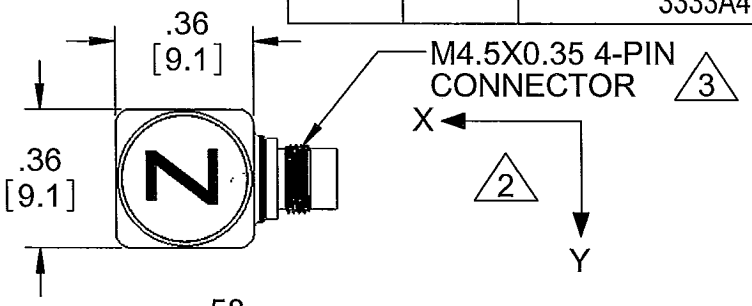
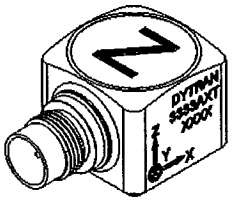
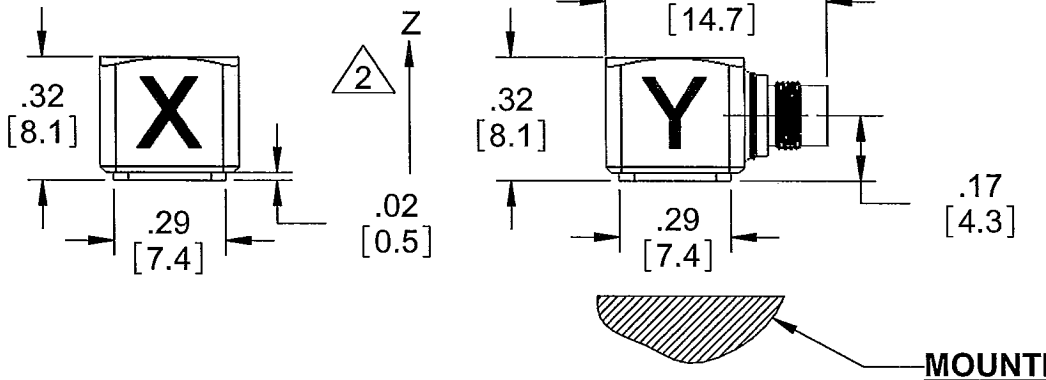
REVISIONS

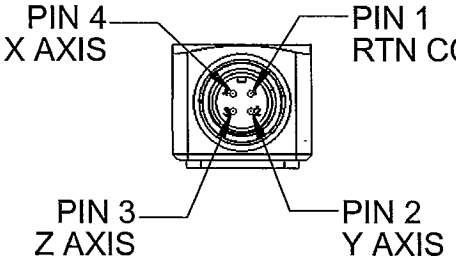
REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	8849	INITIAL RELEASE	AB 08/16/12	JS	DV
B	9718	ADDED 6649AXX CABLE TO NOTE 3, 3333A4T TO TABLE	JS 04/05/13	AS	DT

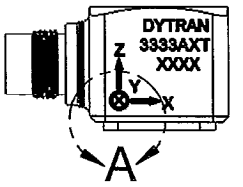
MODEL	SENSITIVITY
3333A1T	10mV/G
3333A2T	100mV/G
3333A3T	50mV/G
3333A4T	1mV/G



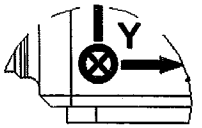








MOUNTING RECOMMENDATIONS
PREPARE A SURFACE AT LEAST .50 BY .50. SURFACE FLATNESS MUST BE EQUAL OR BETTER THAN .001 TIR. USE ONE DROP OF CYANOACRYLATE TO MOUNT THE ACCELEROMETER.



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
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.

63
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	AB	07/10/12
CHK	JS	08/21/12
APP	DV	09/04/12
APP		

DYTRAN INSTRUMENTS, INC. Chatsworth, CA.

