

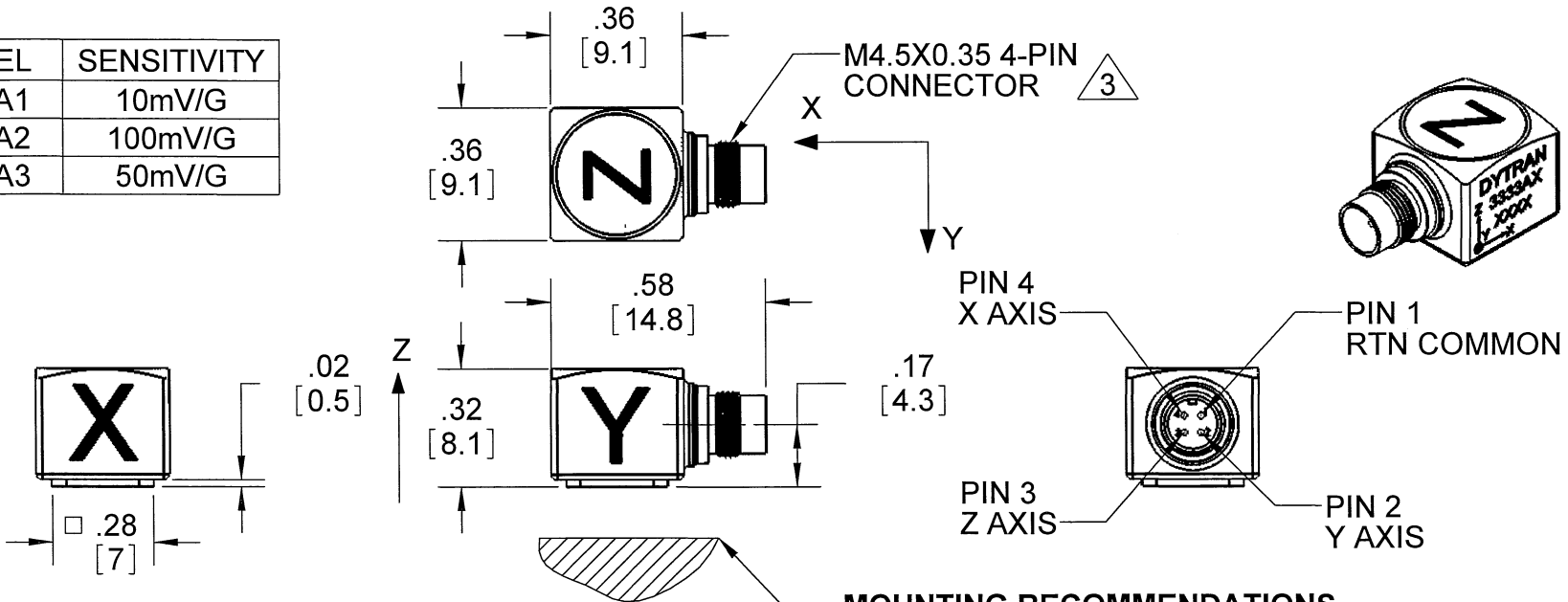
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REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	6289	INITIAL RELEASE	DV 09/28/09	<i>sv</i>	<i>DV</i>

MODEL	SENSITIVITY
3333A1	10mV/G
3333A2	100mV/G
3333A3	50mV/G



4. HOUSING/CONNECTOR MATERIAL: TITANIUM

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 .300 BY .300. SURFACE FLATNESS MUST BE EQUAL OR BETTER THAN .0001 TIR. USE ONE DROP OF CYANOACRYLATE TO MOUNT THE ACCELEROMETER.

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.		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	
3333A	USED ON	NEXT ASSY	APPLICATION
THIRD ANGLE PROJECTION USA		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.



