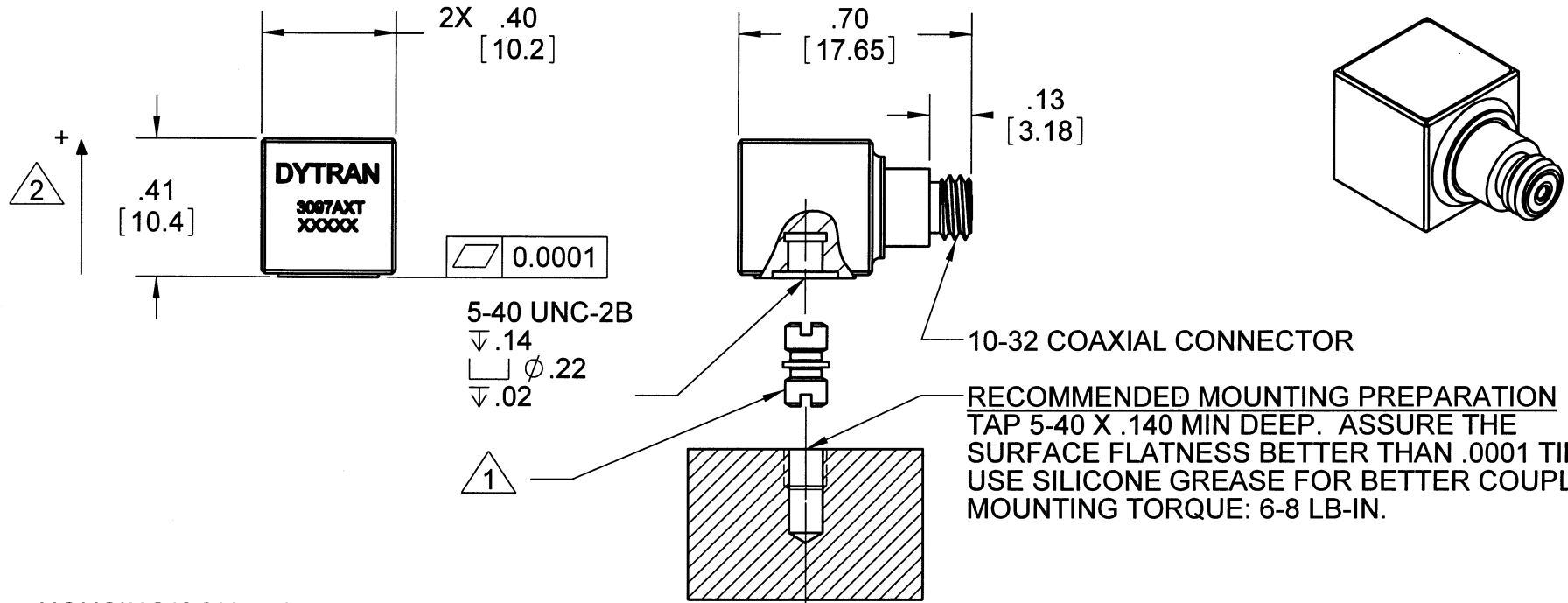


**PROPRIETARY AND CONFIDENTIAL**

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**REVISIONS**

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	6192	INITIAL RELEASE	RA, 08/20/09	<i>ep</i>	<i>SA</i>



4. HOUSING/CONNECTOR MATERIAL: TITANIUM

3. WEIGHT: 4.3 GRAMS

ARROW DESIGNATES UNIT'S POLARITY

MOUNTING STUD 6580 (5-40 TO 5-40) SUPPLIED

MODEL	SENSITIVITY
3097A3T	500mV/g
3097A2T	100mV/g
3097A1T	10mV/g

NOTES: UNLESS OTHERWISE SPECIFIED

3097AT SERIES	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	R.A.	08/20/09
CHK	<i>ep</i>	8/24/09
APP	<i>SA</i>	8/2/09
APP		

**DYTRAN INSTRUMENTS, INC.** Chatsworth, CA

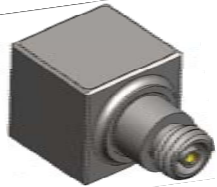
**MASTER ONLY IF IN RED**

TITLE:  
**OUTLINE/INSTALLATION DRAWING,  
 3097AT TEDS SERIES**

SIZE	CAGE CODE	DWG. NO.	REV
<b>A</b>	<b>2W033</b>	<b>127-3097AT</b>	<b>A</b>

SCALE: 2:1      SOLIDWORKS      SHEET 1 OF 1

<b>Model Number</b> 3097A3T	<b>PERFORMANCE SPECIFICATION</b>		<b>DOC NO</b> PS3097A3T
	<b>SINGLE AXIS IEPE PLANAR SHEAR ACCELEROMETERS</b>		REV B, ECN 7213, 11/16/10



- MINIATURE SIZE
- HERMETICALLY SEALED
- EXCELLENT LINEARITY

**PHYSICAL**

Weight  
Size  
Connector  
Mounting Provision : Tapped Hole  
Material : Base, Cap and Connector  
Element Style

