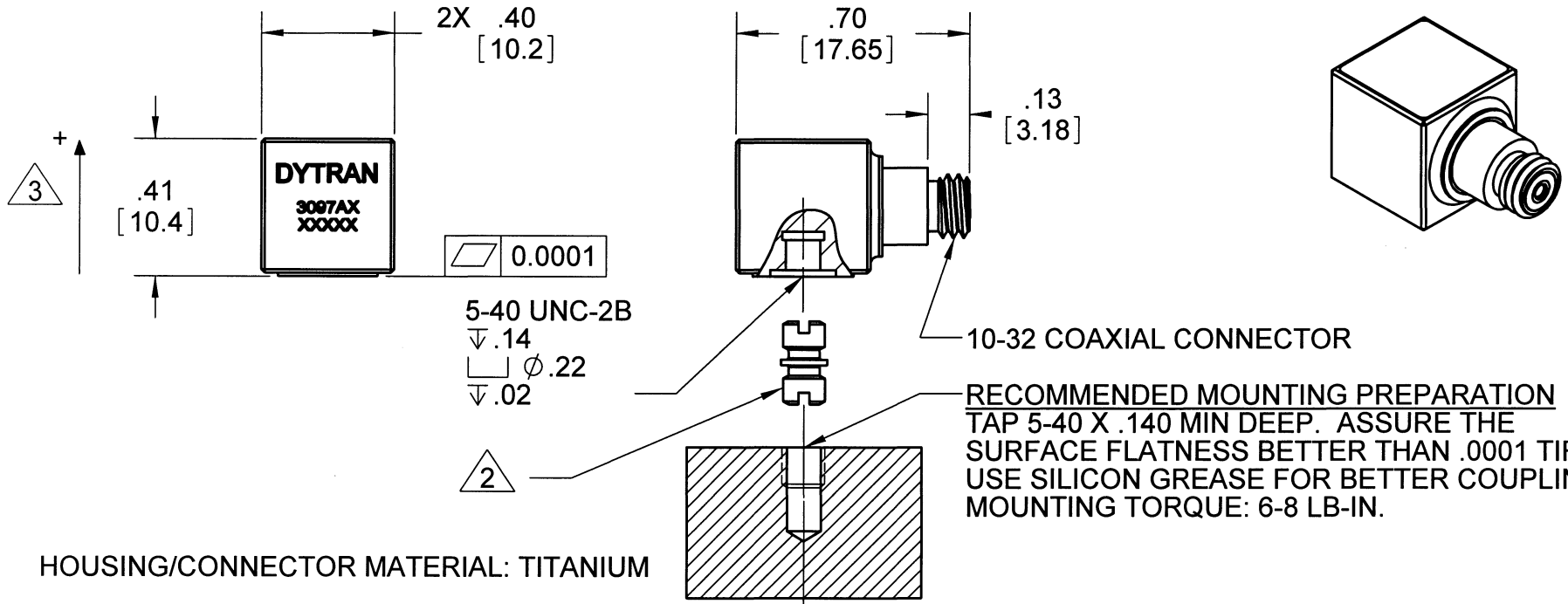


**PROPRIETARY AND CONFIDENTIAL**

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**REVISIONS**

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
C	5902	IS: 6580 WAS: 6728	RA, 04/03/09	De	As



- 5. HOUSING/CONNECTOR MATERIAL: TITANIUM
  - 4. WEIGHT: 4.3 GMS
  - 3. ARROW DESIGNATES UNIT'S POLARITY
  - 2. MOUNTING STUD 6580 (5-40 TO 5-40) SUPPLIED
  - 1. DELETED
- NOTES: UNLESS OTHERWISE SPECIFIED

MODEL	SENSITIVITY
3097A3	500mV/g
3097A2	100mV/g
3097A1	10mV/g

3097A

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.  
 TOLERANCES ARE:

DECIMALS	ANGLES
.XX ± .010	± 1°
.XXX ± .005	

MATERIAL

FINISH

**DO NOT SCALE DRAWING**

CONTRACT NO.

APPROVALS		DATE
ORIG	DV	09/11/08
CHK	DV	09/11/08
APP	DV	09/11/08
APP		

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TITLE: **OUTLINE/ INSTALLATION DRAWING, 3097A SERIES**

SIZE <b>A</b>	CAGE CODE <b>2W033</b>	DWG. NO. <b>127-3097A</b>	REV <b>C</b>
SCALE: 2:1	SOLIDWORKS	SHEET 1 OF 1	

<b>Model Number</b> 3097A3	<b>PERFORMANCE SPECIFICATIONS</b>	<b>DOC NO</b> PS3097A3
<b>IEPE ACCELEROMETER</b>		REV E, ECN 13042, 10/28/16



- **MINIATURE SIZE**
- **HERMETICALLY SEALED**
- **EXCELLENT LINEARITY**

**PHYSICAL**

Weight  
 Connector [1] Type  
 Mounting Provision Tapped Hole  
 Material, Housing/Connector  
 Sensing Element  
 Element Style

ENGLISH		SI	
0.15	oz	4.3	grams
10-32		10-32	
5-40 UNC-2B		5-40 UNC-2B	
TITANIUM		TITANIUM	
CERAMIC		CERAMIC	
PLANAR SHEAR		PLANAR SHEAR	

