

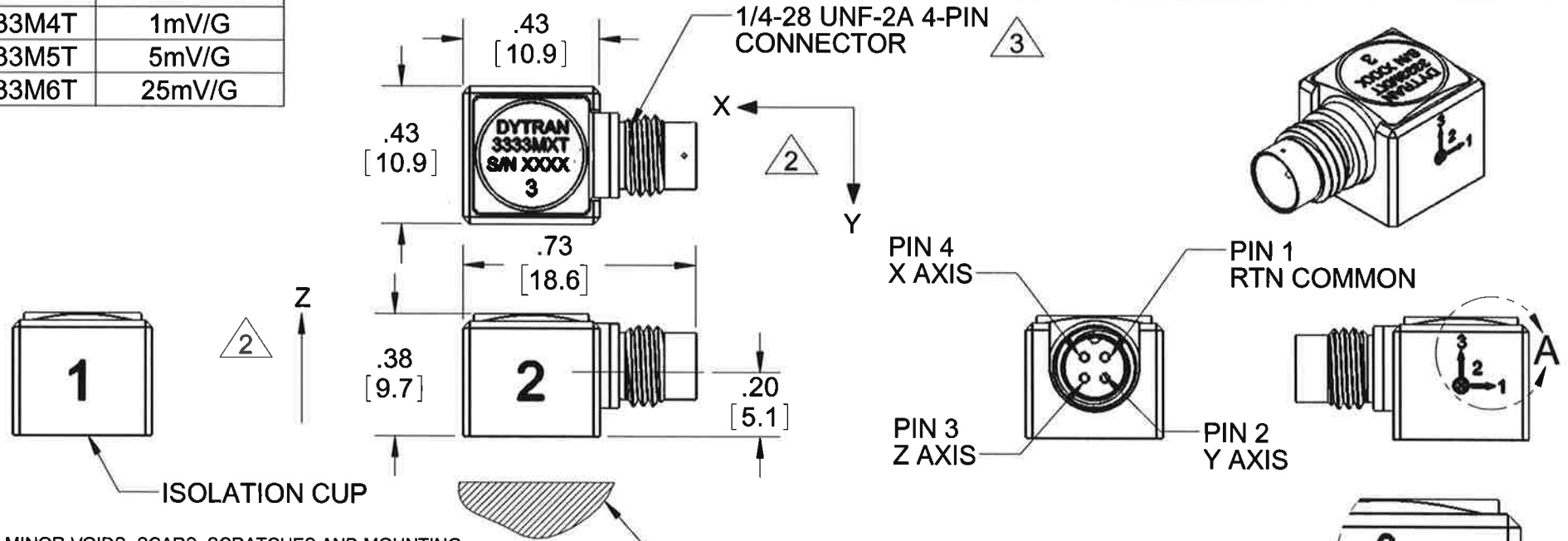
**PROPRIETARY AND CONFIDENTIAL**

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**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
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.	
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	
ORIG	DATE
CHK	DATE
APP	DATE
APP	

**MASTER**  
**DYTRAN**  
 INSTRUMENTS, INC. Chatsworth, CA  
 ONLY IF IN RED

TITLE:  
**OUTLINE/INSTALLATION DRAWING, 3333M4T**

SIZE	CAGE CODE	DWG. NO.	REV
<b>A</b>	<b>2W033</b>	<b>127-3333M4T</b>	<b>B</b>

SCALE: 2:1      SOLIDWORKS      SHEET 1 OF 1

<b>MODEL NUMBER</b> 3333M5T	<b>PERFORMANCE SPECIFICATION</b>		<b>DOC NO</b> PS3333M5T	
	<b>Accelerometer, Triaxial, IEPE</b>		REV B, ECN 12879, 08/12/16	



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

**PHYSICAL**

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

Type  
Material  
Material  
Material  
Material  
Mode

	ENGLISH		SI	
Weight, Max	0.14	oz	4.0	grams
Mounting	Adhesive		Adhesive	
Connector [1]	4-pin		4-pin	
Housing	Ti-6 AL-4V		Ti-6 AL-4V	
Isolation Cup	Ti-6 AL-4V		Ti-6 AL-4V	
Sensing Element	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

	ENGLISH		SI	
Sensitivity, +15-10% [2]	5	mV/g	0.51	mV/m/s <sup>2</sup>
Acceleration Range	+/-1000	Gpeak	+/- 9810	m/s <sup>2</sup> 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 <sup>2</sup> rms
Spectral Noise	1Hz	1258	12341	μm/s <sup>2</sup> rms/sqr(Hz)
	10Hz	220	2158	μm/s <sup>2</sup> rms/sqr(Hz)
	100Hz	134	1315	μm/s <sup>2</sup> rms/sqr(Hz)
	1000Hz	62	608	μm/s <sup>2</sup> rms/sqr(Hz)
	10000Hz	32	314	μm/s <sup>2</sup> rms/sqr(Hz)

**ENVIRONMENTAL**

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

	ENGLISH		SI	
Shock Max	5000	g pk	49050	m/s <sup>2</sup>
Vibration Max	3000	g pk	29430	m/s <sup>2</sup>
Operating Temperature	-60 to +225	°F	-51 to +107	°C
TEDs Operating Temperature	-40 to +185	°F	-40 to +85	°C
Base Strain Sensitivity	0.02	g/με	0.20	m/s <sup>2</sup> /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)
3333M4T	1	5000	0.03	-60 to +250	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)

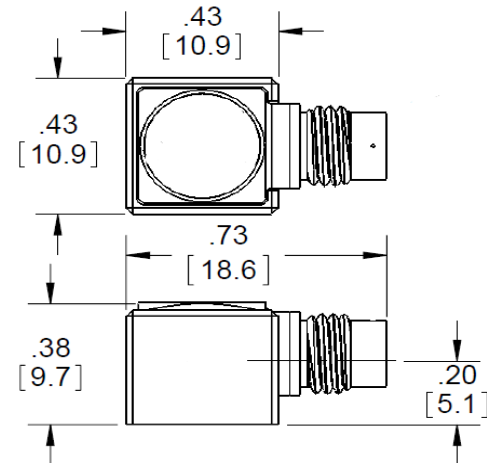
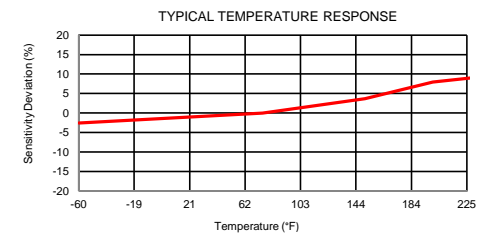
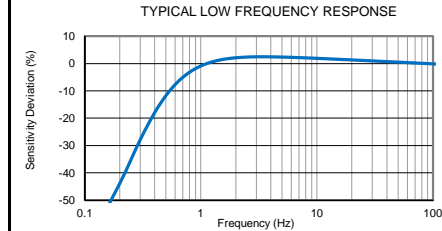
**Notes:**

[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] 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.



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



21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax:818.700.7880 www.dytran.com  
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