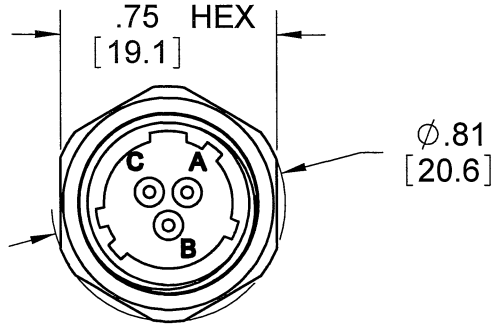


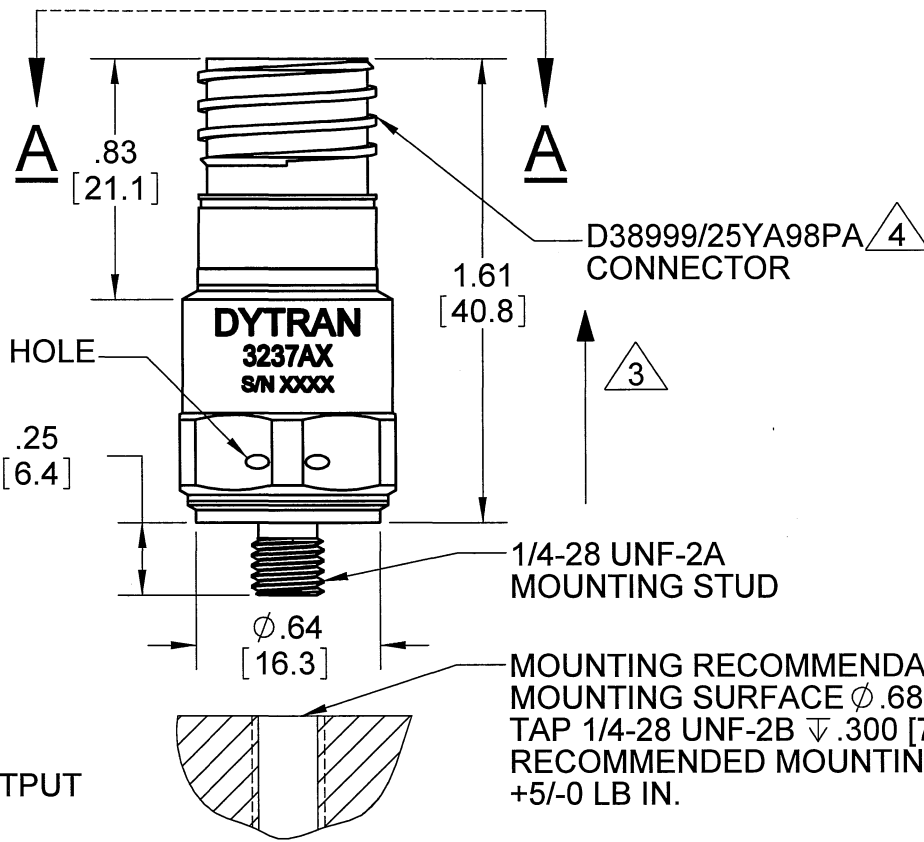
PROPRIETARY AND CONFIDENTIAL		REVISIONS					
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF DYTRAN INSTRUMENTS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF DYTRAN INSTRUMENTS, INC. IS PROHIBITED		REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
		A	6410	INITIAL RELEASE	DV 09/17/09	P	DV



PIN A: SIG/PWR
 PIN B: SIG/PWR RTN
 PIN C: CASE

VIEW A-A

MODEL	SENSITIVITY(mV/g)
3237A1	10
3237A2	25
3237A3	50



- 4 MATES WITH D38999/26KA98SA
 - 3 ARROW SHOWS DIRECTION OF ACCELERATION FOR POSITIVE OUTPUT
 - 2. MATERIAL: 304L
 - 1. WEIGHT: 37 GRAMS APPROX.
- 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.

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	DV	09/17/09
CHK	<i>sp</i>	11-20-09
APP	<i>DL</i>	11/20/09
APP		

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

MASTER ONLY IF IN RED

TITLE: **OUTLINE/INSTALLATION DRAWING, 3237A SERIES**

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3237A	A

SCALE: 3:2 SOLIDWORKS SHEET 1 OF 1

Model Number 3237A2	PERFORMANCE SPECIFICATION	DOC NO PS3237A2
	HIGH FREQUENCY IEPE QUARTZ SHEAR ACCELEROMETERS	REV A, EGN 6410, 09/19/09



- **HIGH FREQUENCY PERFORMANCE**
- **EXCELLENT LINEARITY**
- **ELECTRICALLY ISOLATED**
- **HERMETICALLY SEALED**

PHYSICAL

Weight
Size
Connector

Hex x Height
Type
Pins[1]

ENGLISH		SI	
Weight	1.30 oz	Weight	37 grams
Size	.750 x 1.61 Inches	Size	19.05 x 40.89 mm
Connector	D38999/25YA98PA	Connector	D38999/25YA98PA
	3 PIN		3 PIN
	1/4 - 28 UNF-2A		1/4 - 28 UNF-2A
	304L		304L
	Quartz Shear		Quartz Shear

