

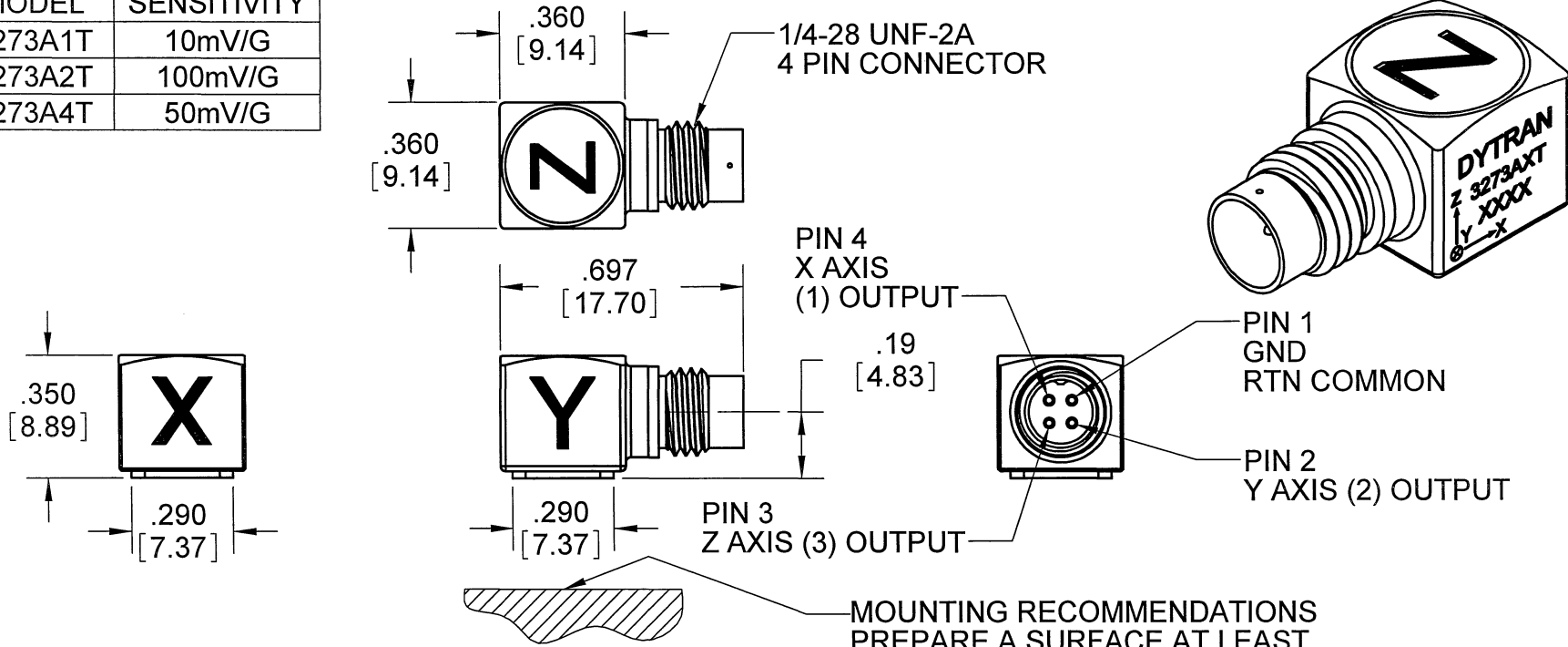
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REVISIONS

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



- TO MATE CABLE TO CONNECTOR INSERT PLUG AND ENGAGE KEYWAY BEFORE TURNING COUPLING NUT.
 - HOUSING/CONNECTOR MATERIAL: TITANIUM
 - ARROWS INDICATE DIRECTIONS OF ACCELERATION FOR POSITIVE OUTPUT.
 - 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	

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.

CONTRACT NO.



