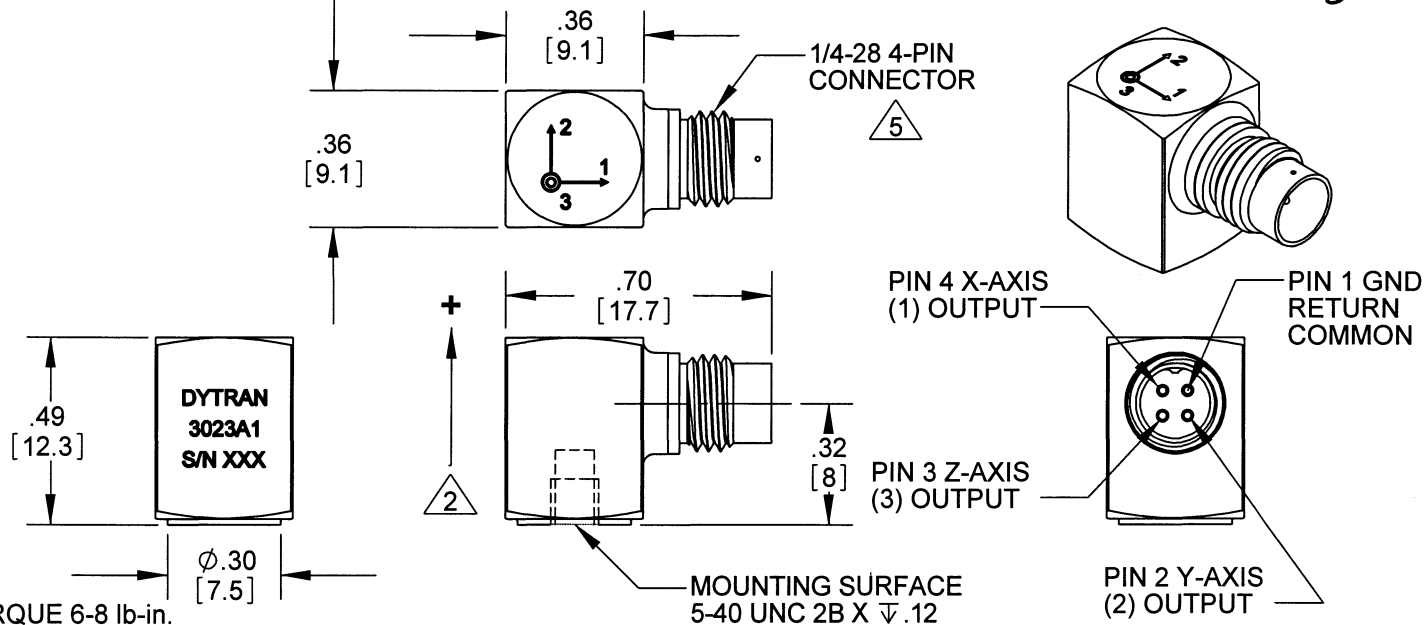


PROPRIETARY AND CONFIDENTIAL

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REVISIONS:

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	6244	SEE ECN	RA, 09/14/09	JS	[Signature]



- △ 6 RECOMMENDED MOUNTING TORQUE 6-8 lb-in.
- △ 5 MATES WITH DYTRAN 6811AXX OR 6824AXX CABLE (XX= LENGTH IN FEET)
- 4. SENSITIVITY: 10mV/g NOMINAL
- 3. WEIGHT: 4 GRAMS APPROX.
- △ 2 ARROWS INDICATE ACCELERATION DIRECTION FOR POSITIVE OUTPUT
- 1. MATERIAL: TITANIUM ALLOY

NOTES: UNLESS OTHERWISE SPECIFIED

**MOUNTING RECOMMENDATIONS:**  
 PREPARE SURFACE AT LEAST Ø.30 [7.5]  
 SURFACE FLATNESS MUST BE EQUAL OR BETTER THAN .001 TIR. TAP 5-40 UNC-2B ∇ .120 MIN

USED ON	NEXT ASSY
APPLICATION	
THIRD ANGLE PROJECTION USA	

UNLESS OTHERWISE SPECIFIED:  
 INTERPRET DIM & TOL PER ASME Y14.5M - 1994.  
 REMOVE BURRS.  
 COUNTERSINK INTERNAL THDS 90° TO MAJOR DIA.  
 CHAM EXT THDS 45° TO MINOR DIA.  
 THD LENGTHS AND DEPTHS ARE FOR MIN FULL THDS.  
 THDS PER MIL-S-7742.  
 DIMENSIONS APPLY AFTER FINISHING.  
 ALL MACHINED SURFACES.  
 TOTAL RUNOUT WITHIN .005.  
 BREAK SHARP EDGES .005 TO .010.  
 MACHINED FILLET RADII .005 TO .015.  
 WELDING SYMBOLS PER AWS A2.4.  
 ABBREVIATIONS PER MIL-STD-12.

