral Noise(1 kHz)	30 µg/√Hz	294 (µm/sec²)/√Hz	[5]
Physical			
Size (Lip Diameter x Height)	0.36 in x 0.26 in	9.1 mm x 6.6 mm	
Weight	0.08 oz	2.2 gm	
Mounting	Adhesive/Solder	Adhesive/Solder	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	Header Pins	Header Pins	
Electrical Connection Position	Bottom	Bottom	
Electrical Connections(Pin 1)	Signal / Power	Signal / Power	
Electrical Connections(Chrome-Plated Brass)	Neg (-) Ground	Neg (-) Ground	
Electrical Connections(Pin 3)	No Connection	No Connection	



CE

UKCA [7]

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 Piezotronics, 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.

HT - High temperature, extends normal operation temperatures

Temperature Range(Operating)	-65 to 250 °F	-54 to 121 °C

RH - RoHS Compliant

NOTES:

[1]Negative output along Z-axis (in upward direction when pin mounted).
[2]Conversion Factor 1g = 9.81 m/s².
[3]The high frequency tolerance is accurate within ±10% of the specified frequency.
[4]Performance depends on mounting
[5]Typical.
[6]Zero-based, least-squares, straight line method.
[7]See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

Model ICS-2 NIST-traceable single-point amplitude response calibration at 6000 cpm (100 Hz) for each axis (1)

Entered: ND	Engineer: NJF	Sales: JL	Approved: NJF	Spec Number:
Date: 02/25/2025	Date: 02/25/2025	Date: 02/25/2025	Date: 02/25/2025	47364

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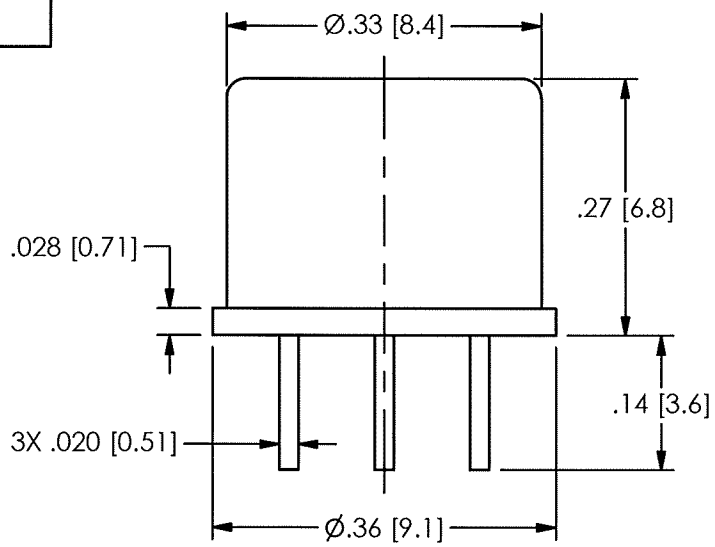
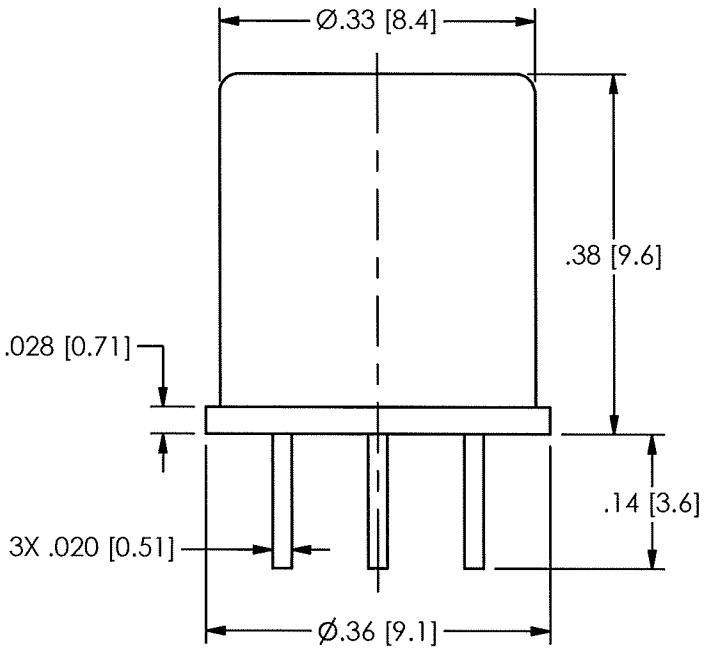
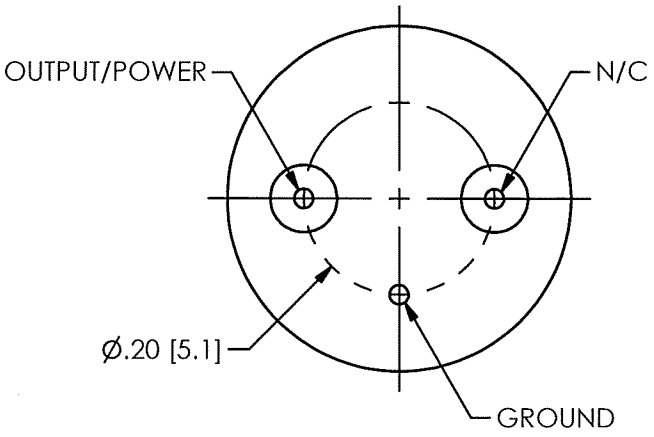
REVISIONS		
REV	DESCRIPTION	DIN
NR	RELEASED TO DRAFTING	35624

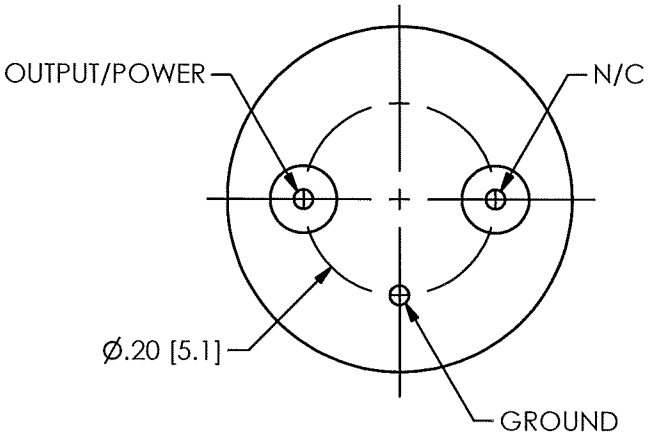


LOW PROFILE



STANDARD PROFILE





UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		DRAWN	CHECKED	ENGINEER	
DIMENSIONS IN INCHES DECIMALS XX ±.03 XXX ±.010 ANGLES ± 2 DEGREES	DIMENSIONS IN MILLIMETERS [IN BRACKETS] DECIMALS X ± 0.8 XX ± 0.25 ANGLES ± 2 DEGREES	MDF 5/9/11	ECB 5/11	LAB 5/5/11	
FILLETS AND RADII .003 - .005	FILLETS AND RADII 0.07 - 0.13	TITLE: OUTLINE DRAWING MODEL 660 SERIES ICP® ACCELEROMETER			

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SCALE: 5X	SHEET 1 OF 1