Mounting Provision : Integral Stud
Material : Housing, Base and Connector
Element Style

PERFORMANCE

Sensitivity, ±5% [2]
Range F.S for ± 5 Volts Output
Frequency Range ±5% ±15%
Resonant Frequency, Nominal
Equivalent Electrical Noise Floor
Linearity [3]
Maximum Transverse sensitivity
Strain Sensitivity

Sensitivity	25 mV/g	Sensitivity	2.55 mV/m/s ²
Range F.S	±200 G's	Range F.S	±1962 m/s ²
Frequency Range	0.48 to 10000 Hz	Frequency Range	0.48 to 10000 Hz
	0.32 to 20000 Hz		0.32 to 20000 Hz
Resonant Frequency	>30 kHz	Resonant Frequency	>30 kHz
Equivalent Electrical Noise Floor	0.009 Grms	Equivalent Electrical Noise Floor	0.088 m/s ² rms
Linearity	± 1% % F.S.	Linearity	± 1% % F.S.
Maximum Transverse sensitivity	5 %	Maximum Transverse sensitivity	5 %
Strain Sensitivity	0.002 g/μσ	Strain Sensitivity	0.02 m/s ² /μσ

ENVIRONMENTAL

Maximum Vibration
Maximum Shock
Temperature Range
Seal

Maximum Vibration	±600 Gpeak	Maximum Vibration	±5886 m/s ² peak
Maximum Shock	±3000 Gpeak	Maximum Shock	±29430 m/s ² peak
Temperature Range	-60 to +305 °F	Temperature Range	-54 to +152 °C
Seal	Hermetic	Seal	Hermetic

ELECTRICAL

Supply Current Range [4]
Compliance Voltage Range
Output Impedence, Typ
Bias Voltage
Discharge Time Constant, Nom
Output Signal Polarity for Acceleration Towards Top
Electrical Isolation, Ground (Pin B) to case (pin A)

Supply Current Range	2 to 20 mA	Supply Current Range	2 to 20 mA
Compliance Voltage Range	+ 18 to +30 Volts	Compliance Voltage Range	+18 to +30 Volts
Output Impedence	100 Ω	Output Impedence	100 Ω
Bias Voltage	+7.5 to +9.5 VDC	Bias Voltage	+7.5 to +9.5 VDC
Discharge Time Constant	1 to 2 Sec	Discharge Time Constant	1 to 2 Sec
Output Signal Polarity	Positive	Output Signal Polarity	Positive
Electrical Isolation	10 GΩ, min	Electrical Isolation	10 GΩ, min

This family also includes:

Model	Sensitivity (mV/g)	Range F.S ± 5 Volts (G's)	Max Vibration/Shock(± Gpeak)	Resonant Frequency (kHz)
3237A1	10	500	700/5000	>30
3237A3	50	100	500/2000	>30

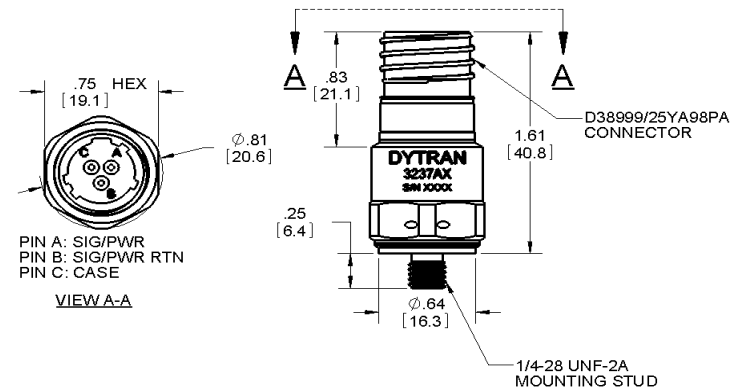
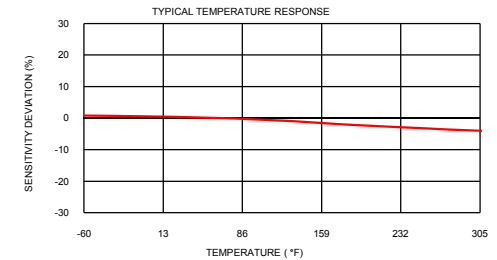
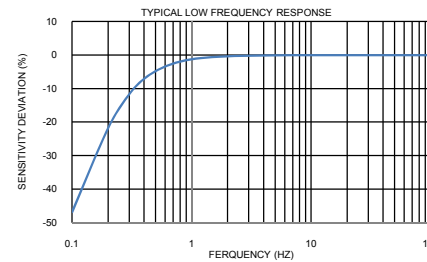
Please refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)

Notes:

- [1] Pin A-SIG/PWR, Pin B - SIG/PWR RTN, Pin C - CASE
- [2] Measure at 100Hz, 1 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] Lock wire holes are included in the base



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3237A for more information.



21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax: 818.700.7880 www.dytran.com
For permission to reprint this content, please contact info@dytran.com