MASTER ONLY IF IN RED
 Chatsworth, CA

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

APPROVALS		DATE
ORIG	R.A.	05/05/09
CHK	EP	05/11/09
APP	DV	05/12/09
APP		

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3273AT	B
SCALE: 4:1		SOLIDWORKS	SHEET 1 OF 1

3273A2T

PERFORMANCE SPECIFICATION

REV G, ECN 8960, 08/10/12

Accelerometer, Triaxial, IEPE



Actual Size

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

	ENGLISH		SI	
Weight	0.1	oz	3.0	grams
Mounting	Adhesive		Adhesive	
Connector [1]	4-pin		4-pin	
Type	Ti-6 AL-4V		Ti-6 AL-4V	
Material	Ti-6 AL-4V		Ti-6 AL-4V	
Housing	Case ground		Case ground	
Material	Ceramic		Ceramic	
Isolation	Ceramic		Ceramic	
Sensing Element	Shear		Shear	
Material				
Mode				

PHYSICAL

Weight
Mounting
Connector [1]
Type
Material
Housing
Material
Isolation
Sensing Element
Material
Mode

PERFORMANCE

Sensitivity, $\pm 10\%$ [2]	100	mV/g	10.19	mV/m/s ²
Acceleration Range	50	Gpeak	491	m/s ² peak
Frequency Range, $\pm 5\%$.7 - 3000	Hz	.7 - 3000	Hz
Frequency Range, $\pm 15\%$ -10%	.42 - 10,000	Hz	.42 - 10,000	Hz
Resonance Frequency	>24	kHz	>24	kHz
Phase Response, $\pm 5^\circ$	4.0 to 3000	Hz	4.0 to 3000	Hz
Linearity [3]	1	%F.S.	1	%F.S.
Transverse Sensitivity Max	6	%	6	%
Noise floor, Max	0.00095	Grms	0.009	m/s ² rms
Spectral Noise				
1Hz	207	μ Grms/sqr(Hz)	2031	μ m/s ² rms/sqr(Hz)
10Hz	52	μ Grms/sqr(Hz)	510	μ m/s ² rms/sqr(Hz)
100Hz	32	μ Grms/sqr(Hz)	314	μ m/s ² rms/sqr(Hz)
1000Hz	11	μ Grms/sqr(Hz)	108	μ m/s ² rms/sqr(Hz)
10000Hz	8	μ Grms/sqr(Hz)	78	μ m/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	11 - 13	VDC	11 - 13	VDC
Discharge Time Constant.	0.5 to 1.5	sec	0.5 to 1.5	sec

ENVIRONMENTAL

Shock Max	5000	g pk	49050	m/s ²
Vibration Max	3000	g pk	29430	m/s ²
Operating Temperature	-60 to +165	$^\circ$ F	-51 to +82	$^\circ$ C
TEDs Operation Temperature	-40 to +185	$^\circ$ F	-40 to +85	$^\circ$ 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/ μ e	0.59	m/s ² / μ e
TED feature	IEEE 1451.4		IEEE 1451.4	

This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp($^\circ$ F)	TC
3273A1T	10	500	0.003	-60 to +250	0.5 - 1.5
3273A4T	50	100	0.002	-60 to +200	0.5 - 1.5

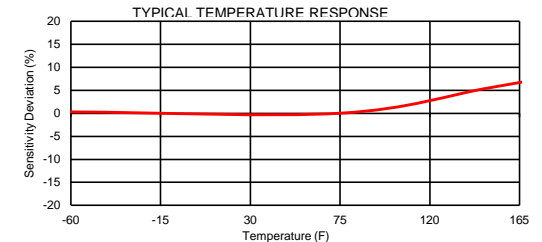
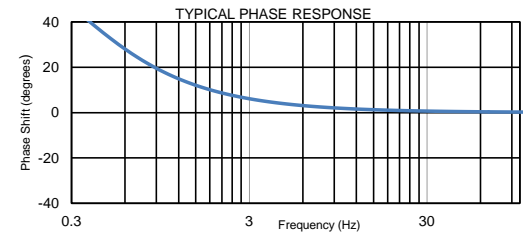
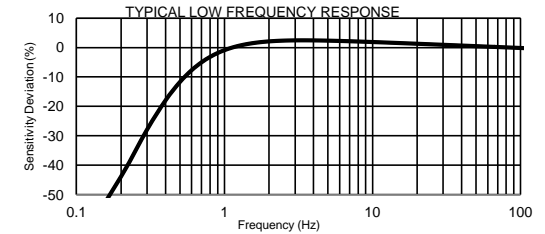
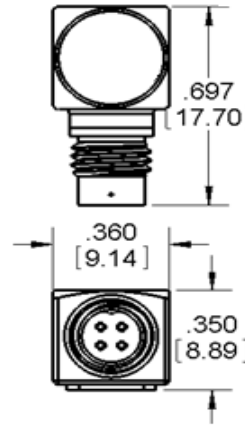
Please, refer to the performance specifications of the products in this family for detailed description

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



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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