

 Model Number
 DOC NO

 3023A
 PERFORMANCE SPECIFICATIONS
 PS3023A

 TRI AXIAL IEPE ACCELEROMETER
 REV H, ECN 17104, 03/29/23



- MINATURE SIZE
- EXCELLENT LINEARITY
- ULTRA LOW WEIGHT

		ENGLISH		SI	
PHYSICAL		•			
Weight, Max.		0.11	oz	3.0	grams
Connector		4-PIN	1	4-PIN	1
Mounting Provision		Adhesive Mount	1	Adhesive Mount	
Material, Housing/Connector		Titanium Alloy		Titanium Alloy	1
Sensing Element		Quartz		Quartz	
Element Style		Shear]	Shear]
PERFORMANCE					
Sensitivity, -10 / +15 %		10	mV/g	1	mV/m/s ²
Range for ± 5 Volts Output		±500	g pk	±4903	m/s² pk
Frequency Response	±5%	1.5 to 4000	Hz	1.5 to 4000	Hz
	-5 / +15%	1.5 to 10000	Hz	1.5 to 10000	Hz
Resonant Frequency		> 40	kHz	> 40	kHz
Broad Band Resolution [6]		0.01	g RMS	0.098	m/s ² RMS
Spectral Noise	1.25Hz	3000	μg RMS/√(Hz)	29430	μm/s² RMS/√(Hz)
	10Hz	1000	μg RMS/√(Hz)	9810	μm/s² RMS/√(Hz)
	100Hz	200	μg RMS/√(Hz)	1962	μm/s² RMS/√(Hz)
	1000Hz	50	μg RMS/√(Hz)	491	μm/s² RMS/√(Hz)
	10000Hz	40	μg RMS/√(Hz)	392	μm/s² RMS/√(Hz)
Linearity [2]		1	% F.S.	1	% F.S.
Maximum Transverse sensitivity		6	%	6	%
Strain Sensitivity @ 250με		0.039	g/με	0.38	m/s²/με
Signal Polarity		[5]]	[5]]
ENVIRONMENTAL					
Maximum Shock		5000	g pk	49033	m/s² pk
Temperature Range		-60 to +250	°F	-51 to +121	°C
Seal		Hermetic		Hermetic	
Magnetic Sensitivity at 100 Gauss		0.00005	g/Gauss	4.905	m/s ² /T
ELECTRICAL					
Supply Current Range [3]		2 to 20	mA	2 to 20	mA
Compliance Voltage Range		18 to 30	Volts	18 to 30	Volts
Output Impedance,Typ		100	Ω	100	Ω
Bias Voltage		7 to 11	VDC	7 to 11	VDC
Discharge Time Constant		0.3 to 1.5	Sec	0.3 to 1.5	Sec
Electrical Isolation		Case Grounded	GΩ,min	Case Grounded	GΩ,min

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	This family also	his family also includes:						
	Model	Sensitivity (mV/g)	Frequency Response (Hz)	Mounting	Operating Temp (°F)			
	3023A1	10 (-10 to +15%)	1.5 to 10000 (-5 to +15%)	5-40 Tapped Hole	-60 to +250			
	3023A2	10 (-10 to +15%)	1.5 to 10000 (-5 to +15%)	10-32 Tapped Hole	-60 to +250			
	3023A3	5 (-10 to +15%)	1.5 to 10000 (-5 to +15%)	Adhesive	-60 to +250			
	3023A4	5 (-10 to +15%)	1.5 to 10000 (-5 to +15%)	5-40 Tapped Hole	-60 to +250			
	3023A5	1 (±5%)	1.5 to 10000 (-5 to +15%)	Adhesive	-60 to +250			
	3023A6	5 (-10 to +15%)	1.5 to 10000 (-5 to +15%)	10-32 Tapped Hole	-60 to +250			
	3023A9	1 (±10%)	1.5 to 10000 (-5 to +15%)	10-32 Tapped Hole	-60 to +250			

Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

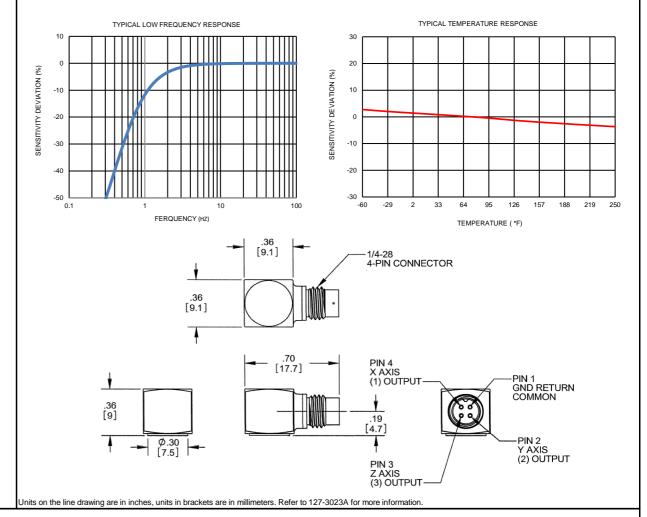
1) Accredited calibration certificate (ISO 17025)

Notes:

- [1] All specifications are at room temperature unless otherwise specified.
- [2] Measure using zero-based straight line method, % of F.S. or any lesser range.
- [3] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.
- [4] In the interest of constant product improvement, we reserve the right to change specifications without notice.

It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.

- [5] Positive for motion in direction of arrows on housing.
- [6] Typical. Not to exceed .010 g RMS [.10 m/s²].





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