

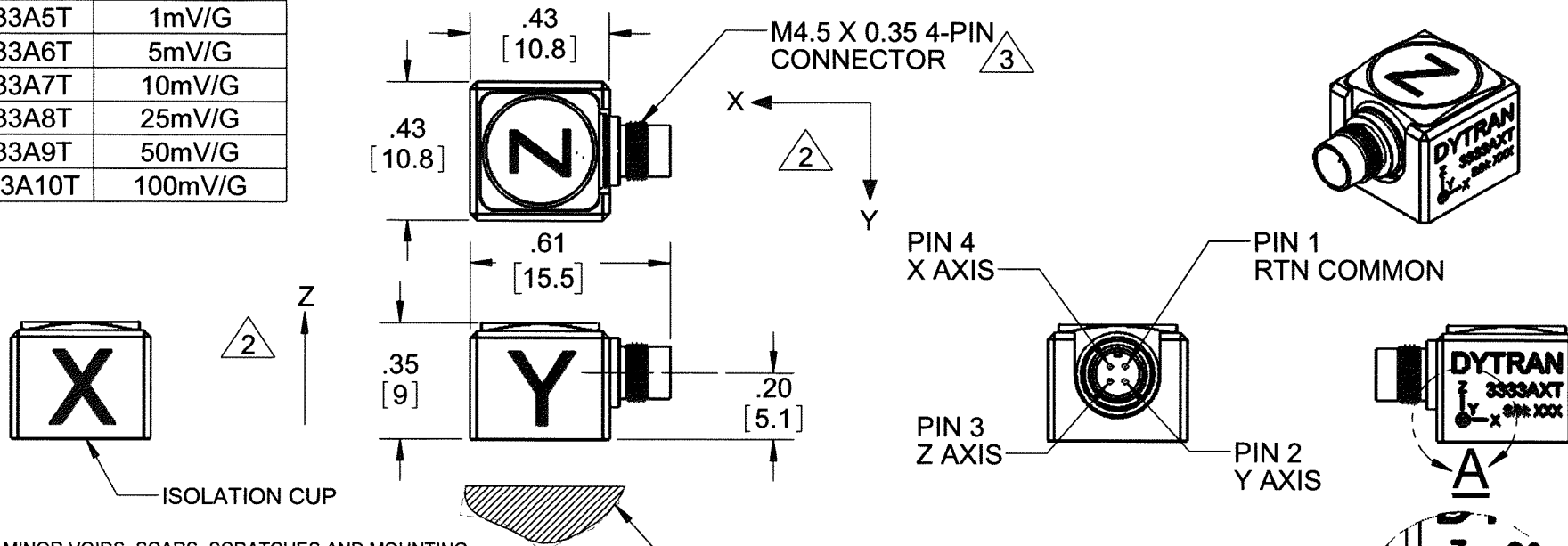
PROPRIETARY AND CONFIDENTIAL

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REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	14677	INITIAL RELEASE, SAME AS X1	RA 11/13/18	DP	LW

MODEL	SENSITIVITY
3333A5T	1mV/G
3333A6T	5mV/G
3333A7T	10mV/G
3333A8T	25mV/G
3333A9T	50mV/G
3333A10T	100mV/G



5. MINOR VOIDS, SCARS, SCRATCHES AND MOUNTING BLEMISH/WITNESS MARKS ON EXTERIOR SURFACES ARE ALLOWED DUE TO RESTRAINING AND HANDLING DURING TESTING, TRANSPORT OR PROCESSING. THESE APPEAR AS INDICATORS THAT DO NOT AFFECT FORM, FIT OR FUNCTION AS INTENDED BY DESIGN OR APPLICATION
4. HOUSING/CONNECTOR MATERIAL: TITANIUM ISOLATION CUP: ALUMINUM ALLOY 6061-T6, BLACK ANODIZED

3 MATES WITH DYTRAN 6893AXX CABLE

2 ARROWS INDICATE DIRECTIONS OF ACCELERATION FOR POSITIVE OUTPUT

1. WEIGHT: 2.8 GRAMS MAX

NOTES: UNLESS OTHERWISE SPECIFIED

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

CONTRACT NO.



