

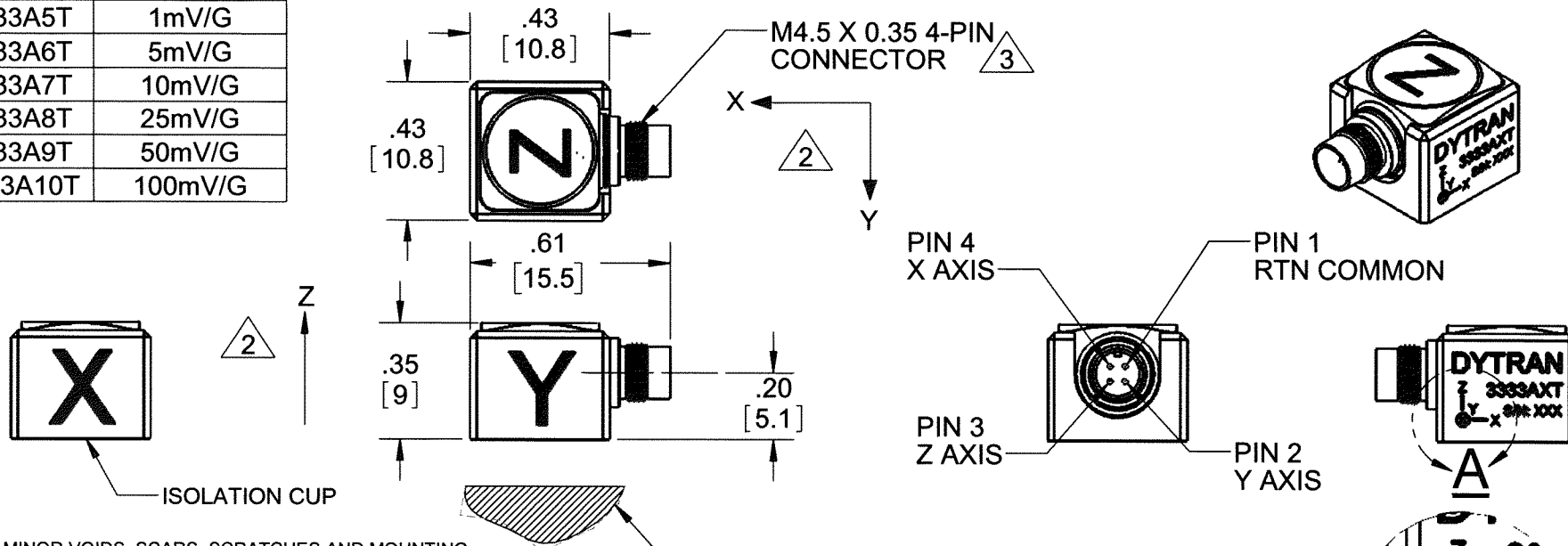
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REVISIONS

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.




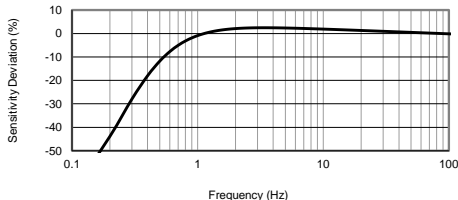
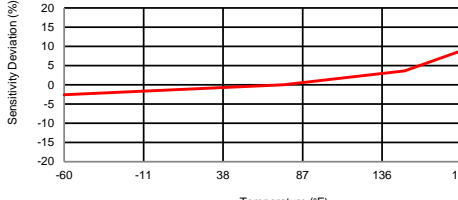
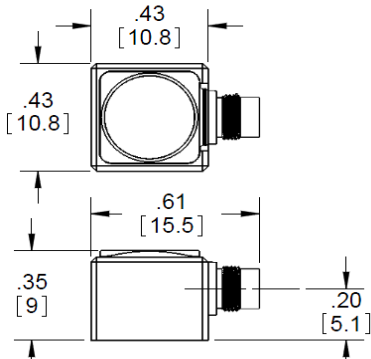

