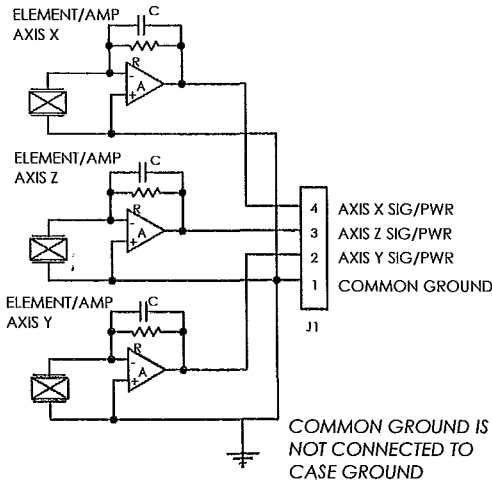


**PROPRIETARY AND CONFIDENTIAL**

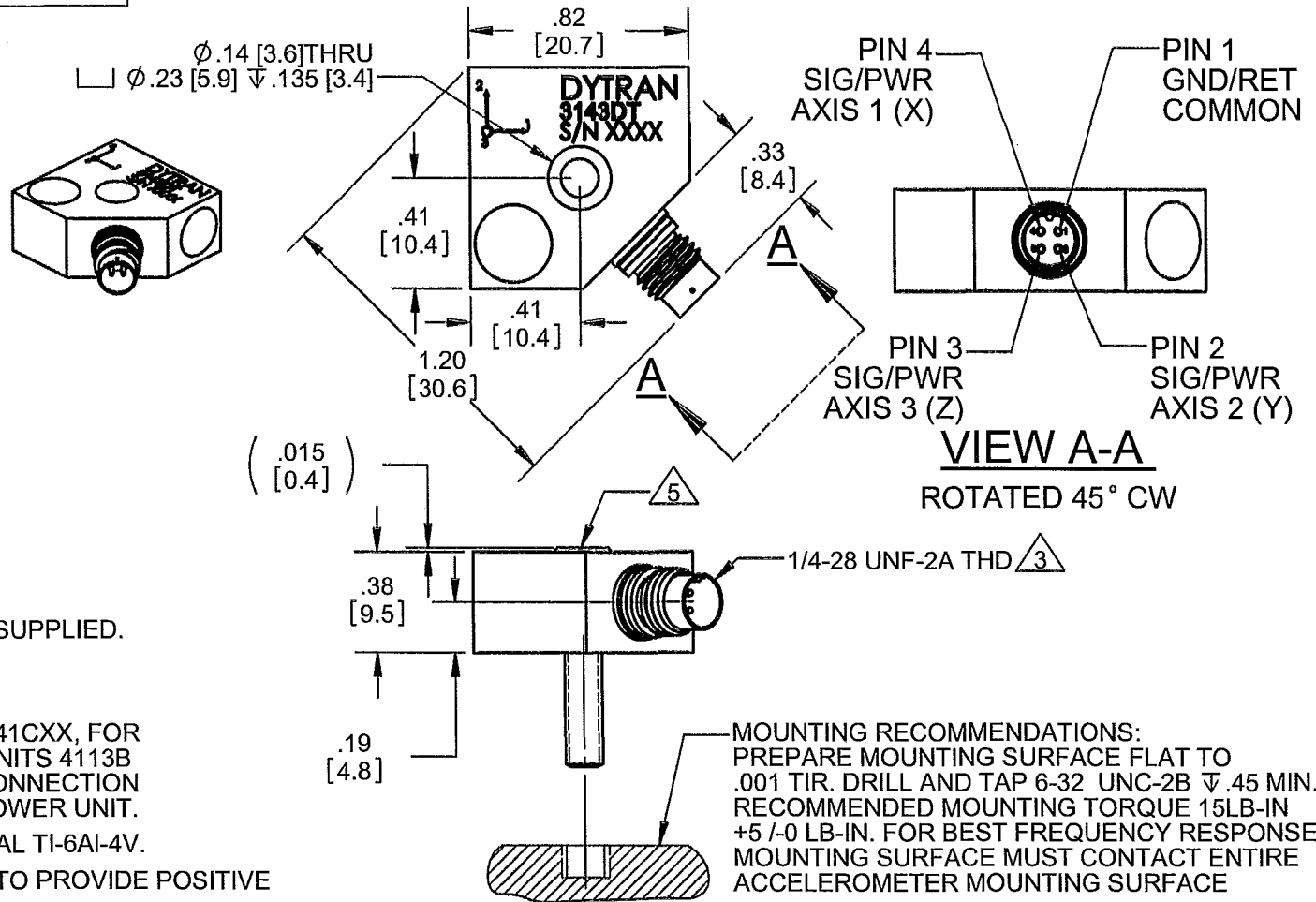
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**REVISIONS**

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	9241	INITIAL RELEASE	AB 10/09/12	96	AB



**SCHMATIC DIAGRAM**



- 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.

**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

**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.	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
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.	

MATERIAL	
FINISH	
DO NOT SCALE DRAWING	

CONTRACT NO.	
APPROVALS	
ORIG	DATE
CHK	11/19/12
APP	10/15/12
APP	

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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

**Model Number**  
3143DT

## PERFORMANCE SPECIFICATIONS

**DOC NO**  
PS3143DT

### IEPE ACCELEROMETER

REV B, ECN 11428, 11/11/14



- HERMETICALLY SEALED
- EXCELLENT LINEARITY
- TEDS FUNCTIONALITY

**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.

**PHYSICAL**

Weight, MAX  
Connector  
Mounting Provision  
Material, Housing/Connector  
Sensing Element  
Element Style

Type  
Thru Hole

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**

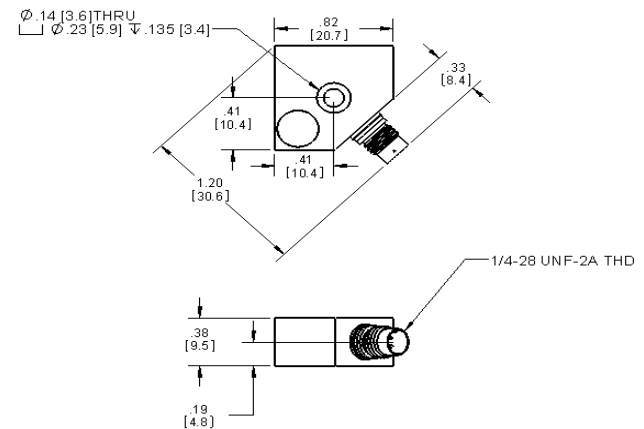
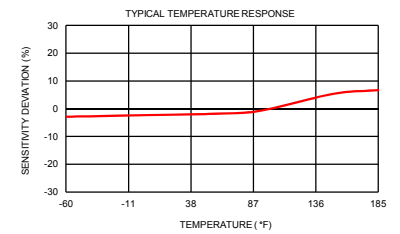
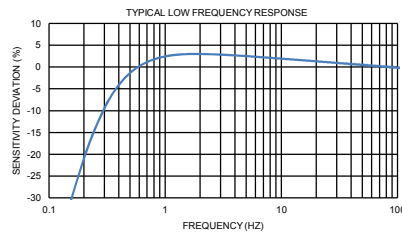
Maximum Vibration  
Maximum Shock  
Operating Temperature Range  
Survival Temperature Range  
Seal

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
-100 to 225	*F	-73 to 107	*C
HERMETIC		HERMETIC	

**ELECTRICAL**

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

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	



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



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