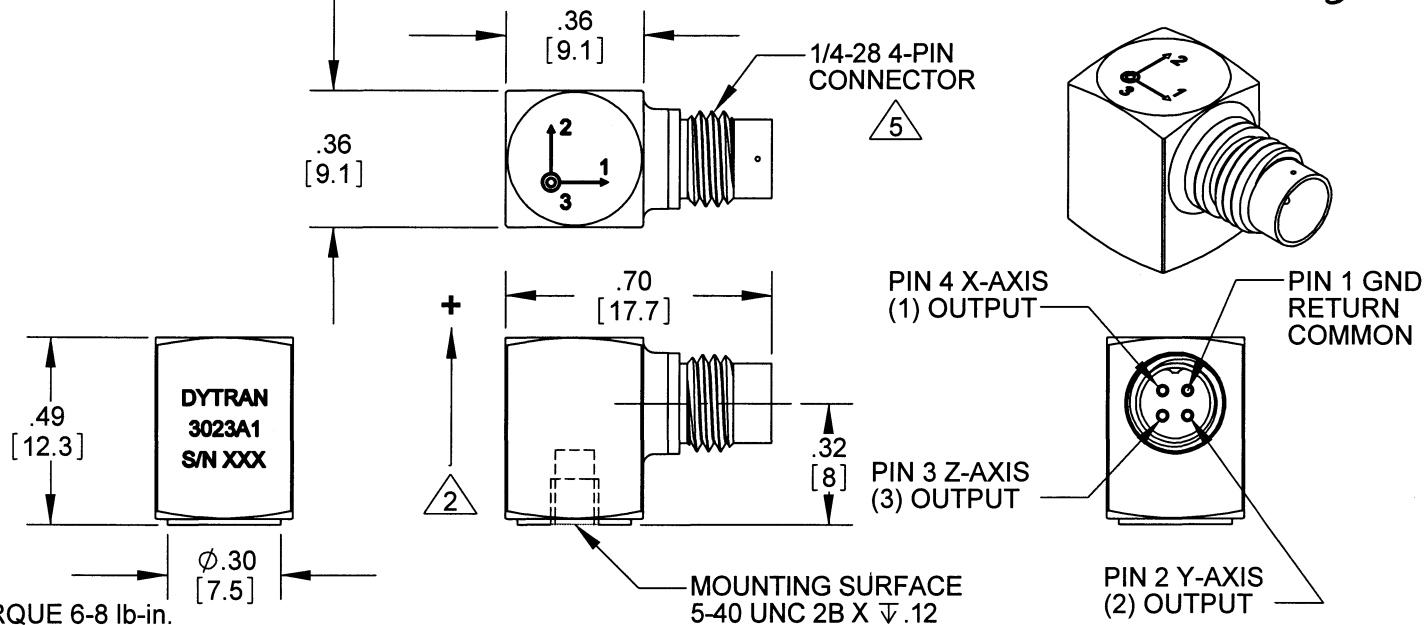


**PROPRIETARY AND CONFIDENTIAL**

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF DYTRAN INSTRUMENTS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF DYTRAN INSTRUMENTS, INC. IS PROHIBITED

**REVISIONS:**

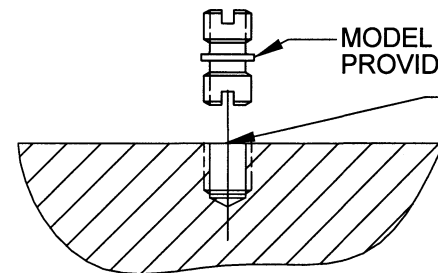
REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	6244	SEE ECN	RA, 09/14/09	JS	[Signature]



- △ 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  $\nabla$  .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

**TRI AXIAL IEPE ACCELEROMETER**

REV F, ECN 15562, 01/29/20



- **STUD MOUNT**
- **ULTRA LOW WEIGHT**

	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	

**PHYSICAL**

Weight, Max.  
Connector  
Mounting Provision  
Material, Housing/Connector  
Sensing Element  
Element Style

