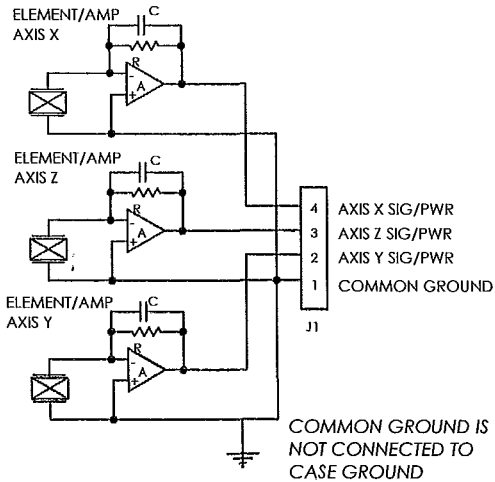


**PROPRIETARY AND CONFIDENTIAL**

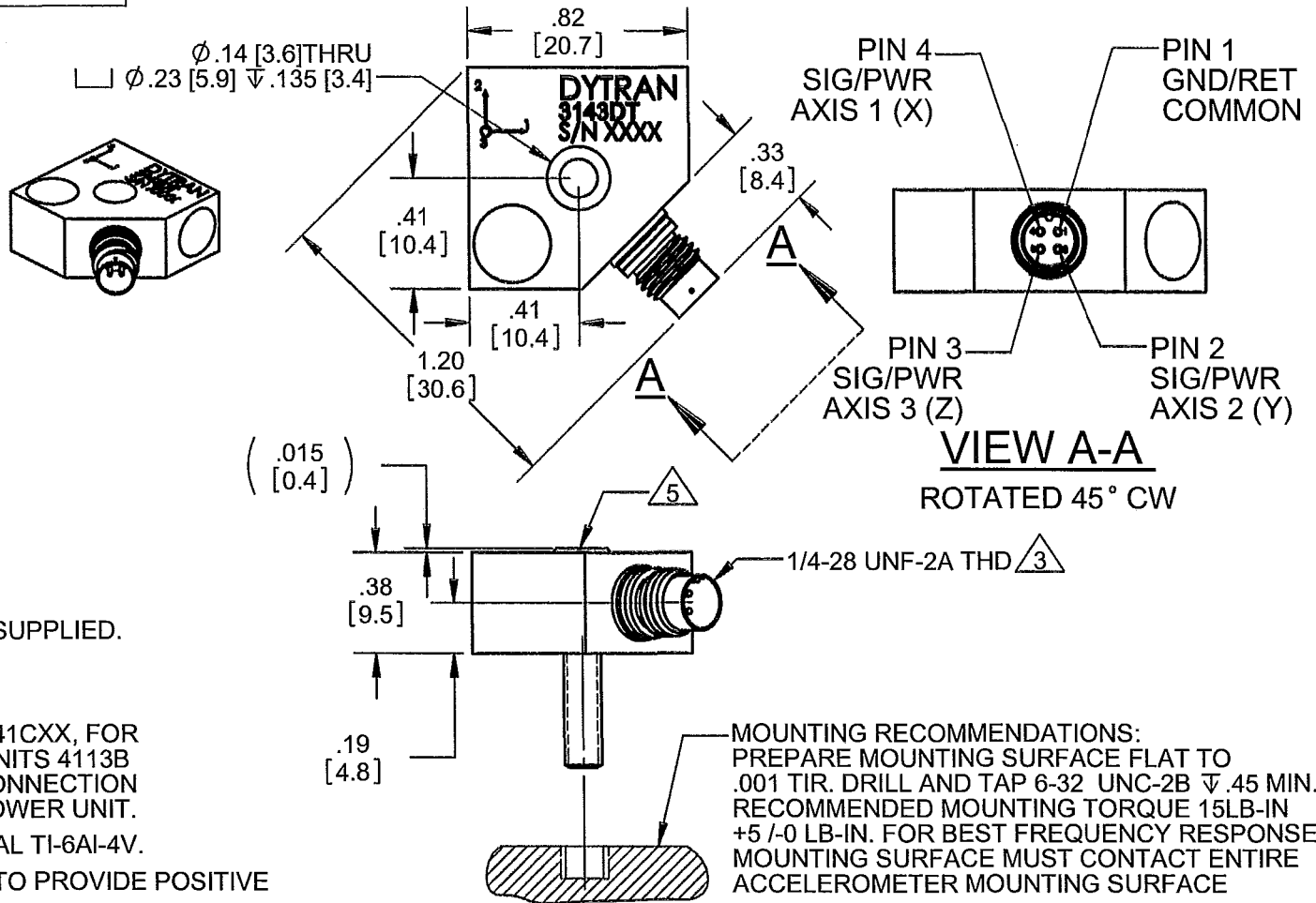
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**REVISIONS**

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	9241	INITIAL RELEASE	AB 10/09/12	96	<i>[Signature]</i>



**SCHMATIC DIAGRAM**



**VIEW A-A**  
ROTATED 45° CW

**MOUNTING RECOMMENDATIONS:**  
PREPARE MOUNTING SURFACE FLAT TO .001 TIR. DRILL AND TAP 6-32 UNC-2B  $\nabla$ .45 MIN. RECOMMENDED MOUNTING TORQUE 15LB-IN +5 /-0 LB-IN. FOR BEST FREQUENCY RESPONSE MOUNTING SURFACE MUST CONTACT ENTIRE ACCELEROMETER MOUNTING SURFACE

- 5 MODEL 6247A1, MOUNTING SCREW SUPPLIED.
- 4. WEIGHT: 15 GRAMS MAX.
- 3 RECOMMENDED CABLES: MODEL 6041CXX, FOR CONNECTION TO DYTRAN POWER UNITS 4113B AND 4103C. MODEL 6811AXX FOR CONNECTION TO MODEL 4114B FOUR-CHANNEL POWER UNIT.
- 2. HOUSING AND CONNECTOR MATERIAL TI-6Al-4V.
- 1. ARROWS INDICATE THE DIRECTION TO PROVIDE POSITIVE OUTPUT.

