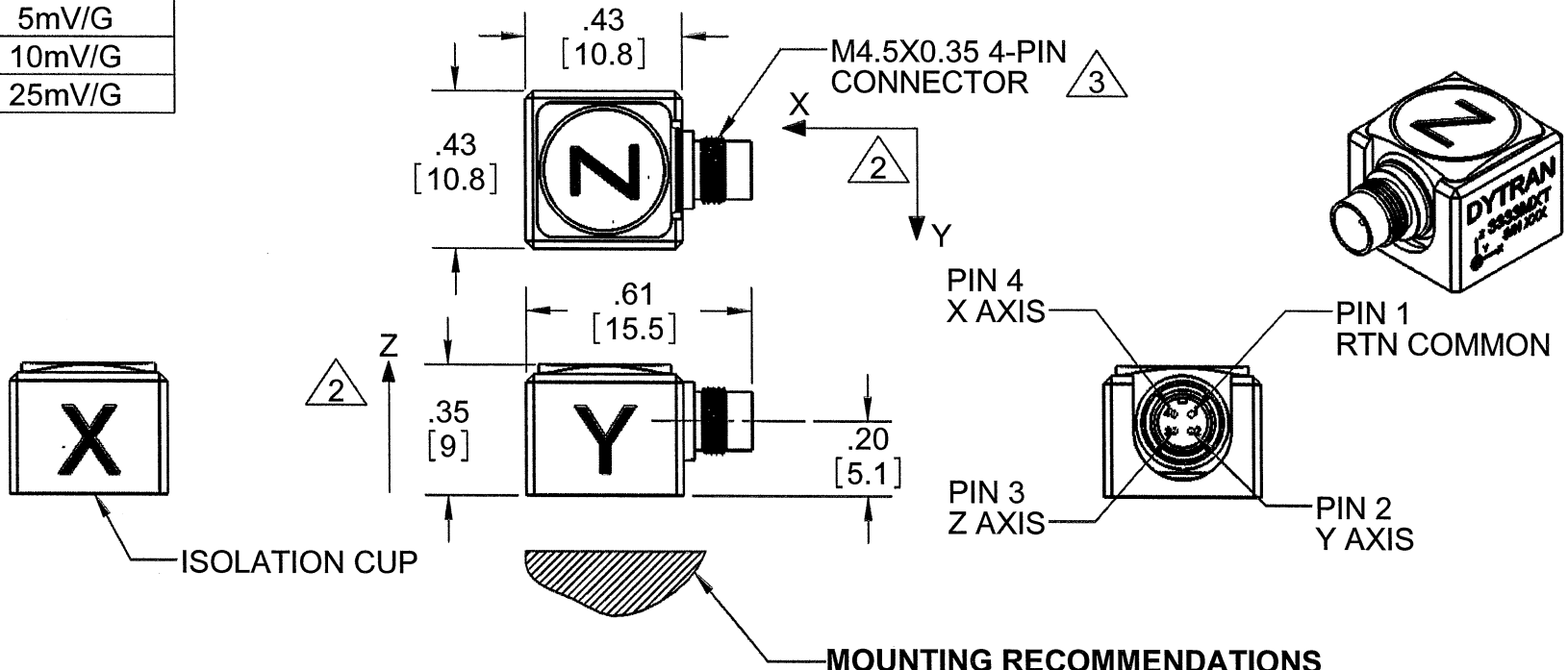
REVISIONS					
REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	7441	INITIAL RELEASE	RA 06/10/11	JS	

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



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

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.

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.
63
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.

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		06/01/11
APP		6/16/11
APP		

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

MASTER ONLY IF IN RED

TITLE:

OUTLINE/INSTALLATION DRAWING, 3333MT SERIES

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3333MT	A

SCALE: 2:1 | SOLIDWORKS | SHEET 1 OF 1

MODEL NUMBER 3333M2T	PERFORMANCE SPECIFICATION		DOC NO PS3333M2T
		Accelerometer, Triaxial, IEPE	REV A, ECN 7441, 05/18/11

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

		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]		10	mV/g	1.02	mV/m/s^2
Acceleration Range,		+/-500	Gpeak	+/- 4905	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, Max		0.0036	Grms	0.035	m/s^{2}rms
Spectral Noise	1Hz	629	µGrms/sqr(Hz)	6170	µm/s^2 rms/sqr(Hz)
	10Hz	110	µGrms/sqr(Hz)	1079	µm/s^2 rms/sqr(Hz)
	100Hz	67	µGrms/sqr(Hz)	657	µm/s^2 rms/sqr(Hz)
	1000Hz	31	µGrms/sqr(Hz)	304	µm/s^2 rms/sqr(Hz)
	10000Hz	16	µGrms/sqr(Hz)	157	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 +225	°F	-51 to +107	°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:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	Time Constant (sec)
3333M1T	5	1000	0.0072	-60 to +250	0.5 to 1.5
3333M3T	25	200	0.0024	-60 to +185	0.5 to 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.

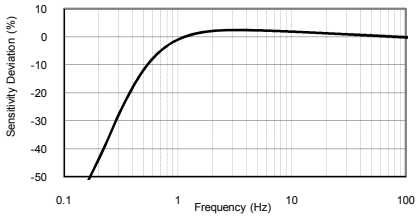
[2] Measured at 100Hz, 5 Grms per ISA RP 37.2.

[3] Measure using zero-based straight line method, % of F.S. or any lesser range.

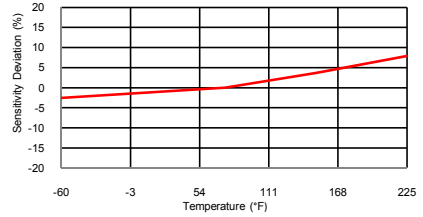
[4] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.

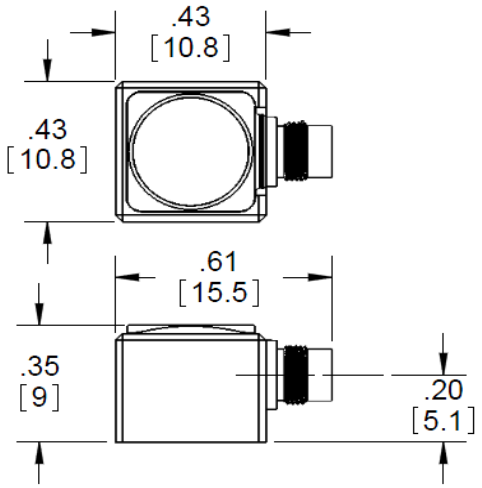
[5] TEDS operational temperature -40°C to + 85°C

TYPICAL LOW FREQUENCY RESPONSE



TYPICAL TEMPERATURE RESPONSE





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

DYTRAN INSTRUMENTS, INC.

21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax:818.700.7880
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