

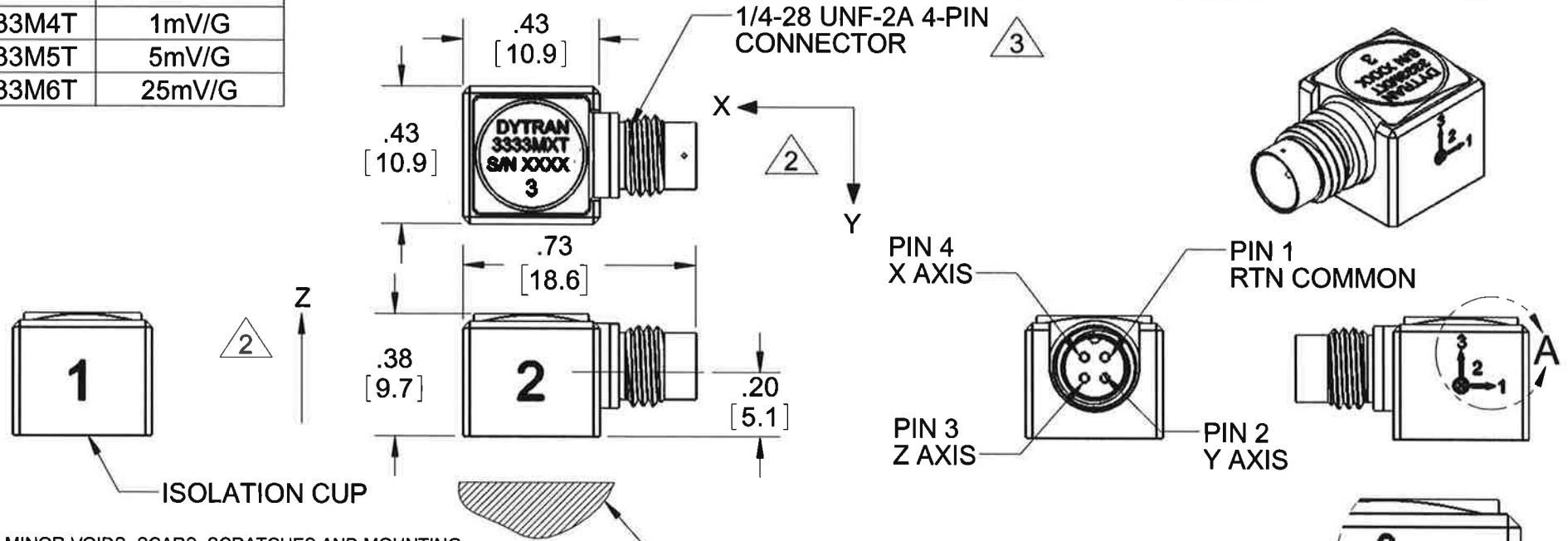
PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF DYTRAN INSTRUMENTS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF DYTRAN INSTRUMENTS INC. IS PROHIBITED

REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
B	12604	ADDED NOTE 5	JS 04/05/16	LA	LW

MODEL	SENSITIVITY
3333M4T	1mV/G
3333M5T	5mV/G
3333M6T	25mV/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

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

- 3 MATES WITH DYTRAN 6811AXX CABLE
 - 2 ARROWS INDICATE DIRECTIONS OF ACCELERATION FOR POSITIVE OUTPUT
 - 1. WEIGHT: 4.0 GRAMS MAX
- 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		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
THIRD ANGLE PROJECTION USA		MATERIAL
		FINISH
		DO NOT SCALE DRAWING
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.		

CONTRACT NO.



TITLE:
OUTLINE/INSTALLATION DRAWING, 3333M4T

APPROVALS		DATE
ORIG	JS	09/18/13
CHK	AB	10/15/13
APP	DV	10/25/13
APP		

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3333M4T	B
SCALE: 2:1	SOLIDWORKS	SHEET 1 OF 1	

MODEL NUMBER 3333M4T	PERFORMANCE SPECIFICATION	DOC NO PS3333M4T
	Accelerometer, Triaxial, IEPE	REV D, ECN 13537, 07/05/2017



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

PHYSICAL

Weight, Max
Mounting
Connector [1]
Type
Material
Housing
Material
Isolation Cup
Material
Sensing Element
Material
Mode

