

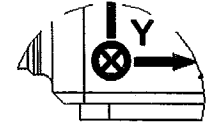
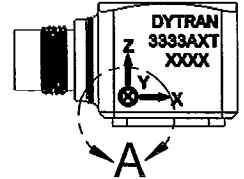
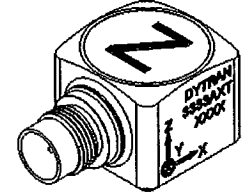
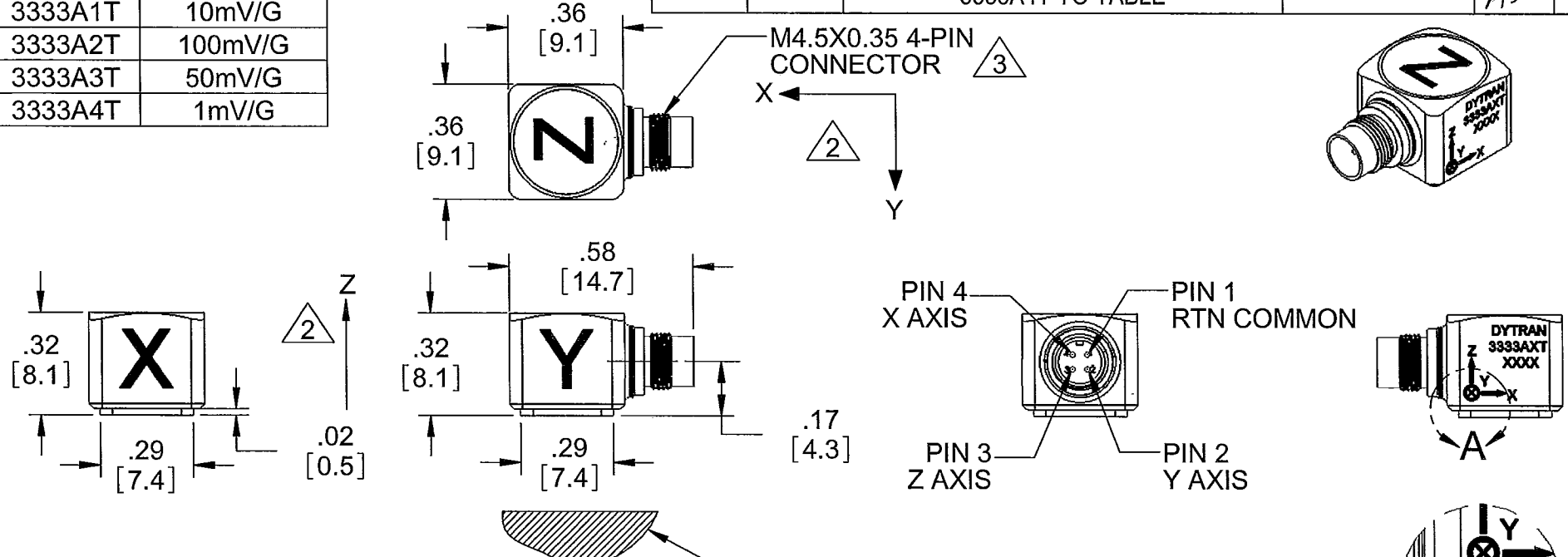
**PROPRIETARY AND CONFIDENTIAL**

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**REVISIONS**

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	8849	INITIAL RELEASE	AB 08/16/12	JS	DV
B	9718	ADDED 6649AXX CABLE TO NOTE 3, 3333A4T TO TABLE	JS 04/05/13	AS	RT

MODEL	SENSITIVITY
3333A1T	10mV/G
3333A2T	100mV/G
3333A3T	50mV/G
3333A4T	1mV/G



**MOUNTING RECOMMENDATIONS**  
 PREPARE A SURFACE AT LEAST .50 BY .50. SURFACE FLATNESS MUST BE EQUAL OR BETTER THAN .001 TIR. USE ONE DROP OF CYANOACRYLATE TO MOUNT THE ACCELEROMETER.

**DETAIL A**  
**SCALE 4 : 1**

4. HOUSING/CONNECTOR MATERIAL: TITANIUM

3 MATES WITH 6893AXX CABLE OR LOW OUTGASSING 6649AXX CABLE

2 ARROWS INDICATE DIRECTIONS OF ACCELERATION FOR POSITIVE OUTPUT

1. WEIGHT: 2.4 GRAMS APPROX

NOTES: UNLESS OTHERWISE SPECIFIED

USED ON	NEXT ASSY	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.
APPLICATION		
THIRD ANGLE PROJECTION USA		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
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.		