TITLE:
OUTLINE/INSTALLATION DRAWING, 3333AT

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3333AT	B

SCALE: 2:1 | SOLIDWORKS | SHEET 1 OF 1

MODEL NUMBER 3333A2T	PERFORMANCE SPECIFICATION	DOC NO PS3333A2T
	Accelerometer, Triaxial, IEPE	REV C, ECN 12879 08/12/16

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

		ENGLISH		SI	
PHYSICAL					
Weight, Max		0.08	oz	2.4	grams
Mounting		Adhesive		Adhesive	
Connector [1]	Type	4-pin		4-pin	
	Material	Ti-6 AL-4V		Ti-6 AL-4V	
Housing	Material	Ti-6 AL-4V		Ti-6 AL-4V	
Sensing Element	Material	Ceramic		Ceramic	
	Mode	Shear		Shear	
PERFORMANCE					
Sensitivity, +15-10% [2]		100	mV/g	10.19	mV/m/s^2
Acceleration Range,		+/-50	Gpeak	+/- 491	m/s^2 peak
Frequency Range, +15/-10%		.65-10,000	Hz	.65-10,000	Hz
Resonance Frequency		>24	kHz	>24	kHz
Linearity [3]		1	%F.S.	1	%F.S.
Transverse Sensitivity Max		6	%	6	%
Noise floor, Max		0.00095	Grms	0.009	m/s^{2}rms
Spectral Noise	1Hz	207	µGrms/sqr(Hz)	2031	µm/s^2 rms/sqr(Hz)
	10Hz	52	µGrms/sqr(Hz)	510	µm/s^2 rms/sqr(Hz)
	100Hz	32	µGrms/sqr(Hz)	314	µm/s^2 rms/sqr(Hz)
	1000Hz	11	µGrms/sqr(Hz)	108	µm/s^2 rms/sqr(Hz)
	10000Hz	8	µGrms/sqr(Hz)	78	µm/s^2 rms/sqr(Hz)
ENVIRONMENTAL					
Shock Max		5000	g pk	49050	m/s^2
Vibration Max		3000	g pk	29430	m/s^2
Operating Temperature		-60 to +180	°F	-51 to +82	°C
TEDS Operating Temperature		-40 to +185	°F	-40 to +85	°C
Seal		Hermetic		Hermetic	
Base Strain Sensitivity		0.06	g/µε	0.59	m/s^2/µε
ELECTRICAL					
Supply Current Range [4]		2 to 20	mA	2 to 20	mA
Compliance Voltage Range		+18 to +30	VDC	+18 to +30	VDC
Output Impedance, Typ.		100	Ω	100	Ω
Output Bias Voltage		11 to 13	VDC	11 to 13	VDC
Discharge Time Constant		0.5 - 1.5	sec	0.5 - 1.5	sec
TEDS Feature [5]		IEEE 1451.4		IEEE 1451.4	

This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3333A1T	10	500	0.003	-60 to +225	0.5 - 1.5
3333A3T	50	100	0.002	-60 to +225	0.5 - 1.5

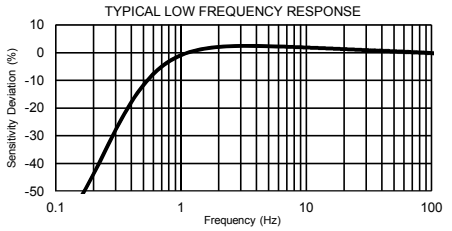
Refer to the performance specifications of the products in this family for detailed description.

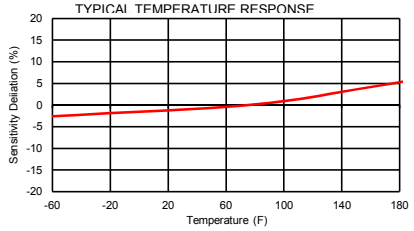
Supplied Accessories:

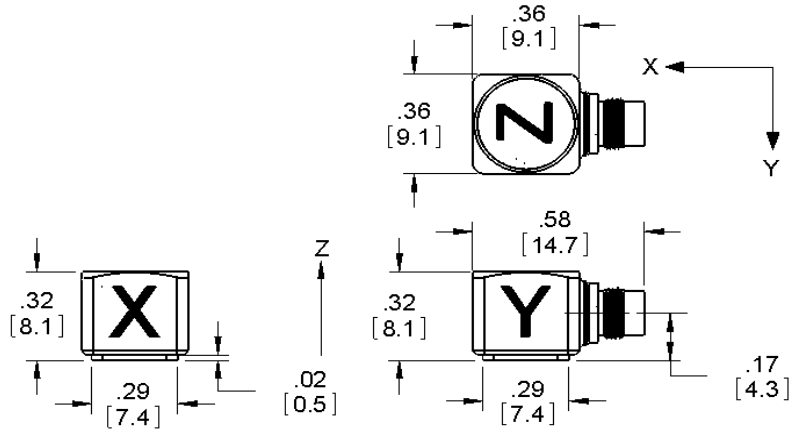
1) Accredited calibration certificate (ISO 17025)

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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