UNLESS OTHERWISE SPECIFIED:  
 DIMENSIONS ARE IN INCHES.  
 DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS  
 TOLERANCES ARE:  
 INCHES    METRIC    ANGLES  
 .XX ± .03    .X ± 0.8    ± 1°  
 .XXX ± .010    .XX ± 0.25

MATERIAL

FINISH

DO NOT SCALE DRAWING

CONTRACT NO.		
APPROVALS		DATE
ORIG	PML	5/14/2003
CHK	JS	09/14/09
APP	NC	8/11/03
APP		

**MASTER COPY**  
 ONLY IF IN RED

TITLE: **OUTLINE/INSTALLATION DRAWING, MODEL 3023A1**

SIZE	CAGE CODE	DWG. NO.	REV
<b>A</b>	<b>2W033</b>	<b>127-3023A1</b>	<b>A</b>
SCALE: 2:1	SOLIDWORKS	SHEET 1 OF 1	

<b>Model Number</b> 3023A1	<b>PERFORMANCE SPECIFICATIONS</b>	<b>DOC NO</b> PS3023A1
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**TRI AXIAL IEPE ACCELEROMETER**

REV C, ECN 12512, 02/25/16



- **STUD MOUNT**
- **EXCELLENT LINEARITY**
- **ULTRA LOW WEIGHT**

**PHYSICAL**

	ENGLISH		SI	
Weight, Max.	0.14	oz	4.0	grams
Connector	4- PIN		4- PIN	
Mounting Provision	5 - 40 Tapped Hole		5 - 40 Tapped Hole	
Material, Housing/Connector	Titanium Alloy		Titanium Alloy	
Sensing Element	Quartz		Quartz	
Element Style	Shear		Shear	

**PERFORMANCE**

	ENGLISH		SI	
Sensitivity, -10 / +15% [1]	10	mV/g	1	mV/m/s <sup>2</sup>
Range for ± 5 Volts Output	±500	g	±4903	m/s <sup>2</sup>
Frequency Response	±5%	1.5 to 4000	1.5 to 4000	Hz
	-5 / +15%	1.5 to 10000	1.5 to 10000	Hz
Resonant Frequency	> 40	kHz	> 40	kHz
Broad Band Resolution	0.007	Grms	0.069	m/s <sup>2</sup> rms
Spectral Noise	1.25Hz	0.003	0.029	µm/s <sup>2</sup> rms/v(Hz)
	10Hz	0.001	0.0098	µm/s <sup>2</sup> rms/v(Hz)
	100Hz	0.0002	0.00196	µm/s <sup>2</sup> rms/v(Hz)
	1000Hz	0.00005	0.00049	µm/s <sup>2</sup> rms/v(Hz)
	10000Hz	0.00004	0.00039	µm/s <sup>2</sup> rms/v(Hz)
Linearity [2]	1	% F.S.	1	% F.S.
Maximum Transverse Sensitivity	5	%	5	%
Strain Sensitivity @ 250µε	0.006	g/µε	0.06	m/s <sup>2</sup> /µε

**ENVIRONMENTAL**

Maximum Vibration	±600	Gpeak	±5884	m/s <sup>2</sup> peak
Maximum Shock	5000	Gpeak	49033	m/s <sup>2</sup> peak
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 <sup>2</sup> /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

**This family also includes:**

Model	Sensitivity (mV/g)	Frequency Response (Hz)	Mounting	Operating Temp (°F)
3023A	10 (-10 to +15%)	1.5 to 10000 (-5 to +15%)	Adhesive	-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

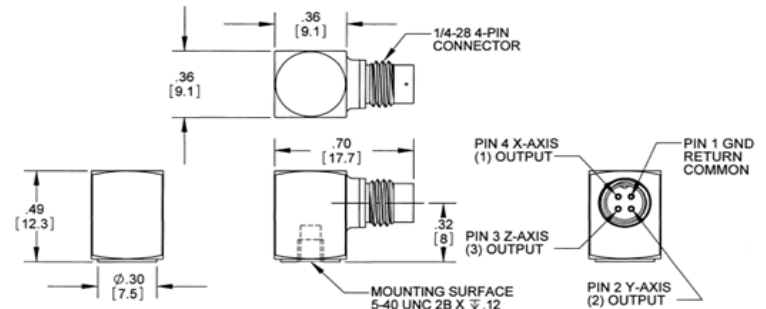
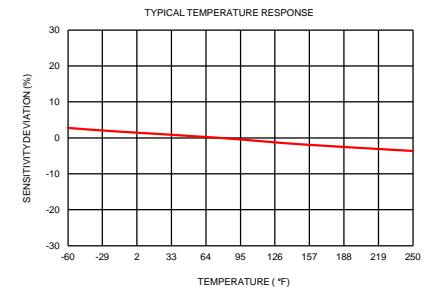
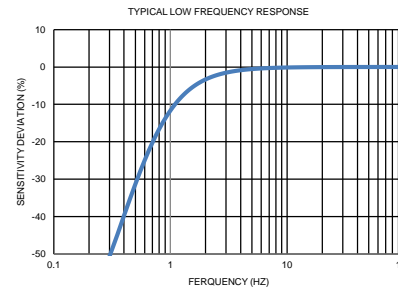
Refer to the performance specifications of the products in this family for detailed description

**Supplied Accessories:**

- 1) Accredited calibration certificate (ISO 17025)
- 2) Model 6580 Mounting Stud, Quantity 1

**Notes:**

- [1] Measured at 100Hz, 1 Grms per ISA RP 37.2.
- [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.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3023A1 for more information.



21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax:818.700.7880 www.dytran.com  
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