ENGLISH		SI	
0.14	oz	4.0	grams
Adhesive		Adhesive	
4-pin		4-pin	
Ti-6 AL-4V		Ti-6 AL-4V	
Ti-6 AL-4V		Ti-6 AL-4V	
Anodized Aluminum		Anodized Aluminum	
Ceramic		Ceramic	
Shear		Shear	

PERFORMANCE

Sensitivity, +15-10% [2]
Acceleration Range
Frequency Range, +15/-10%
Resonance Frequency
Linearity [3]
Transverse Sensitivity Max
Noise floor
Spectral Noise
1Hz
10Hz
100Hz
1000Hz
10000Hz

	ENGLISH		SI	
Sensitivity, +15-10% [2]	1	mV/g	0.10	mV/m/s ²
Acceleration Range	+/-5000	Gpeak	+/-49050	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	0.03	Grms	0.294	m/s ² rms
Spectral Noise				
1Hz	62900	µGrms/sqr(Hz)	617049	µm/s ² rms/sqr(Hz)
10Hz	1100	µGrms/sqr(Hz)	10791	µm/s ² rms/sqr(Hz)
100Hz	670	µGrms/sqr(Hz)	6573	µm/s ² rms/sqr(Hz)
1000Hz	310	µGrms/sqr(Hz)	3041	µm/s ² rms/sqr(Hz)
10000Hz	160	µGrms/sqr(Hz)	1570	µm/s ² rms/sqr(Hz)

ENVIRONMENTAL

Shock Max
Vibration Max
Operating Temperature
TEDs Operating Temperature
Base Strain Sensitivity
Seal

	ENGLISH		SI	
Shock Max	7000	g pk	68670	m/s ²
Vibration Max	6000	g pk	58860	m/s ²
Operating Temperature	-60 to +250	°F	-51 to +121	°C
TEDs Operating Temperature	-40 to +185	°F	-40 to +85	°C
Base Strain Sensitivity	0.06	g/µε	0.59	m/s ² /µε
Seal	Hermetic		Hermetic	

ELECTRICAL

Supply Current Range [4]
Compliance Voltage Range
Output Impedance, Typ.
Output Bias Voltage
Discharge Time Constant
Case Isolation
TEDS Feature

	ENGLISH		SI	
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
Case Isolation	10	GΩ	10	GΩ
TEDS Feature	IEEE 1451.4		IEEE 1451.4	

This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	Time Constant (sec)
3333M5T	5	1000	0.0072	-60 to +225	0.5 - 1.5
3333M6T	25	200	0.0024	-60 to +225	0.5 - 1.5

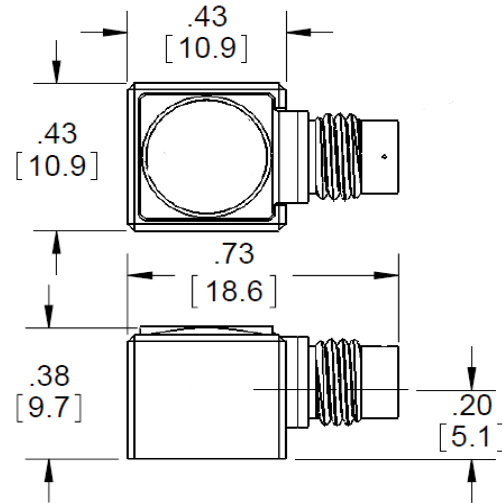
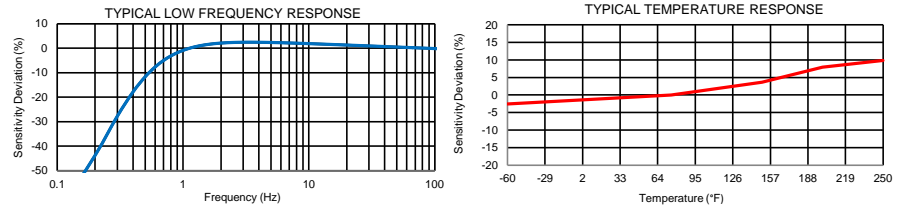
Refer to the performance specifications of the products in this family for detailed description.

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)

Notes:

- [1] 1/4-28 UNF-2A Connector. Mates with Dytran cable Model 6811AXX.
- [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.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3333M4T for more information.