TITLE: **OUTLINE/INSTALLATION
DWG, ACCELEROMETER,
TRIAxIAL, 3333A5T, TEDS**

APPROVALS		DATE
ORIG	R.A.	11/08/18
CHK	DP	11/20/18
APP	LW	11/29/18
APP		

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3333A5T	A
SCALE: 2:1		SOLIDWORKS	SHEET 1 OF 1

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.	
3333A5T	63
USED ON	NEXT ASSY
APPLICATION	
THIRD ANGLE PROJECTION USA	
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		

MODEL NUMBER 3333A6T		PERFORMANCE SPECIFICATION			DOC NO PS3333A6T	
		Accelerometer, Triaxial, IEPE			REV A, ECN 14677, 11/16/18	



- ULTRA LOW FREQUENCY RESPONSE
- ULTRA LOW NOISE LEVEL
- HERMETICALLY SEALED
- CASE ISOLATED
- TEDS FEATURE

ENGLISH		SI	
PHYSICAL			
Weight, Max	0.14 oz	4.0 grams	
Mounting	Adhesive	Adhesive	
Connector [1]	4-pin	4-pin	
	Ti-6 Al-4V	Ti-6 Al-4V	
Housing	Ti-6 Al-4V	Ti-6 Al-4V	
Isolation Cup	Anodized Aluminum	Anodized Aluminum	
Sensing Element	Ceramic	Ceramic	
	Shear	Shear	
PERFORMANCE			
Sensitivity, +15/-10% [2]	5 mV/g	0.51 mV/m/s ²	
Acceleration Range, +/-5V	1000 Gpeak	9810 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	0.0072 Grms	0.071 m/s ² rms	
Spectral Noise			
1Hz	1258 μGrms/sqr(Hz)	12341 μm/s ² rms/sqr(Hz)	
10Hz	220 μGrms/sqr(Hz)	2158 μm/s ² rms/sqr(Hz)	
100Hz	134 μGrms/sqr(Hz)	1315 μm/s ² rms/sqr(Hz)	
1000Hz	62 μGrms/sqr(Hz)	608 μm/s ² rms/sqr(Hz)	
10000Hz	32 μGrms/sqr(Hz)	314 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 +225 °F	-51 to +107 °C	
TEDS Operating Temperature	-40 to +185 °F	-40 to +85 °C	
Seal	Hermetic	Hermetic	
Base Strain Sensitivity	0.02 g/με	0.20 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	IEEE 1451.4	IEEE 1451.4	
Case Isolation	10 GΩ	10 GΩ	

This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	Time Constant (sec)
3333A5T	1	5000	0.03	-60 to +225	0.5 - 1.5
3333A7T	10	500	0.0036	-60 to +225	0.5 - 1.5
3333A8T	25	200	0.0024	-60 to +185	0.5 - 1.5
3333A9T	50	100	0.00095	-60 to +185	0.5 - 1.5
3333A10T	100	50	0.00095	-60 to +180	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.

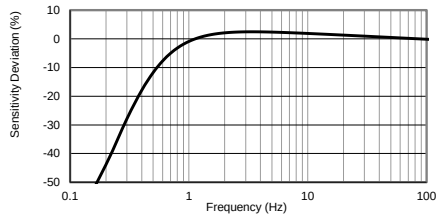
[2] Measured at 100Hz, 5 Grms per ISA RP 37.2.

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

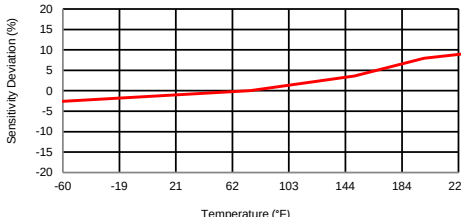
[4] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.

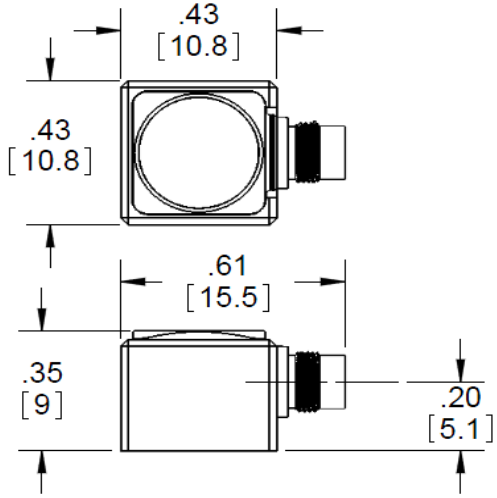
[5] In the interest of constant product improvement, we reserve the right to change specifications without notice.

TYPICAL LOW FREQUENCY RESPONSE



TYPICAL TEMPERATURE RESPONSE





Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3333A5T for more information.