

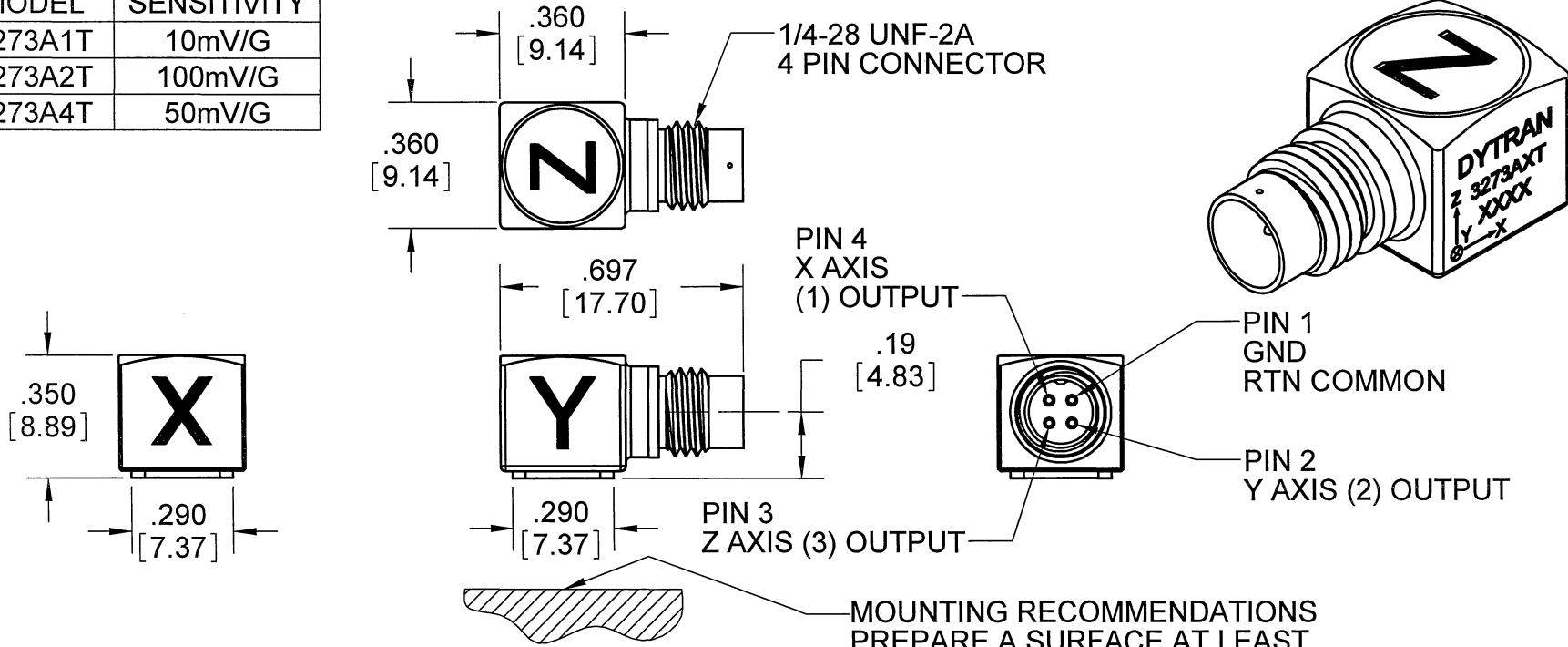
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REVISIONS

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

MODEL	SENSITIVITY
3273A1T	10mV/G
3273A2T	100mV/G
3273A4T	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 APPROXIMATELY
- 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.	
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	
ORIG	R.A. 05/05/09
CHK	EP 05/11/09
APP	DV 05/12/09
APP	

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

MASTER ONLY IF IN RED

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

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3273AT	B

SCALE: 4:1 SOLIDWORKS SHEET 1 OF 1

3273A4T

PERFORMANCE SPECIFICATION

REV G, ECN 7336, 01/26/11

Accelerometer, Triaxial, IEPE



Actual Size

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

This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3273A1T	10	500	0.003	-60 to +225	0.8 - 1.2
3273A2T	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, 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
- [5] In the interest of constant product improvement, we reserve the right to change specifications without notice

