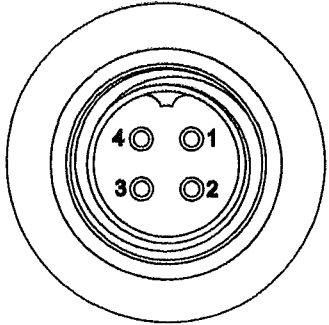


PROPRIETARY AND CONFIDENTIAL

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REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
B	9338	.97[24.5] WAS: .97[24.54] .29[7.3] WAS: .29[7.4]	RA 11/13/12	EM 11/28/12	AS



DETAIL A

CONNECTOR PINOUT

- PIN 1 GND RETURN, COMMON
- PIN 2 SIG/PWR AXIS 2 (Y)
- PIN 3 SIG/PWR AXIS 3 (Z)
- PIN 4 SIG/PWR AXIS 1 (X)

6. DIELECTRIC WITHSTAND, SIGNAL GROUND TO HOUSING ISOLATION:
1mA MAX AT 1000 VDC FOR 1 MINUTE WITH 20 SECONDS RAMP

5. MATES WITH DYTRAN CABLE
6811AXX (XX=LENGTH IN FEET)

4. ARROWS INDICATE ACCELERATION
DIRECTION FOR POSITIVE OUTPUT.

3. HOUSING AND CONNECTOR MATERIAL:
TITANIUM

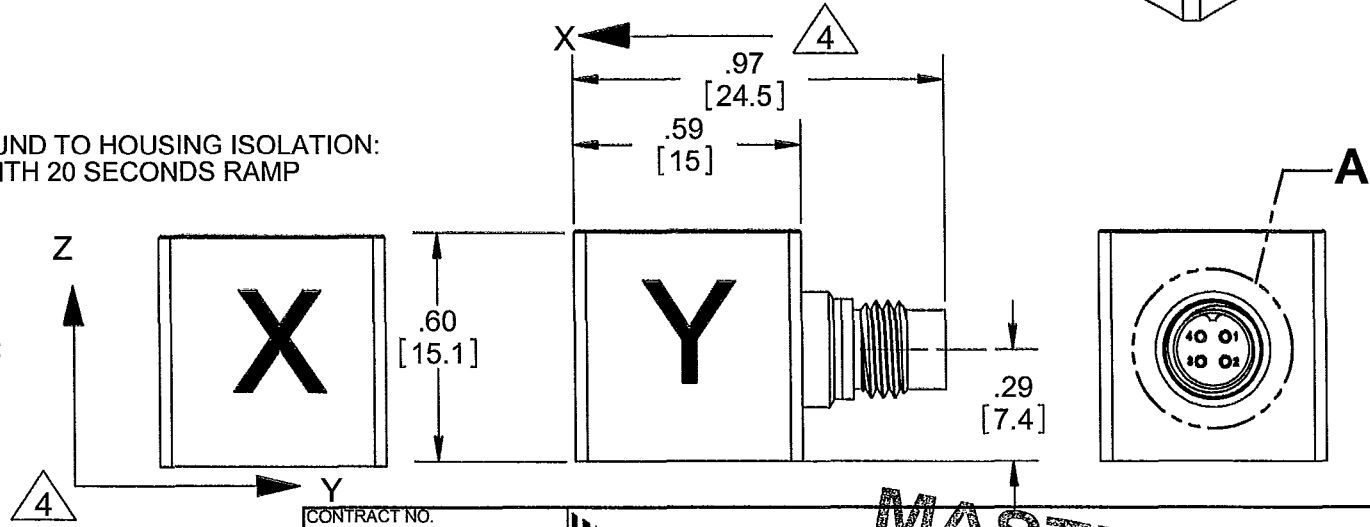
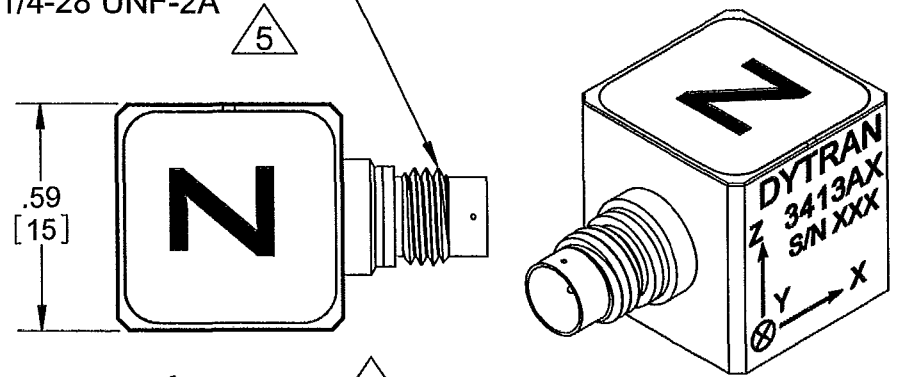
2. WEIGHT: 13 GRAMS MAX.

