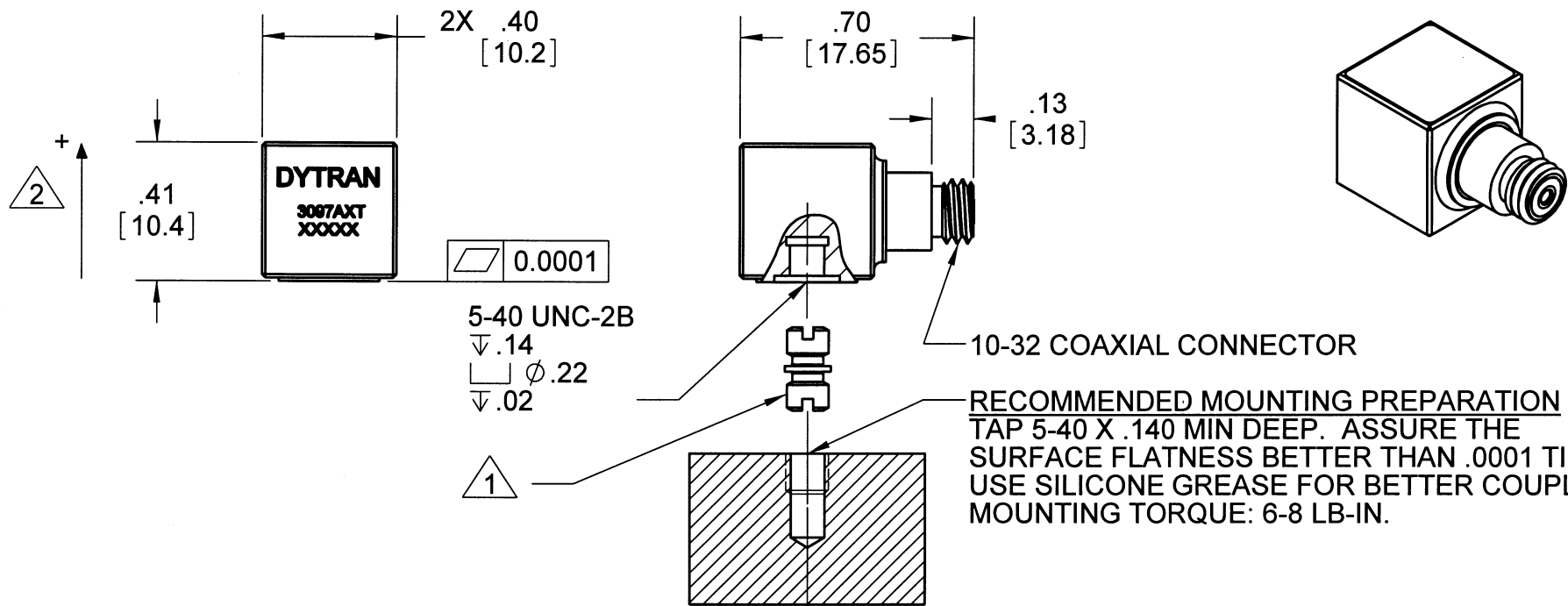


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REVISIONS

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



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.
CHK	08/20/09
APP	08/24/09
APP	08/24/09

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

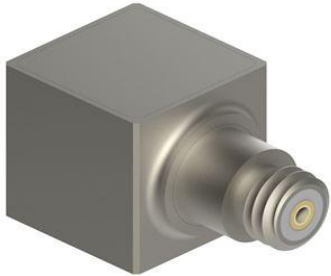
MASTER ONLY IF IN RED

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 3097A2T	PERFORMANCE SPECIFICATION	DOC NO PS3097A2T
	SINGLE AXIS IEPE PLANAR SHEAR ACCELEROMETERS	REV D, ECN 13572, 07/21/17



- MINIATURE SIZE
- HERMETICALLY SEALED
- EXCELLENT LINEARITY
- TEDS FEATURE

PHYSICAL

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

Square x Height
Type

Material
Type

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	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%
Resonant Frequency
Equivalent Electrical Noise Floor
Linearity [2]
Phase Response (±5°)
Maximum Transverse sensitivity
Strain Sensitivity

