

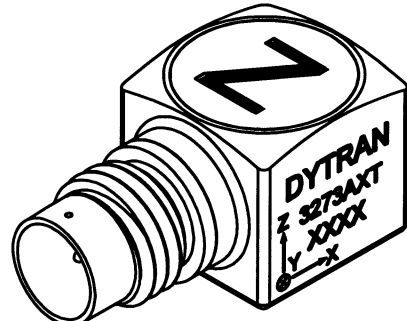
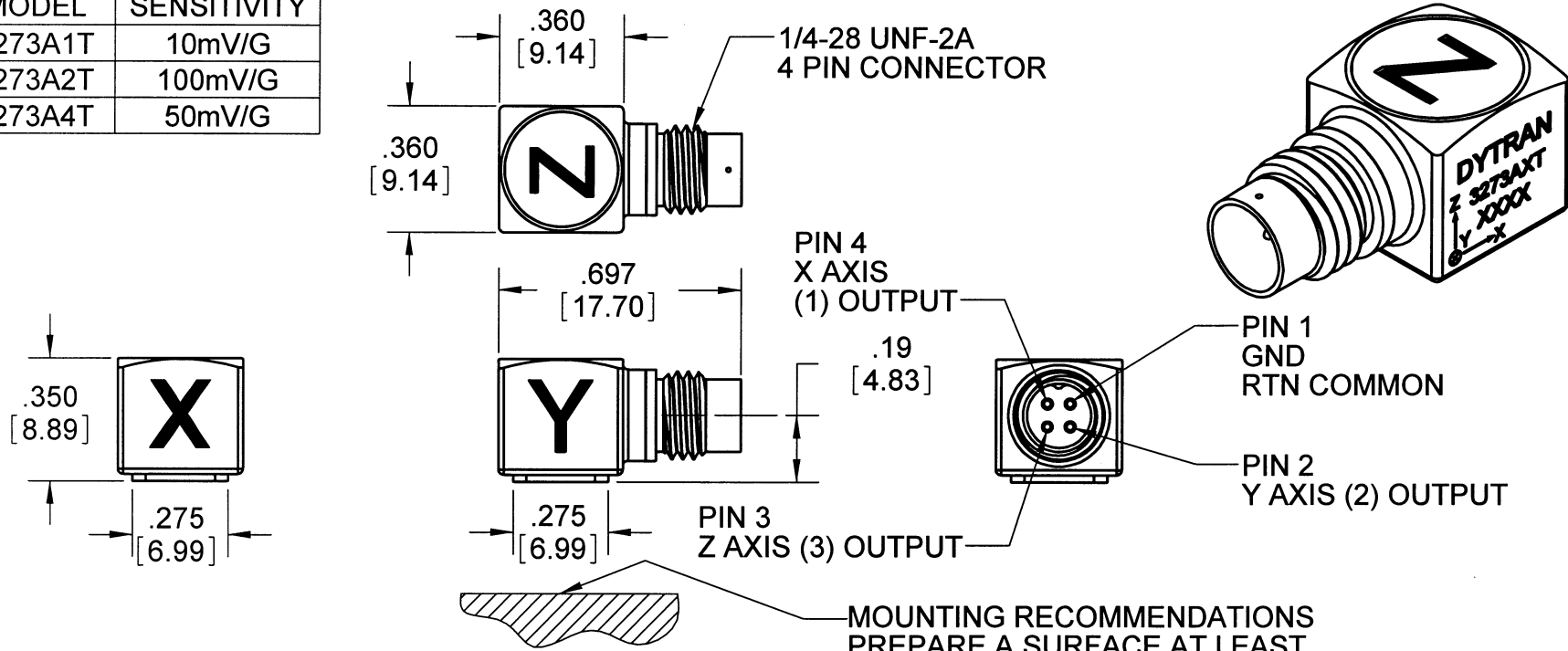
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REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	5832	INITIAL RELEASE	RA, 03/13/09	<i>ey</i>	<i>DU</i>

MODEL	SENSITIVITY
3273A1T	10mV/G
3273A2T	100mV/G
3273A4T	50mV/G



- 3. HOUSING/CONNECTOR MATERIAL: TITANIUM
- 2. ARROWS INDICATE DIRECTIONS OF ACCELERATION FOR POSITIVE OUTPUT.
- 1. WEIGHT: 3.0 GRAMS APPROXIMATELY

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.