MATERIAL	APPROVALS	DATE
FINISH	ORIG AB	07/10/12
DO NOT SCALE DRAWING	CHK JS	08/21/12
	APP DV	09/04/12
	APP	

CONTRACT NO. \_\_\_\_\_

**DYTRAN INSTRUMENTS INC. Chatsworth, CA**

TITLE: **OUTLINE/INSTALLATION DRAWING, 3333AT**

SIZE <b>A</b>	CAGE CODE <b>2W033</b>	DWG. NO. <b>127-3333AT</b>	REV <b>B</b>
SCALE: 2:1	SOLIDWORKS	SHEET 1 OF 1	

<b>MODEL NUMBER</b> 3333A1T	<b>PERFORMANCE SPECIFICATION</b>	<b>DOC NO</b> PS3333A1T
	<b>Accelerometer, Triaxial, IEPE</b>	REV B, ECN 12879 08/12/16



- **ULTRA LOW FREQUENCY RESPONSE**
- **ULTRA LOW NOISE LEVEL**

**PHYSICAL**

Weight, Max	0.08	oz	2.4	grams
Mounting	Adhesive			
Connector [1]	4-pin			
	Type	Ti-6 AL-4V		
	Material	Ti-6 AL-4V		
Housing	Material	Ceramic		
Sensing Element	Mode	Shear		

ENGLISH		SI	
0.08	oz	2.4	grams
Adhesive			
4-pin			
Ti-6 AL-4V			
Ti-6 AL-4V			
Ceramic			
Shear			

**PERFORMANCE**

Sensitivity, +15-10% [2]	10	mV/g	1.02	mV/m/s <sup>2</sup>
Acceleration Range,	500 Gpeak			
Frequency Range, +15/-10%	.65-10,000 Hz			
Resonance Frequency	>24 kHz			
Linearity [3]	1 %F.S.			
Transverse Sensitivity Max	5 %			
Noise floor, Max	0.003 Grms			
Spectral Noise	1Hz	629	6170	μm/s <sup>2</sup> rms/sqr(Hz)
	10Hz	110	1079	μm/s <sup>2</sup> rms/sqr(Hz)
	100Hz	67	657	μm/s <sup>2</sup> rms/sqr(Hz)
	1000Hz	31	304	μm/s <sup>2</sup> rms/sqr(Hz)
	10000Hz	16	157	μm/s <sup>2</sup> rms/sqr(Hz)

**ENVIRONMENTAL**

Shock Max	5000	g pk	49050	m/s <sup>2</sup>
Vibration Max	3000 g pk			
Operating Temperature	-60 to +225 °F			
TEDS Operating Temperature	-40 to +185 °F			
Seal	Hermetic			
Base Strain Sensitivity	0.06 g/με			
TEDS Feature [5]	IEEE 1451.4			

**ELECTRICAL**

Supply Current Range [4]	2 to 20	mA	2 to 20	mA
Compliance Voltage Range	+18 to +30 VDC			
Output Impedance, Typ.	100 Ω			
Output Bias Voltage	11 to 13 VDC			
Discharge Time Constant	0.5 - 1.5 sec			

**This family also includes:**

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3333A2T	100	50	0.00095	-60 to +180	0.5 - 1.5
3333A3T	50	100	0.002	-60 to +225	0.5 - 1.5

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

**Supplied Accessories:**

1) Accredited calibration certificate (ISO 17025)

**Notes:**

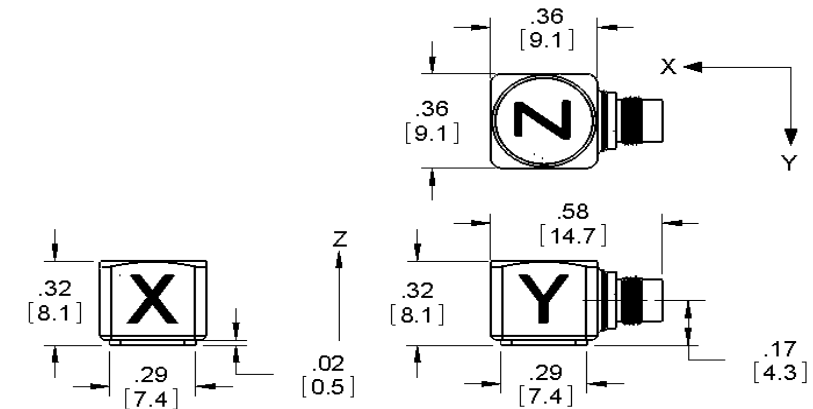
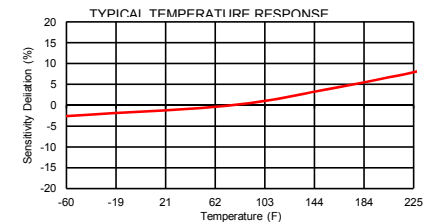
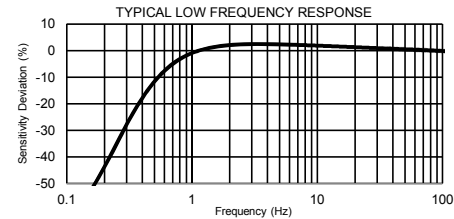
[1] M4.5 X 0.35 Connector. Mates with Dytran cable Model 6893AXX.

[2] Measured at 100Hz, 5 Grms per ISA RP 37.2.

[3] Measure using zero-based straight line method, % of F.S. or any lesser range.

[4] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.

[5] TEDS operational temperature -40°C to + 85°C



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3333AT for more information.



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