	ENGLISH		SI	
Weight	0.15	oz	4.3	grams
Size	.40 x .40 x .41	Inches	10.16 x 10.16 x 10.41	mm
Connector Type	10-32 Coaxial		10-32 Coaxial	
Mounting Provision	5-40 UNC-2B		5-40 UNC-2B	
Material	Titanium		Titanium	
Element Style	Ceramic		Ceramic	
	Planar Shear		Planar Shear	

**PERFORMANCE**

Sensitivity, ±5% [1]  
Range F.S for ± 5 Volts Output  
Frequency Range, ±5%  
±15%  
Resonant Frequency, Nominal  
Equivalent Electrical Noise Floor  
Linearity [2]  
Phase Response (±5°)  
Maximum Transverse sensitivity  
Strain Sensitivity

Sensitivity	500	mV/g	51.02	mV/m/s <sup>2</sup>
Range F.S	±10	G's	±98	m/s <sup>2</sup>
Frequency Range	0.3 to 5000	Hz	0.3 to 5000	Hz
	0.15 to 10,000	Hz	0.15 to 10,000	Hz
Resonant Frequency	> 35	kHz	> 35	kHz
Equivalent Electrical Noise Floor	0.0002	Grms	0.002	m/s <sup>2</sup> rms
Linearity	± 1%	% F.S.	± 1%	% F.S.
Phase Response	3 to 3000	Hz	3 to 3000	Hz
Maximum Transverse sensitivity	5	%	5	%
Strain Sensitivity	0.002	g/μσ	0.02	m/s <sup>2</sup> /μσ

**ENVIRONMENTAL**

Maximum Vibration  
Maximum Shock  
Temperature Range  
Seal, Hermetic

Maximum Vibration	±200	Gpeak	±1962	m/s <sup>2</sup> peak
Maximum Shock	±5000	Gpeak	±49050	m/s <sup>2</sup> peak
Temperature Range	-60 to +150	°F	-51 to +65	°C
Seal, Hermetic	Glass-to-metal/Welded		Glass-to-metal/Welded	

**ELECTRICAL**

Supply Current Range [3]  
Compliance Voltage Range  
Output Impedence, Typ  
Bias Voltage  
Discharge Time Constant, Nom  
Output Signal Polarity for Acceleration Towards Top

Supply Current Range	2 to 20	mA	2 to 20	mA
Compliance Voltage Range	+18 to +30	Volts	+18 to +30	Volts
Output Impedence	100	Ω	100	Ω
Bias Voltage	+11 to +13	VDC	+11 to +13	VDC
Discharge Time Constant	1.5 to 2.5	Sec	1.5 to 2.5	Sec
Output Signal Polarity	Positive		Positive	

**This family also includes:**

Model	Sensitivity (mV/g)	Range F.S ± 5 Volts (G's)	Max Vibration/Shock(± Gpeak)	Resonant Frequency (kHz)
3097A1T	10	±500	600/5000	40
3237A2T	100	±50	400/5000	40

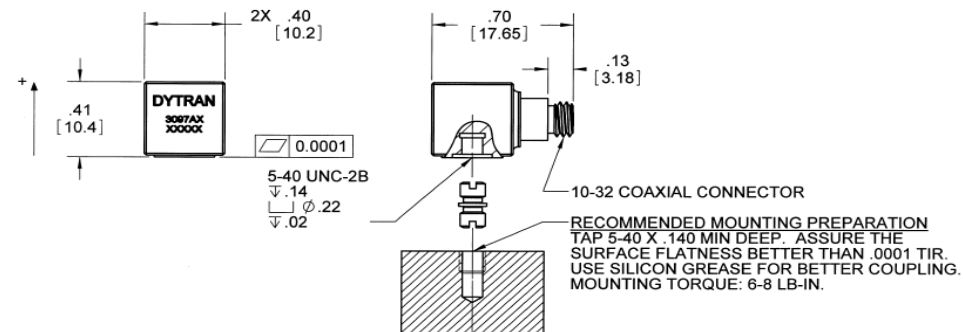
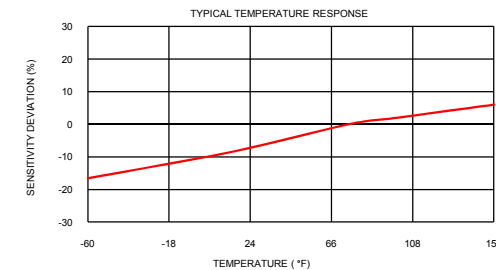
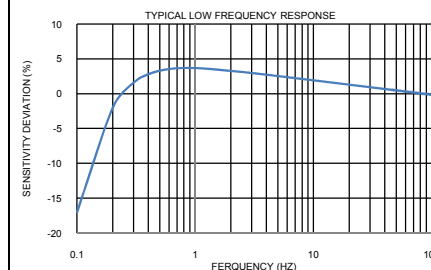
Refer to the performance specifications of the products in this family for detailed description

**Supplied Accessories:**

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

**Notes:**

- [1] Measure 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



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3097A for more information.



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