3273AT SERIES	
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	R.A.	05/05/09
CHK	<i>ey</i>	5/11/09
APP	<i>DU</i>	5/12/09
APP		

**DYTRAN INSTRUMENTS, INC.** Chatsworth, CA

**MASTER ONLY IF IN RED**

TITLE: **OUTLINE/INSTALLATION DRAWING, MODEL 3273AT SERIES**

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

SCALE: 4:1      SOLIDWORKS      SHEET 1 OF 1

# 3273A4T

# PERFORMANCE SPECIFICATION

REV A, ECN 5940, 04/22/09

Accelerometer, Triaxial, IEPE



Actual Size

- ULTRA LOW FREQUENCY RESPONSE
- ULTRA LOW NOISE LEVEL
- WEIGHT ONLY 3 GRAMS

ENGLISH		SI	
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### PHYSICAL

		ENGLISH		SI	
Weight		0.105	oz	3.0	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	Case ground		Case ground	
Sensing Element	Material	Ceramic		Ceramic	
	Mode	Shear		Shear	

### PERFORMANCE

		ENGLISH		SI	
Sensitivity, +15-10% [2]		50	mV/g	5.10	mV/m/s <sup>2</sup>
Acceleration Range		100	Gpeak	981.00	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		0.0009	Grms	0.009	m/s <sup>2</sup> rms
Spectral Noise	1Hz	311	μGrms/sqr(Hz)	3051	μm/s <sup>2</sup> rms/sqr(Hz)
	10Hz	60	μGrms/sqr(Hz)	589	μm/s <sup>2</sup> rms/sqr(Hz)
	100Hz	30	μGrms/sqr(Hz)	294	μm/s <sup>2</sup> rms/sqr(Hz)
	1000Hz	10	μGrms/sqr(Hz)	98	μm/s <sup>2</sup> rms/sqr(Hz)
	10000Hz	6	μGrms/sqr(Hz)	59	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 - 13	VDC	11 - 13	VDC
Discharge Time Constant.		0.8 - 1.2	sec	0.8 - 1.2	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 +200	°F	-51 to +93	°C
TEDS Operation Temperature		-40 to +185	°F	-40 to +85	°C
Seal		Hermetic		Hermetic	
Magnetic Sensitivity at 100 Gauss		0.000013	g/Gauss	0.000128	m/s <sup>2</sup> /Gauss
Base Strain Sensitivity		0.06	g/με	0.59	m/s <sup>2</sup> /με
TEDS feature		IEEE 1451.4		IEEE 1451.4	

### This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3273A1T	10	500	0.0012	-60 to +225	0.8 - 1.2
3273A2T	100	50	0.0008	-60 to +160	0.8 - 1.2

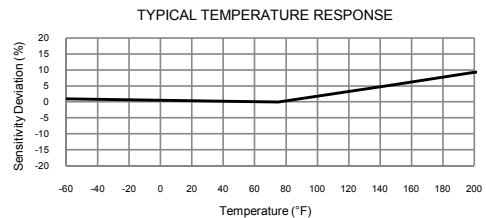
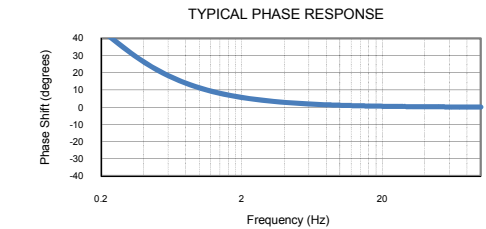
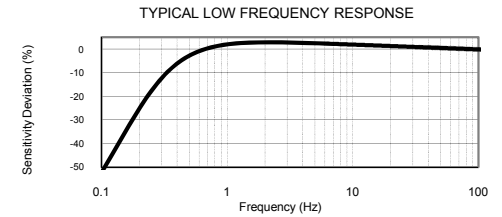
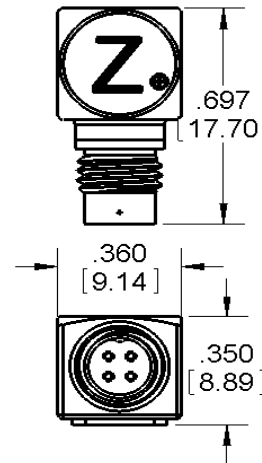
Please, refer to the performance specifications of the products in this family for detailed description

### 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, 5 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 127-3273AT for more information.



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