

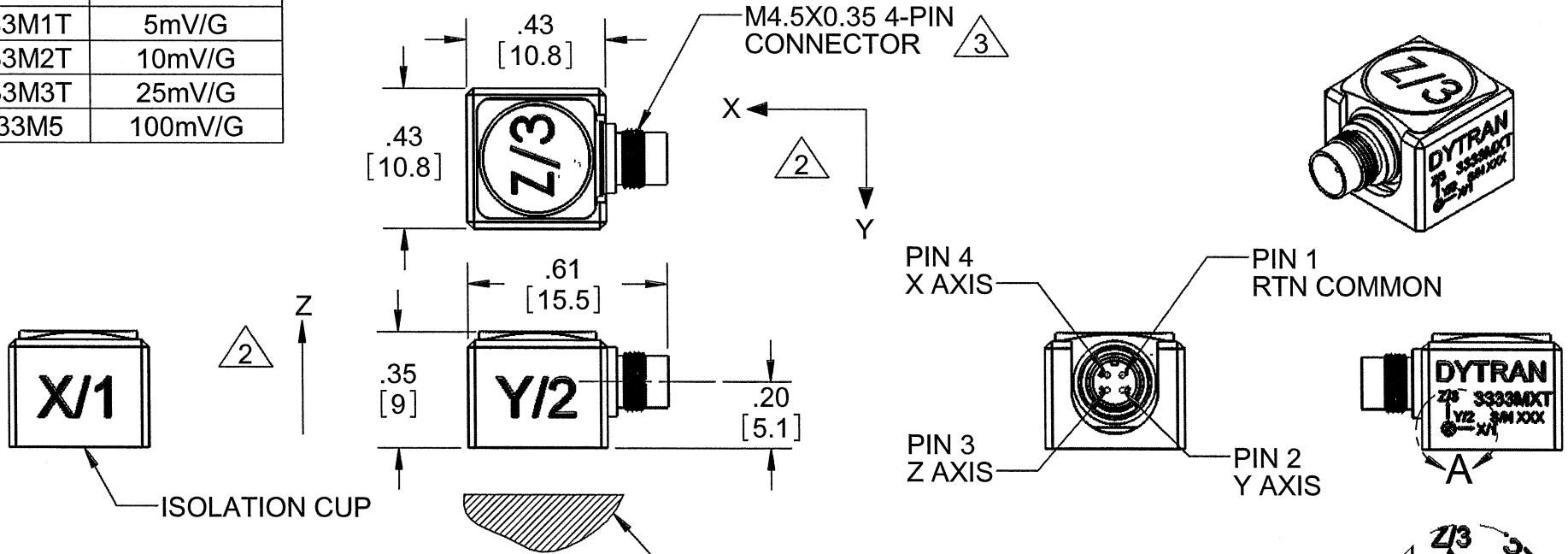
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REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
C	9198	INITIAL RELEASE OF 3333M5	AB 09/25/12	41	A5

MODEL	SENSITIVITY
3333M1T	5mV/G
3333M2T	10mV/G
3333M3T	25mV/G
3333M5	100mV/G



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.

4. HOUSING/CONNECTOR MATERIAL: TITANIUM
ISOLATION CUP: ALUMINUM ALLOY 6061-T6, BLACK ANODIZED

3 MATES WITH 6893AXX CABLE

2 ARROWS INDICATE DIRECTIONS OF ACCELERATION FOR POSITIVE OUTPUT

1. WEIGHT: 2.8 GRAMS

NOTES: UNLESS OTHERWISE SPECIFIED

USED ON	NEXT ASSY
APPLICATION	
THIRD ANGLE PROJECTION USA	
<p>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.</p> <p>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.</p>	

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	RA	03/30/11
CHK	JS	06/01/11
APP	DV	06/16/11
APP		

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

TITLE: **OUTLINE/INSTALLATION DRAWING, 3333MT SERIES**

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

MODEL NUMBER 3333M1T	PERFORMANCE SPECIFICATION		DOC NO PS3333M1T
	Accelerometer, Triaxial, IEPE		REV C, ECN 13537, 07/05/17



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

PHYSICAL

	ENGLISH		SI	
Weight, Max	0.14	oz	4.0	grams
Mounting	Adhesive		Adhesive	
Connector [1]	4-pin		4-pin	
	Type		Material	
	Ti-6 AL-4V		Ti-6 AL-4V	
Housing	Ti-6 AL-4V		Ti-6 AL-4V	
Isolation Cup	Material		Anodized Aluminum	
Sensing Element	Material		Ceramic	
	Mode		Shear	

PERFORMANCE

	ENGLISH		SI	
Sensitivity, +15-10% [2]	5	mV/g	0.51	mV/m/s ²
Acceleration Range,	+/- 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	μGrms/sqr(Hz)	12341	μm/s ² rms/sqr(Hz)
	10Hz	μGrms/sqr(Hz)	2158	μm/s ² rms/sqr(Hz)
	100Hz	μGrms/sqr(Hz)	1315	μm/s ² rms/sqr(Hz)
	1000Hz	μGrms/sqr(Hz)	608	μm/s ² rms/sqr(Hz)
	10000Hz	μGrms/sqr(Hz)	314	μm/s ² rms/sqr(Hz)

ENVIRONMENTAL

	ENGLISH		SI	
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

	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
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)
3333M2T	10	500	0.0072	-60 to +225	0.5 - 1.5
3333M3T	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)

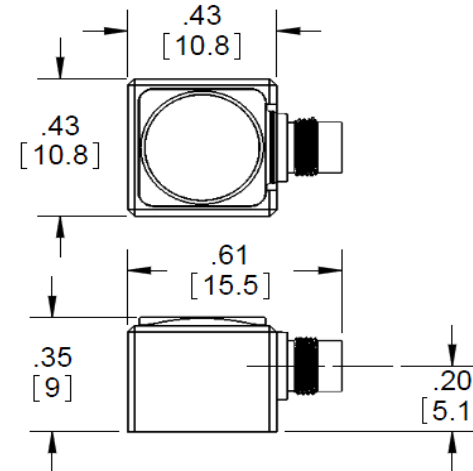
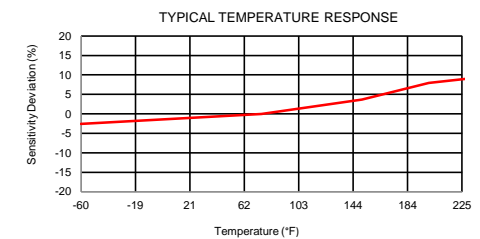
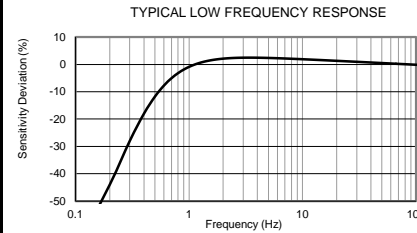
Notes:

[1] 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.



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

