

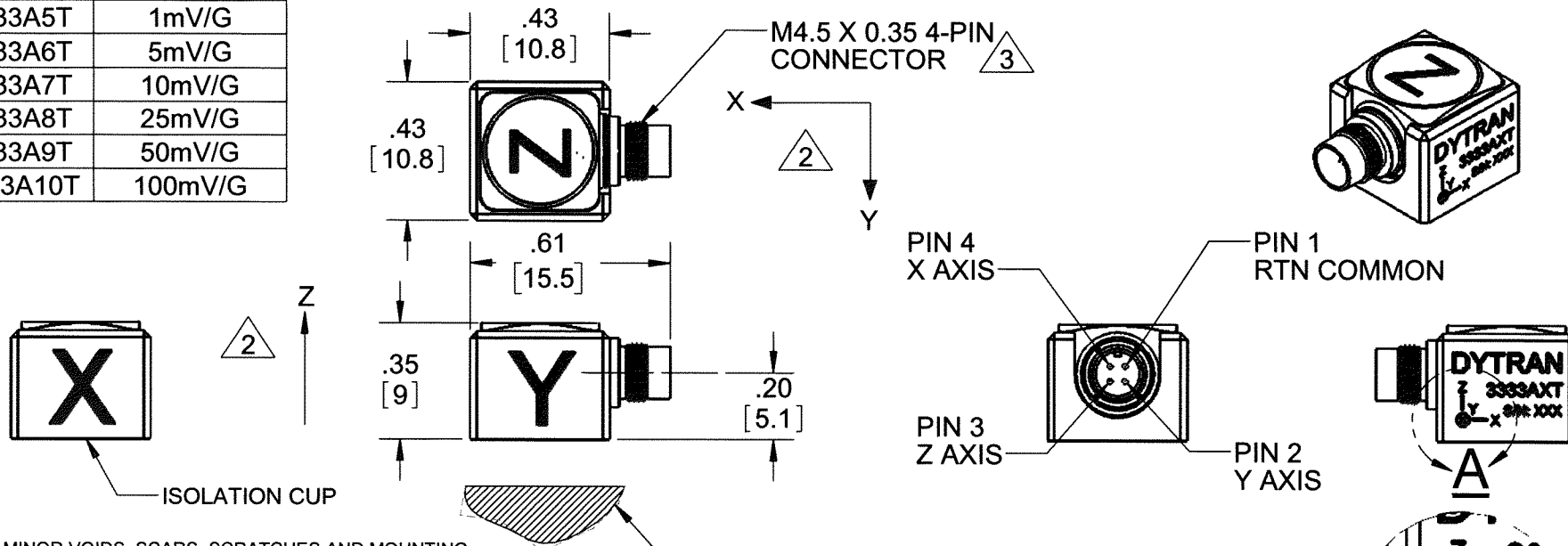
PROPRIETARY AND CONFIDENTIAL

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REVISIONS

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

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



- 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
- 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


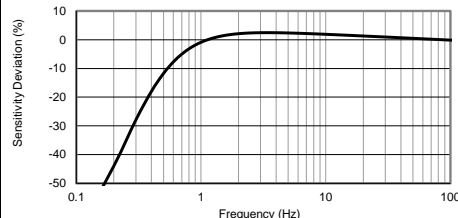
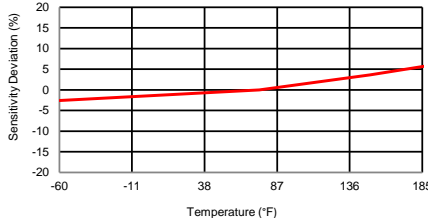
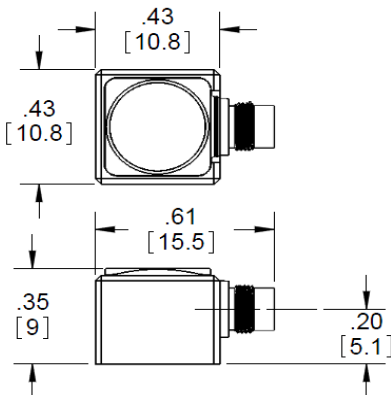
UNLESS OTHERWISE SPECIFIED: INTERPRET DIM & TOL PER ASME Y14.5M - 1994. REMOVE BURRS. COUNTERSINK INTERNAL THDS 90° TO MAJOR DIA. CHAM EXT THDS 45° TO MINOR DIA. THD LENGTHS AND DEPTHS ARE FOR MIN FULL THDS. THDS PER MIL-S-7742. DIMENSIONS APPLY AFTER FINISHING.	
3333A5T	ALL MACHINED SURFACES. TOTAL 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	

CONTRACT NO.

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

 DYTRAN INSTRUMENTS, INC.		MASTER ONLY IF IN RED Chatsworth, CA	
TITLE: OUTLINE/INSTALLATION DWG, ACCELEROMETER, TRIAxIAL, 3333A5T, TEDS			
SIZE A	CAGE CODE 2W033	DWG. NO. 127-3333A5T	REV A
SCALE: 2:1		SOLIDWORKS	SHEET 1 OF 1

MODEL NUMBER 3333A9T		PERFORMANCE SPECIFICATION				DOC NO PS3333A9T	
		Accelerometer, Triaxial, IEPE			REV B, ECN 15776, 06/02/20		
		<ul style="list-style-type: none"><li>• ULTRA LOW FREQUENCY RESPONSE</li><li>• ULTRA LOW NOISE LEVEL</li><li>• HERMETICALLY SEALED</li><li>• CASE ISOLATED</li><li>• TEDS FEATURE</li></ul>					
		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			
Sensing Element	Material	Ceramic		Ceramic			
	Mode	Shear		Shear			
PERFORMANCE							
Sensitivity, +15/-10% [2]		50	mV/g	5.1	mV/m/s <sup>2</sup>		
Acceleration Range, +/-5V		100	Gpeak	981	m/s <sup>2</sup> 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, Max		0.00095	Grms	0.009	m/s <sup>2</sup> rms		
Spectral Noise	1Hz	207	µGrms/sqr(Hz)	2031	µm/s <sup>2</sup> rms/sqr(Hz)		
	10Hz	52	µGrms/sqr(Hz)	510	µm/s <sup>2</sup> rms/sqr(Hz)		
	100Hz	32	µGrms/sqr(Hz)	314	µm/s <sup>2</sup> rms/sqr(Hz)		
	1000Hz	11	µGrms/sqr(Hz)	108	µm/s <sup>2</sup> rms/sqr(Hz)		
	10000Hz	8	µGrms/sqr(Hz)	78	µm/s <sup>2</sup> rms/sqr(Hz)		
ENVIRONMENTAL							
Shock Max		5000	g pk	49050	m/s <sup>c</sup>		
Vibration Max		3000	g pk	29430	m/s <sup>c</sup>		
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 <sup>2</sup> /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:					
		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
		3333A8T	25	200	0.0024	-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, 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.					
		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.					



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