**NOTES UNLESS OTHERWISE SPECIFIED**

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.	
USED ON	NEXT ASSY
APPLICATION	
THIRD ANGLE PROJECTION USA	
ALL MACHINED SURFACES. $\checkmark$ 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 $\pm$ .03    .X $\pm$ 0.8 $\pm$ 1° .XXX $\pm$ .010    .XX $\pm$ 0.25	
MATERIAL	
FINISH	
DO NOT SCALE DRAWING	

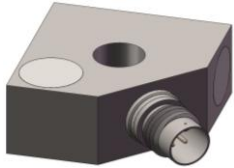
CONTRACT NO.	
APPROVALS	
ORIG	DATE
CHK	11/19/12
APP	<i>[Signature]</i>
APP	10/15/12

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TITLE: **OUTLINE INSTALLATION DRAWING, 3143DT**

SIZE	CAGE CODE	DWG. NO.	REV
<b>A</b>	<b>2W033</b>	<b>127-3143DT</b>	<b>A</b>
SCALE: NONE		SOLIDWORKS	SHEET 1 OF 1

	<b>IEPE ACCELEROMETER</b>		REV C, ECN 13573, 07/21/17
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- HERMETICALLY SEALED
- EXCELLENT LINEARITY
- TEDS FUNCTIONALITY

**PHYSICAL**  
 Weight, MAX  
 Connector Type  
 Mounting Provision Thru Hole  
 Material, Housing/Connector  
 Sensing Element  
 Element Style

ENGLISH		SI	
0.53	oz	15	grams
4 - PIN		4 - PIN	
6-32 MOUNTING SCREW		6-32 MOUNTING SCREW	
TITANIUM		TITANIUM	
CERAMIC		CERAMIC	
PLANAR SHEAR		PLANAR SHEAR	

**PERFORMANCE**  
 Sensitivity, ±5% [1]  
 Range for ± 5 Volts Output  
 Frequency Response, ±5%  
 Resonant Frequency  
 Broad Band Resolution  
 Linearity [2]  
 Maximum Transverse sensitivity  
 Strain Sensitivity @ 250µε

10	mV/G	1	mV/m/s <sup>2</sup>
500	G peak	4905	m/s <sup>2</sup>
0.4 to 3000	Hz	0.4 to 3000	Hz
> 25	kHz	> 25	kHz
0.007	G rms	0.069	m/s <sup>2</sup> rms
± 1	% F.S.	± 1	% F.S.
5	%	5	%
0.012	G/µε	0.12	m/s <sup>2</sup> /µε

**ENVIRONMENTAL**  
 Maximum Vibration  
 Maximum Shock  
 Operating Temperature Range  
 TEDS Operating Range  
 Survival Temperature Range  
 Seal

600	G peak	5886	m/s <sup>2</sup> peak
1500	G peak	14715	m/s <sup>2</sup> peak
-60 to 185	°F	-51 to 85	°C
-40 to +185	°F	-40 to +85	°C
-100 to 225	°F	-73 to 107	°C
HERMETIC		HERMETIC	

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

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
0.9 to 2	Sec	0.9 to 2	Sec
10	GΩ, min	10	GΩ, min
IEEE 1451.4		IEEE 1451.4	

**This family also includes:**

Model	Sensitivity (mV/g)	Frequency Response (Hz)	Time Constant (Sec)	Operating Temp (°F)

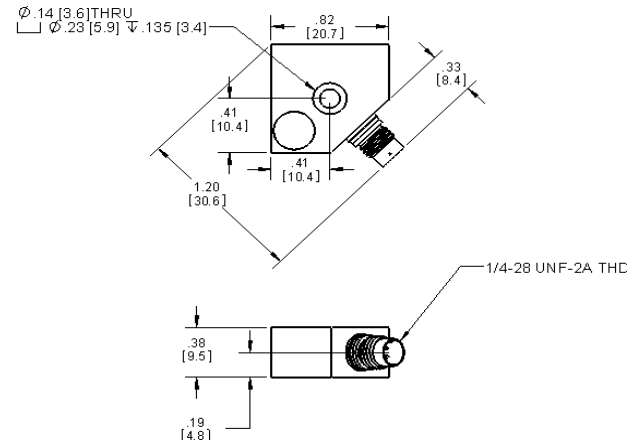
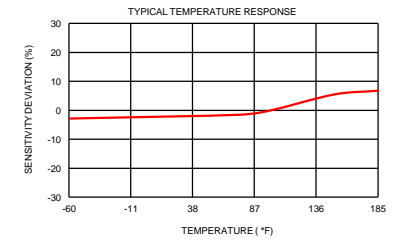
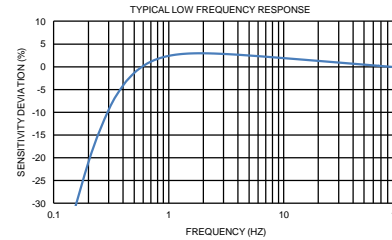
Refer to the performance specifications of the products in this family for detailed description

**Supplied Accessories:**

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mounting screw Model 6247A1

**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.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3143DT for more information.