PHYSICAL

	ENGLISH		SI	
Weight	0.105	oz	3.0	grams
Mounting	Adhesive		Adhesive	
Connector [1]	4-pin		4-pin	
	Type			
	Material			
Housing	Ti-6 AL-4V		Ti-6 AL-4V	
	Material			
	Isolation			
Sensing Element	Ceramic		Ceramic	
	Material			
	Mode			
	Shear		Shear	

PERFORMANCE

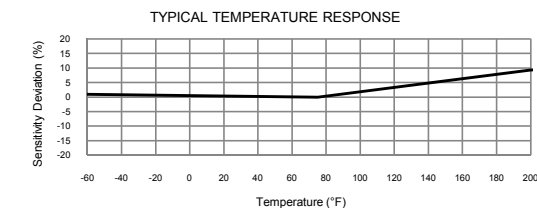
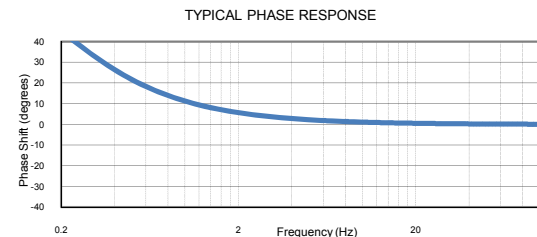
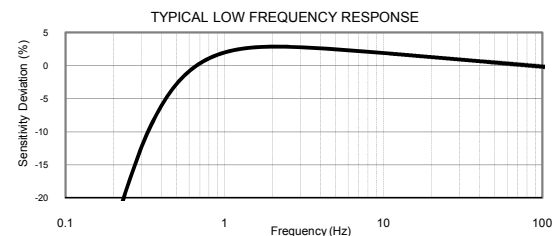
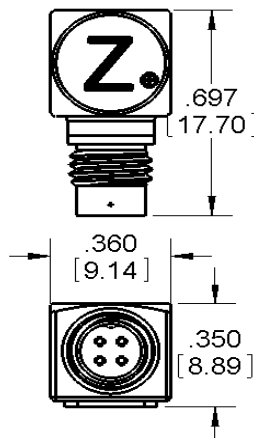
	ENGLISH		SI	
Sensitivity, ±10% [2]	50	mV/g	5.10	mV/m/s ²
Acceleration Range	100	Gpeak	981	m/s ² peak
Frequency Range, ±15%	.3-10,000	Hz	.3-10,000	Hz
Frequency Range, ± 5%	.5 - 3000	Hz	.5 - 3000	Hz
Resonance Frequency	>24	kHz	>24	kHz
Linearity [3]	1	%F.S.	1	%F.S.
Phase Response, ± 5°	2.3 to 3000	Hz	2.3 to 3000	Hz
Transverse Sensitivity Max	5	%	5	%
Noise floor, Max	0.002	Grms	0.020	m/s ² rms
Spectral Noise				
	1Hz	525	5150	μm/s ² rms/sqr(Hz)
	10Hz	101	991	μm/s ² rms/sqr(Hz)
	100Hz	50	491	μm/s ² rms/sqr(Hz)
	1000Hz	16	157	μm/s ² rms/sqr(Hz)
	10000Hz	10	98	μm/s ² 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 to 1.2	sec	0.8 to 1.2	sec

ENVIRONMENTAL

	ENGLISH		SI	
Shock Max	5000	g pk	49050	m/s ²
Vibration Max	3000	g pk	29430	m/s ²
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	0.00013	m/s ² /Gauss
Base Strain Sensitivity	0.06	g/με	0.59	m/s ² /με
TEDS feature	IEEE 1451.4		IEEE 1451.4	



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



21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax: 818.700.7880
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