

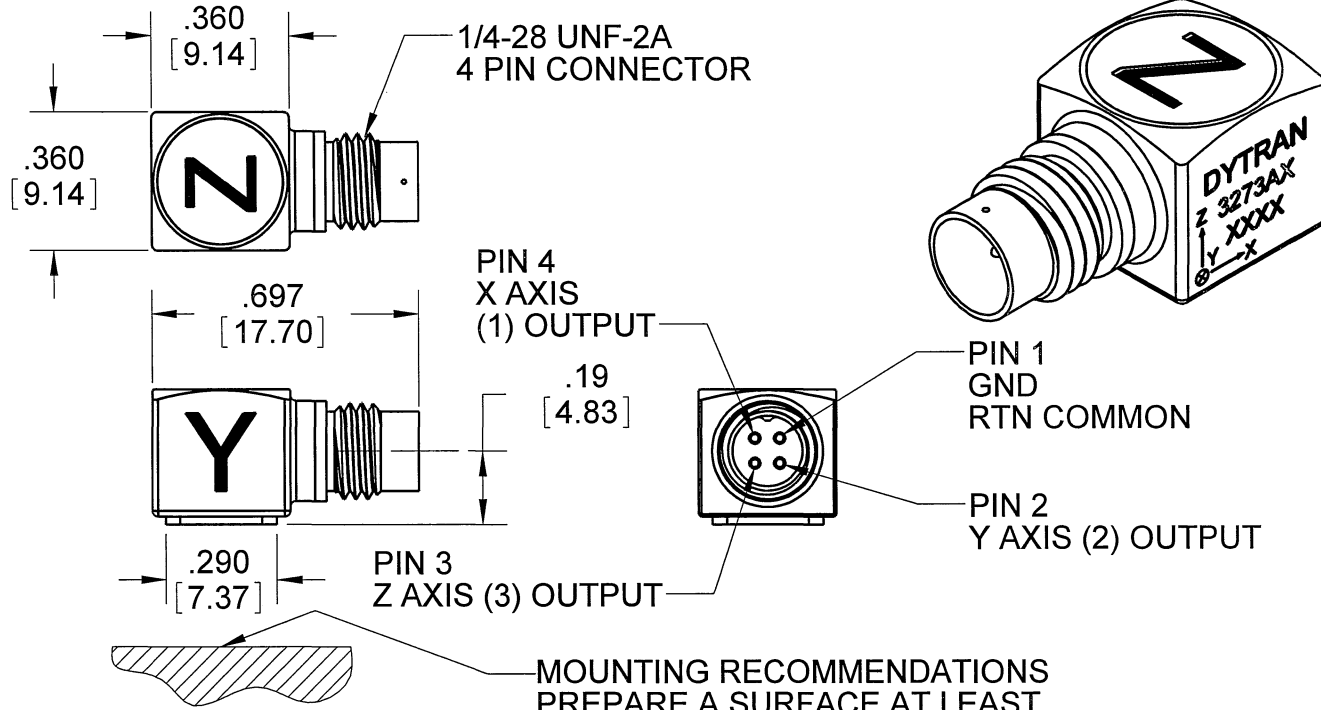
**PROPRIETARY AND CONFIDENTIAL**

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**REVISIONS**

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
D	7027	ADDED NOTE 4	JS 08/18/10	RA	JS

MODEL	SENSITIVITY
3273A1	10mV/G
3273A2	100mV/G
3273A4	50mV/G



4. TO MATE CABLE TO CONNECTOR INSERT PLUG AND ENGAGE KEYWAY BEFORE TURNING COUPLING NUT.
  3. HOUSING/CONNECTOR MATERIAL: TITANIUM
  2. ARROWS INDICATE DIRECTIONS OF ACCELERATION FOR POSITIVE OUTPUT.
  1. WEIGHT: 3.0 GRAMS
- NOTES: UNLESS OTHERWISE SPECIFIED.

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.