**PERFORMANCE**

Sensitivity, ±5% [2]  
 Range for ± 5 Volts Output  
 Frequency Response, ±5%  
 ±15%  
 Resonant Frequency  
 Broad Band Resolution  
 Spectral Noise  
 1Hz  
 10Hz  
 100Hz  
 1000Hz  
 10000Hz  
 Linearity [2]  
 Maximum Transverse sensitivity  
 Strain Sensitivity @ 250µε  
 Phase Response ±5°

500	mV/G	51	mV/m/s <sup>2</sup>
10	G peak	98	m/s <sup>2</sup>
0.3 to 5000	Hz	0.3 to 5000	Hz
0.15 to 10,000	Hz	0.15 to 10,000	Hz
> 35	kHz	> 35	kHz
0.00175	G rms	0.00172	m/s <sup>2</sup> rms
8.5	µgrms/√(Hz)	83.4	µm/s <sup>2</sup> rms/v(Hz)
6.5	µgrms/√(Hz)	63.8	µm/s <sup>2</sup> rms/v(Hz)
2.3	µgrms/√(Hz)	22.6	µm/s <sup>2</sup> rms/v(Hz)
1.4	µgrms/√(Hz)	13.7	µm/s <sup>2</sup> rms/v(Hz)
1.0	µgrms/√(Hz)	9.8	µm/s <sup>2</sup> rms/v(Hz)
±1	% F.S.	±1	% F.S.
5	%	5	%
0.002	G/µε	0.02	m/s <sup>2</sup> /µε
5 to 3000	Hz	5 to 3000	Hz

**ENVIRONMENTAL**

Maximum Vibration  
 Maximum Shock  
 Temperature Range (<5% Sensitivity Deviation)  
 Temperature Range  
 Temperature Range (Storage)  
 Seal

200	G peak	1962	m/s <sup>2</sup> peak
5000	G peak	49050	m/s <sup>2</sup> peak
+50 to +100	°F	+10 to +38	°C
-60 to 150	°F	-51 to 65	°C
-60 to +250	°F	-51 to +121	°C
HERMETIC		HERMETIC	

**ELECTRICAL**

Supply Current Range [3]  
 Compliance Voltage Range  
 Output Impedence, Typ  
 Bias Voltage  
 Discharge Time Constant

2 to 20	mA	2 to 20	mA
+18 to +30	Volts	+18 to +30	Volts
100	Ω	100	Ω
+11 to +13	VDC	+11 to +13	VDC
1.5 to 2.5	Sec	1.5 to 2.5	Sec

**This family also includes:**

Model	Sensitivity (mV/g)	Frequency Response ±5%, (Hz)	Time Constant (Sec)	Operating Temp (°F)
3097A1	10	0.3 to 5000	1.5 to 2.5	-60 to 200
3097A2	100	0.3 to 5000	1.5 to 2.5	-60 to 180

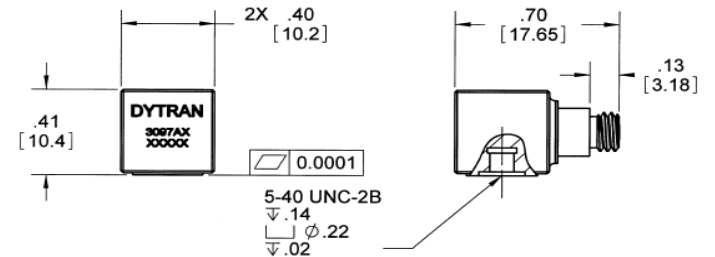
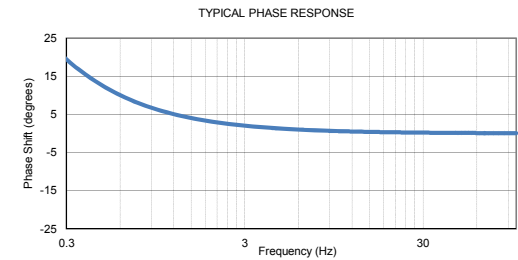
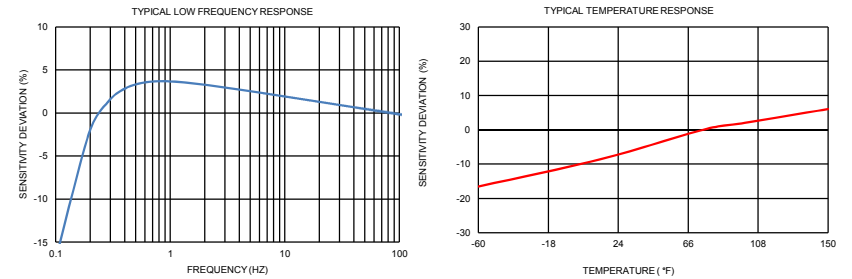
Refer to the performance specifications of the products in this family for detailed description

**Supplied Accessories:**

- 1) Accredited calibration certificate (ISO 17025)
- 2) Model 6580 mounting stud (5-40 to 5-40), qty 1

**Notes:**

- [1] Coaxial, 10-32 connector. Mates with Dytran cable Model 6010AXX or 6011AXX
- [2] Measured at 100Hz, 1 Grms per ISA RP 37.2.
- [3] Measure using zero-based straight line method, % of F.S. or any lesser range.
- [5] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.
- [6] 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 127-3097A for more information.