**PERFORMANCE**

Sensitivity, -10 / +15% [1]  
Range for ± 5 Volts Output  
Frequency Response: X & Y Axes: ±5%  
±3dB  
Z Axis: ±5%  
-5 / +15%  
Resonant Frequency  
Broad Band Resolution [5]  
Spectral Noise  
1.25Hz  
10Hz  
100Hz  
1000Hz  
10000Hz  
Linearity [2]  
Maximum Transverse Sensitivity  
Strain Sensitivity @ 250µε

10	mV/g	1	mV/m/s <sup>2</sup>
±500	g	±4903	m/s <sup>2</sup>
1.5 to 4000	Hz	1.5 to 4000	Hz
0.6 to 10000	Hz	0.6 to 10000	Hz
1.5 to 4000	Hz	1.5 to 4000	Hz
1.5 to 10000	Hz	1.5 to 10000	Hz
> 40	kHz	> 40	kHz
0.007	Grms	0.07	m/s <sup>2</sup> rms
0.003	Grms/v(Hz)	0.03	m/s <sup>2</sup> rms/v(Hz)
0.001	Grms/v(Hz)	0.01	m/s <sup>2</sup> rms/v(Hz)
0.0002	Grms/v(Hz)	0.002	m/s <sup>2</sup> rms/v(Hz)
0.00005	Grms/v(Hz)	0.0005	m/s <sup>2</sup> rms/v(Hz)
0.00004	Grms/v(Hz)	0.0004	m/s <sup>2</sup> rms/v(Hz)
1	% F.S.	1	% F.S.
5	%	5	%
0.006	g/µε	0.06	m/s <sup>2</sup> /µε

**ENVIRONMENTAL**

Maximum Vibration  
Maximum Shock  
Temperature Range  
Seal  
Magnetic Sensitivity at 100 Gauss

±600	Gpeak	±5884	m/s <sup>2</sup> peak
5000	Gpeak	49033	m/s <sup>2</sup> peak
-60 to +250	°F	-51 to +121	°C
Hermetic		Hermetic	
0.00005	g/Gauss	4.905	m/s <sup>2</sup> /T

**ELECTRICAL**

Supply Current Range [3]  
Compliance Voltage Range  
Output Impedance, Typ  
Bias Voltage  
Discharge Time Constant  
Electrical Isolation

2 to 20	mA	2 to 20	mA
18 to 30	Volts	18 to 30	Volts
100	Ω	100	Ω
7 to 11	VDC	7 to 11	VDC
0.3 to 1.5	Sec	0.3 to 1.5	Sec
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

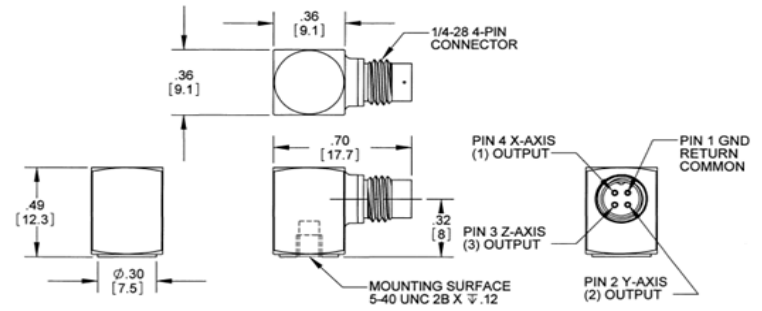
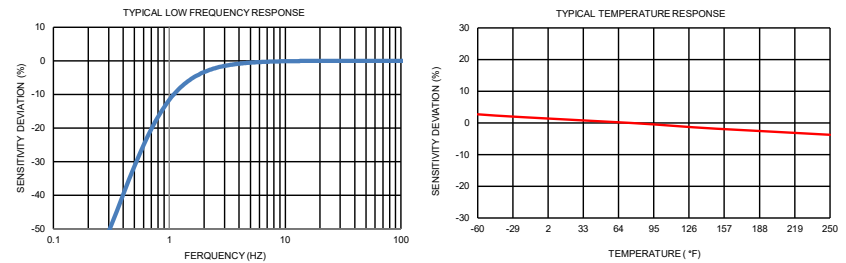
Refer to the performance specifications of the products in this family for detailed description

**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. 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 overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.
- [5] Typical. Not to exceed .010 Grms [ .10 m/s<sup>2</sup>].



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