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.	
SERIES	
USED ON	NEXT ASSY
APPLICATION	
THIRD ANGLE PROJECTION USA	
ALL MACHINED SURFACES. <sup>63</sup> 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 ± 0.10 .XX ± 0.25	
MATERIAL	
FINISH	
DO NOT SCALE DRAWING	

CONTRACT NO.	
APPROVALS	
ORIG	DATE
CHK	9/30/08
APP	DV 10/17/08
APP	ANS 10/17/08

Chatsworth, CA

**MASTER ONLY IF IN RED**

TITLE: **OUTLINE/INSTALLATION DRAWING, 3273A SERIES**

SIZE	CAGE CODE	DWG. NO.	REV
<b>A</b>	<b>2W033</b>	<b>127-3273A</b>	<b>D</b>

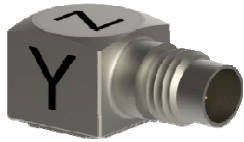
SCALE: 4:1      SOLIDWORKS      SHEET 1 OF 1

# 3273A4

# PERFORMANCE SPECIFICATION

REV M, ECN 15711, 04/21/20

Accelerometer, Triaxial, IEPE



- ULTRA LOW FREQUENCY RESPONSE
- ULTRA LOW NOISE LEVEL
- WEIGHT ONLY 2.7 GRAMS

### PHYSICAL

		ENGLISH		SI	
Weight		0.096	oz	2.7	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	Case ground		Case ground	
Sensing Element	Material	Ceramic		Ceramic	
	Mode	Shear		Shear	

### PERFORMANCE

		ENGLISH		SI	
Sensitivity, ±10% [2]		50	mV/g	5.10	mV/m/s <sup>2</sup>
Acceleration Range		+/-100	Gpeak	+/-981	m/s <sup>2</sup> peak
Frequency Range, ±15%		.3-10,000	Hz	.3-10,000	Hz
Frequency Range, ± 5%		.5 - 3000	Hz	.5 - 3000	Hz
Phase Response, ± 5°		2.3 to 3000	Hz	2.3 to 3000	Hz
Resonance Frequency		>24	kHz	>24	kHz
Linearity [3]		1	%F.S.	1	%F.S.
Transverse Sensitivity Max		6	%	6	%
Noise floor, Max		0.002	Grms	0.017	m/s <sup>2</sup> rms
Spectral Noise	1Hz	525	µGrms/sqr(Hz)	5150	µm/s <sup>2</sup> rms/sqr(Hz)
	10Hz	101	µGrms/sqr(Hz)	991	µm/s <sup>2</sup> rms/sqr(Hz)
	100Hz	50	µGrms/sqr(Hz)	491	µm/s <sup>2</sup> rms/sqr(Hz)
	1000Hz	16	µGrms/sqr(Hz)	157	µm/s <sup>2</sup> rms/sqr(Hz)
	10000Hz	10	µGrms/sqr(Hz)	98	µm/s <sup>2</sup> rms/sqr(Hz)

### 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 to 1.5	sec	0.5 to 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 +185	°F	-51 to +85	°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	0.1962	m/s <sup>2</sup> /µε

### This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3273A1	10	500	0.003	-60 to +225	0.5 - 1.5
3273A2	100	50	0.00095	-60 to +165	0.5 - 1.5

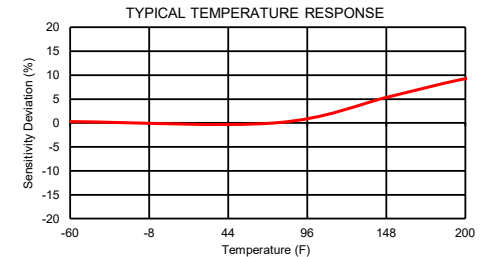
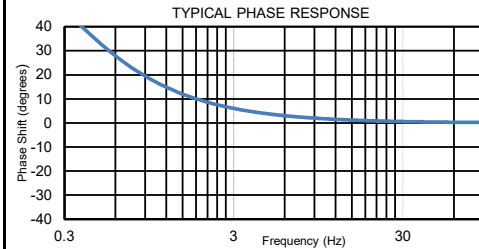
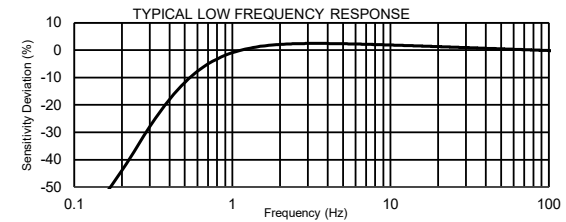
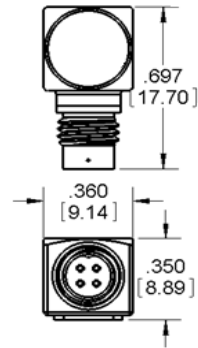
Please, refer to the performance specifications of the products in this family for detailed description

### Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)

### Notes:

- [1] Glass to metal Seal connector. Mates with Dytran cable model 6811AXX or 6824AXX (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
- [5] In the interest of constant product improvement, we reserve the right to change specifications without notice. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3273A for more information.



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