TITLE: **OUTLINE/INSTALLATION
DWG, ACCELEROMETER,
TRIAxIAL, 3333A5T, TEDS**

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	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.
USED ON	NEXT ASSY
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		
MATERIAL		
FINISH		
DO NOT SCALE DRAWING		

MODEL NUMBER 3333A8T		PERFORMANCE SPECIFICATION			DOC NO PS3333A8T																																				
		Accelerometer, Triaxial, IEPE			REV B, ECN 15776, 06/02/20																																				
		<ul style="list-style-type: none"> • 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]	Type	4-pin		4-pin																																					
	Material	Ti-6 Al-4V		Ti-6 Al-4V																																					
Housing	Material	Ti-6 Al-4V		Ti-6 Al-4V																																					
Isolation Cup	Material	Anodized Aluminum		Anodized Aluminum																																					
Sensing Element	Material	Ceramic		Ceramic																																					
	Mode	Shear		Shear																																					
PERFORMANCE																																									
Sensitivity, +15/-10% [2]		25	mV/g	2.55	mV/m/s ²																																				
Acceleration Range, +/-5V		200	Gpeak	1982	m/s ² peak																																				
Frequency Range, +15/-10%		.54-10,000	Hz	.54-10,000	Hz																																				
Resonance Frequency		>24	kHz	>24	kHz																																				
Linearity [3]		1	%F.S.	1	%F.S.																																				
Transverse Sensitivity Max		6	%	6	%																																				
Noise floor		0.0024	Grms	0.024	m/s ² rms																																				
Spectral Noise	1Hz	419	µGrms/sqr(Hz)	4110	µm/s ² rms/sqr(Hz)																																				
	10Hz	73	µGrms/sqr(Hz)	716	µm/s ² rms/sqr(Hz)																																				
	100Hz	45	µGrms/sqr(Hz)	441	µm/s ² rms/sqr(Hz)																																				
	1000Hz	21	µGrms/sqr(Hz)	206	µm/s ² rms/sqr(Hz)																																				
	10000Hz	11	µGrms/sqr(Hz)	108	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 +185	°F	-51 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 [5]		IEEE 1451.4		IEEE 1451.4																																					
Case Isolation		10	GΩ	10	GΩ																																				
		This family also includes: <table> <tr> <th>Model</th><th>Sensitivity (mV/g)</th><th>Range (Gpeak)</th><th>Resolution (Grms)</th><th>Oper. Temp(°F)</th><th>Time Constant (sec)</th></tr> <tr> <td>3333A5T</td><td>1</td><td>5000</td><td>0.03</td><td>-60 to +225</td><td>0.5 - 1.5</td></tr> <tr> <td>3333A6T</td><td>5</td><td>1000</td><td>0.0072</td><td>-60 to +225</td><td>0.5 - 1.5</td></tr> <tr> <td>3333A7T</td><td>10</td><td>500</td><td>0.0036</td><td>-60 to +225</td><td>0.5 - 1.5</td></tr> <tr> <td>3333A9T</td><td>50</td><td>100</td><td>0.00095</td><td>-60 to +185</td><td>0.5 - 1.5</td></tr> <tr> <td>3333A10T</td><td>100</td><td>50</td><td>0.00095</td><td>-60 to +180</td><td>0.5 - 1.5</td></tr> </table>			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	3333A6T	5	1000	0.0072	-60 to +225	0.5 - 1.5	3333A7T	10	500	0.0036	-60 to +225	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
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		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, 1 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] In the interest of constant product improvement, we reserve the right to change specifications without notice. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.																																							
		<div> <div> TYPICAL LOW FREQUENCY RESPONSE  </div> <div> TYPICAL TEMPERATURE RESPONSE  </div> </div> <div>  </div>			Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3333A5T for more information.																																				
		21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax:818.700.7880 www.dytran.com For permission to reprint this content, please contact info@dytran.com																																							