Sensitivity	100 mV/g	10.20	mV/m/s ²
Range F.S	±50 G's	±490	m/s ²
Frequency Range	0.3 to 5,000 Hz	0.3 to 5,000	Hz
	0.15 to 10,000 Hz	0.15 to 10,000	Hz
Resonant Frequency	>35 kHz	>35	kHz
Equivalent Electrical Noise Floor	0.0004 Grms	0.004	m/s ² rms
Linearity [2]	± 1% % F.S.	± 1%	% F.S.
Phase Response (±5°)	5 to 3000 Hz	5 to 3000	Hz
Maximum Transverse sensitivity	5 %	5	%
Strain Sensitivity	0.002 g/μs	0.02	m/s ² /μs

ENVIRONMENTAL

Maximum Vibration
Maximum Shock
Temperature Range
TEDS Operating Temperature
Seal, Hermetic

Maximum Vibration	±400 Gpeak	±3924	m/s ² peak
Maximum Shock	±5000 Gpeak	±49050	m/s ² peak
Temperature Range	-60 to +180 °F	-51 to +82 °C	°C
TEDS Operating Temperature	-40 to +185 °F	-40 to +85 °C	°C
Seal, Hermetic	Glass-to-metal/Welded	Glass-to-metal/Welded	

ELECTRICAL

Supply Current Range [3]
Compliance Voltage Range
Output Impedance, Typ
Bias Voltage
Discharge Time Constant, Nom
Output Signal Polarity for Acceleration Towards Top
Electrical Isolation
TEDS Feature

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	+11 to +13 VDC	+11 to +13	VDC
Discharge Time Constant, Nom	1.5 to 2.5 Sec	1.5 to 2.5	Sec
Output Signal Polarity for Acceleration Towards Top	Positive	Positive	
Electrical Isolation	Case Grounded	Case Grounded	
TEDS Feature	IEEE 1451.4	IEEE 1451.4	

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	>35
3237A3T	500	±10	200/5000	>35

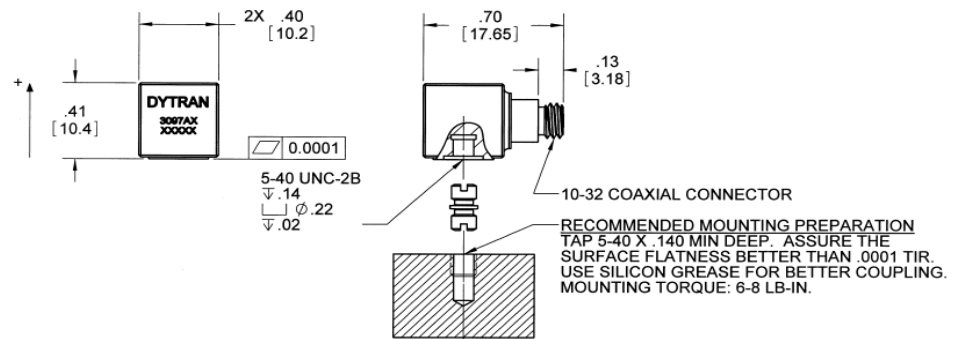
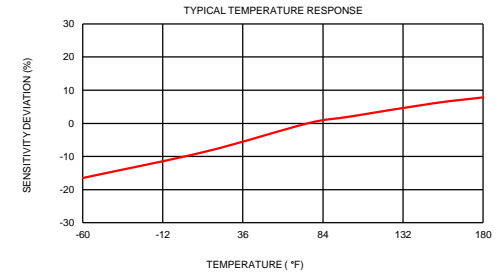
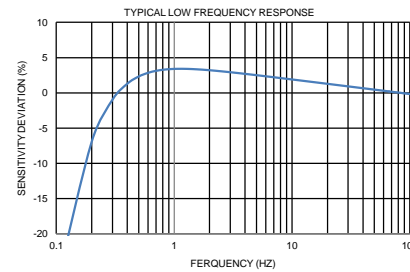
Refer to the performance specifications of the products in this family for detailed description

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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