1. ENVIRONMENTAL SEAL: HERMETIC

NOTES: UNLESS OTHERWISE SPECIFIED

MODEL NUMBER	NOMINAL SENSITIVITY
3413A1	5 mV/G
3413A2	50mV/G

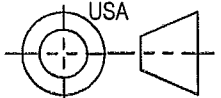
4 PIN CONNECTOR
1/4-28 UNF-2A



USED ON	NEXT ASSY

APPLICATION

THIRD ANGLE PROJECTION



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.
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	JS	05/01/12
CHK	LN	05/09/12
APP	DV	05/19/12
APP		



TITLE:
OUTLINE/INSTALLATION DRAWING
3413A1 & 3413A2

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3413A	B

SCALE: 2:1 SOLIDWORKS SHEET 1 OF 1

3413A1

PERFORMANCE SPECIFICATION

DOC NO
PS3413A1

Accelerometer, Triaxial, IEPE

REV C, ECN 13534, 06/30/17



- GROUND ISOLATED
- HERMETICALLY SEALED
- TEDS FUNCTION

	ENGLISH		SI	
PHYSICAL				
Weight	0.5	oz	13	grams
Size				
Length	0.97	inch	24.6	mm
Width	0.59	inch	15.0	mm
Height	0.60	inch	15.2	mm
Mounting	Adhesive		Adhesive	
Connector [1]	Type	4-pin	Type	4-pin
	Material	Ti-6 AL-4V	Material	Ti-6 AL-4V
Housing	Material	Ti-6 AL-4V	Material	Ti-6 AL-4V
	Isolation	Case Isolated	Isolation	Case Isolated
Sensing Element	Material	PiezoElectric	Material	PiezoElectric
	Mode	Shear	Mode	Shear
PERFORMANCE				
Sensitivity, +/-5% [2]	5	mV/g	0.51	mV/m/s ²
Acceleration Range, ±	1000	Gpeak	9810	m/s ² peak
Frequency Range, ±5%	3.3-3000	Hz	3.3-3000	Hz
Frequency Range, ±10%	2.2-5000	Hz	2.2-5000	Hz
Frequency Range, ±3dB	1.1-10000	Hz	1.1-10000	Hz
Resonance Frequency	>20	kHz	>20	kHz
Linearity [3]	1	%F.S.	1	%F.S.
Transverse Sensitivity, Max	6	%	6	%
Noise floor	0.007	Grms	0.069	m/s ² rms
Spectral Noise				
1Hz	1000	µGrms/sqr(Hz)	9810	µm/s ² rms/sqr(Hz)
10Hz	500	µGrms/sqr(Hz)	4905	µm/s ² rms/sqr(Hz)
100Hz	100	µGrms/sqr(Hz)	981	µm/s ² rms/sqr(Hz)
1000Hz	60	µGrms/sqr(Hz)	589	µm/s ² rms/sqr(Hz)
10000Hz	50	µGrms/sqr(Hz)	491	µm/s ² rms/sqr(Hz)
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	+7.5 to +9.5	VDC	+7.5 to +9.5	VDC
Discharge Time Constant	0.15 to 0.25	sec	0.15 to 0.25	sec
TEDS Feature	IEEE 1451.4		IEEE 1451.4	
ENVIRONMENTAL				
Shock Max	5000	g pk	49050	m/s ²
Vibration Max	1500	g pk	14715	m/s ²
Operating Temperature	-60 to +320	°F	-51 to +160	°C
TEDS Operating Temperature	-40 to +185	°F	-40 to +85	°C
Seal	Hermetic		Hermetic	
Magnetic Sensitivity at 100 Gauss	0.0001	g/Gauss	0.000981	m/s ² /Gauss
Base Strain Sensitivity	0.002	g/µε	0.01962	m/s ² /µε

This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3413A2	50	100	0.002	-60 to +320	0.15 to 0.25

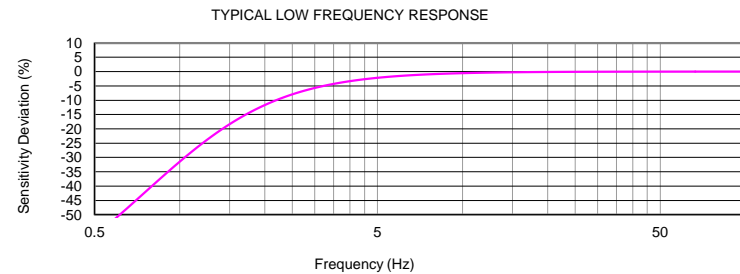
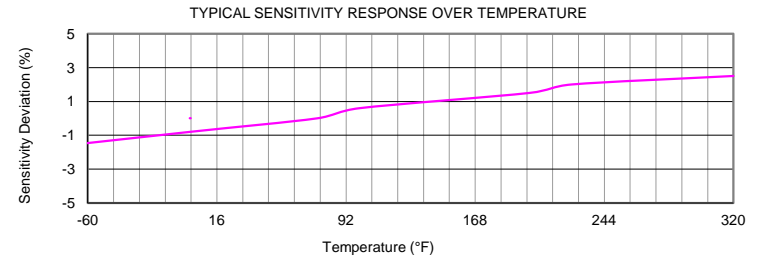
Please refer to the performance specifications of the products in this family for detailed description.

Supplied Accessories:

- 1) Accredited Calibration Certificate (ISO 17025).

Notes:

- [1] Glass to Metal Seal connector. Mates with Dytran cable Model 6811AXX (XX=length in feet).
- [2] Measured At 100 Hz, 1 Grms per ISA RP 37.2.
- [3] Linearity is % of specified full scale (or any less full-scale range), zero-based best fit straight line method.
- [4] Do not apply power to this device without current limiting, 20mA Max, to do so will destroy the integral IC amplifier.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3413A for more information.



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