**MASTER ONLY IF IN RED**  
 Chatsworth, CA

TITLE: <b>OUTLINE/INSTALLATION DRAWING, 3333A SERIES</b>			
APPROVALS	DATE	SIZE	CAGE CODE
ORIG DV	09/28/09	A	2W033
CHK <i>sv</i>	10/26/09	DWG. NO.	127-3333A
APP <i>DV</i>	10/26/09	REV	A
APP		SCALE: 2:1	SOLIDWORKS
DO NOT SCALE DRAWING		SHEET 1 OF 1	

<b>MODEL NUMBER</b> 3333A1	<b>PERFORMANCE SPECIFICATION</b>	<b>DOC NO</b> PS3333A1
	Accelerometer, Triaxial, IEPE	REV F, ECN 12879, 08/12/16



Actual Size

- **ULTRA LOW FREQUENCY RESPONSE**
- **ULTRA LOW NOISE LEVEL**
- **WEIGHT ONLY 2.3 GRAMS**

**PHYSICAL**

	ENGLISH		SI	
Weight	0.08	oz	2.3	grams
Mounting	Adhesive		Adhesive	
Connector [1]	4-pin	Type	4-pin	
	Ti-6 AL-4V	Material	Ti-6 AL-4V	
Housing	Ti-6 AL-4V	Material	Ti-6 AL-4V	
	Case ground	Isolation	Case ground	
Sensing Element	Ceramic	Material	Ceramic	
	Shear	Mode	Shear	

**PERFORMANCE**

	ENGLISH		SI	
Sensitivity, +15-10% [2]	10	mV/g	1.02	mV/m/s <sup>2</sup>
Acceleration Range	+/-500	Gpeak	+/- 4905	m/s <sup>2</sup> peak
Frequency Range, +15/-10%	.31-10,000	Hz	.31-10,000	Hz
Resonance Frequency	>24	kHz	>24	kHz
Linearity [3]	1	%F.S.	1	%F.S.
Transverse Sensitivity Max	6	%	6	%
Noise floor	0.004	Grms	0.039	m/s <sup>2</sup> rms
Spectral Noise				
	1Hz	419	μGrms/sqr(Hz)	4110
	10Hz	73	μGrms/sqr(Hz)	716
	100Hz	45	μGrms/sqr(Hz)	441
	1000Hz	21	μGrms/sqr(Hz)	206
	10000Hz	11	μGrms/sqr(Hz)	108

**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

**ENVIRONMENTAL**

	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
Seal	Hermetic		Hermetic	
Magnetic Sensitivity at 100 Gauss	0.00007	g/Gauss	0.00069	m/s <sup>2</sup> /Gauss
Base Strain Sensitivity	0.02	g/με	0.20	m/s <sup>2</sup> /με

**This family also includes:**

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3333A2	100	50	0.00095	-60 to +180	0.5 - 1.5
3333A3	50	100	0.0009	-60 to +225	0.5 - 1.5

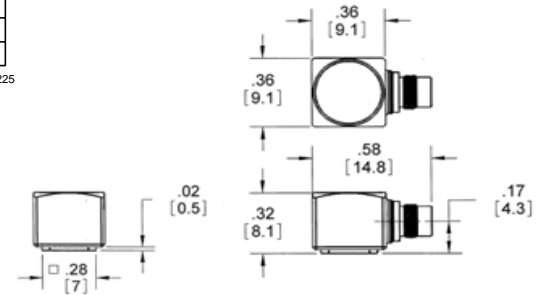
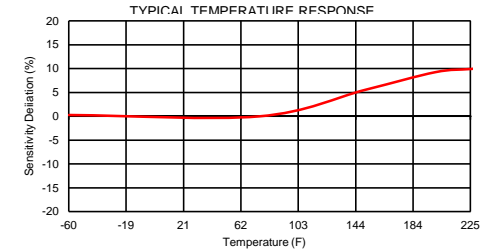
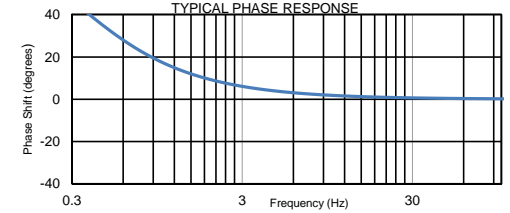
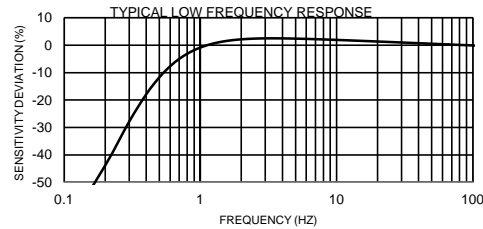
Refer to the performance specifications of the products in this family for detailed description

**Supplied Accessories:**

- 1) Accredited calibration certificate (ISO 17025)

**Notes:**

- [1] Coaxial, 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] In the interest of constant product improvement, we reserve the right to change specifications without notice.



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



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