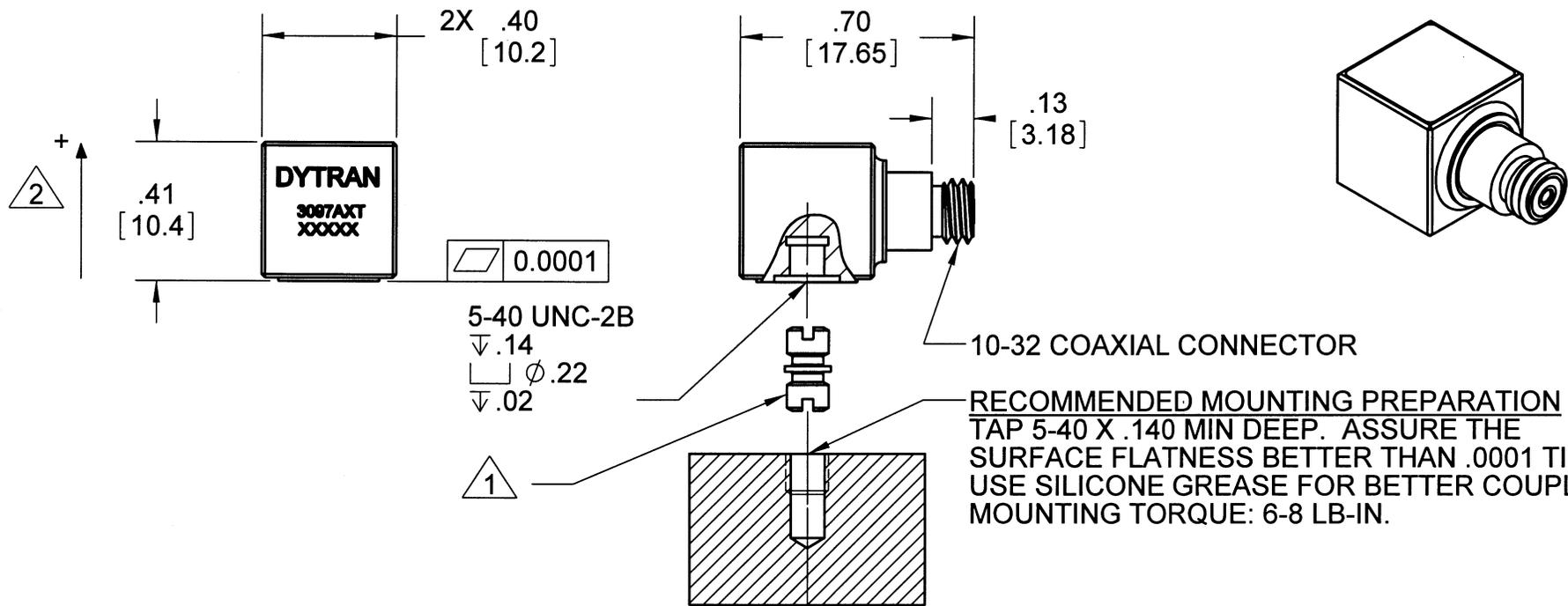


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REVISIONS

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



RECOMMENDED MOUNTING PREPARATION
 TAP 5-40 X .140 MIN DEEP. ASSURE THE SURFACE FLATNESS BETTER THAN .0001 TIR. USE SILICONE GREASE FOR BETTER COUPLING. MOUNTING TORQUE: 6-8 LB-IN.

4. HOUSING/CONNECTOR MATERIAL: TITANIUM

3. WEIGHT: 4.3 GRAMS

2 ARROW DESIGNATES UNIT'S POLARITY

1 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>	8/24/09
APP		

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

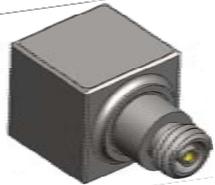
MASTER ONLY IF IN RED

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

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3097AT	A

SCALE: 2:1 SOLIDWORKS SHEET 1 OF 1

Model Number 3097A1T	PERFORMANCE SPECIFICATION		DOC NO PS3097A1T
	SINGLE AXIS IEPE PLANAR SHEAR ACCELEROMETERS		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	10	mV/g	1.02	mV/m/s ²
Range F.S	±500	G's	±4905	m/s ²
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	0.001	Grms	0.010	m/s ² rms
Linearity	± 1%	% F.S.	± 1%	% F.S.
Phase Response	5 to 3000	Hz	5 to 3000	Hz
Maximum Transverse sensitivity	5	%	5	%
Strain Sensitivity	0.002	g/μσ	0.02	m/s ² /μσ

ENVIRONMENTAL

Maximum Vibration
Maximum Shock
Temperature Range
Seal, Hermetic

Maximum Vibration	±600	Gpeak	±5886	m/s ² peak
Maximum Shock	±5000	Gpeak	±49050	m/s ² peak
Temperature Range	-60 to +200	°F	-51 to +93	°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)
3097A2T	100	±50	400/5000	> 35
3237A3T	500	±10	200/5000	> 35

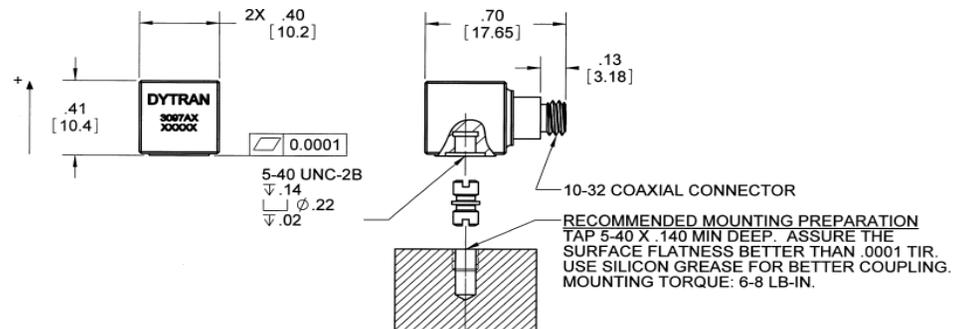
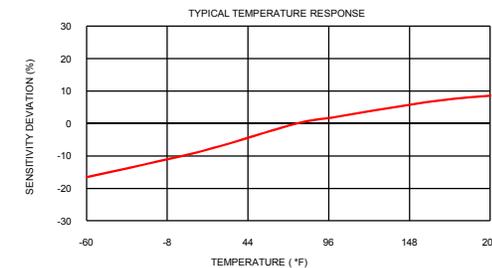
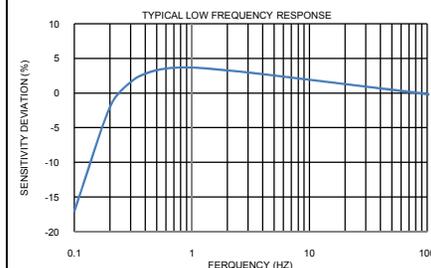
Refer to the performance specifications of the products in this family for detailed description

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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