

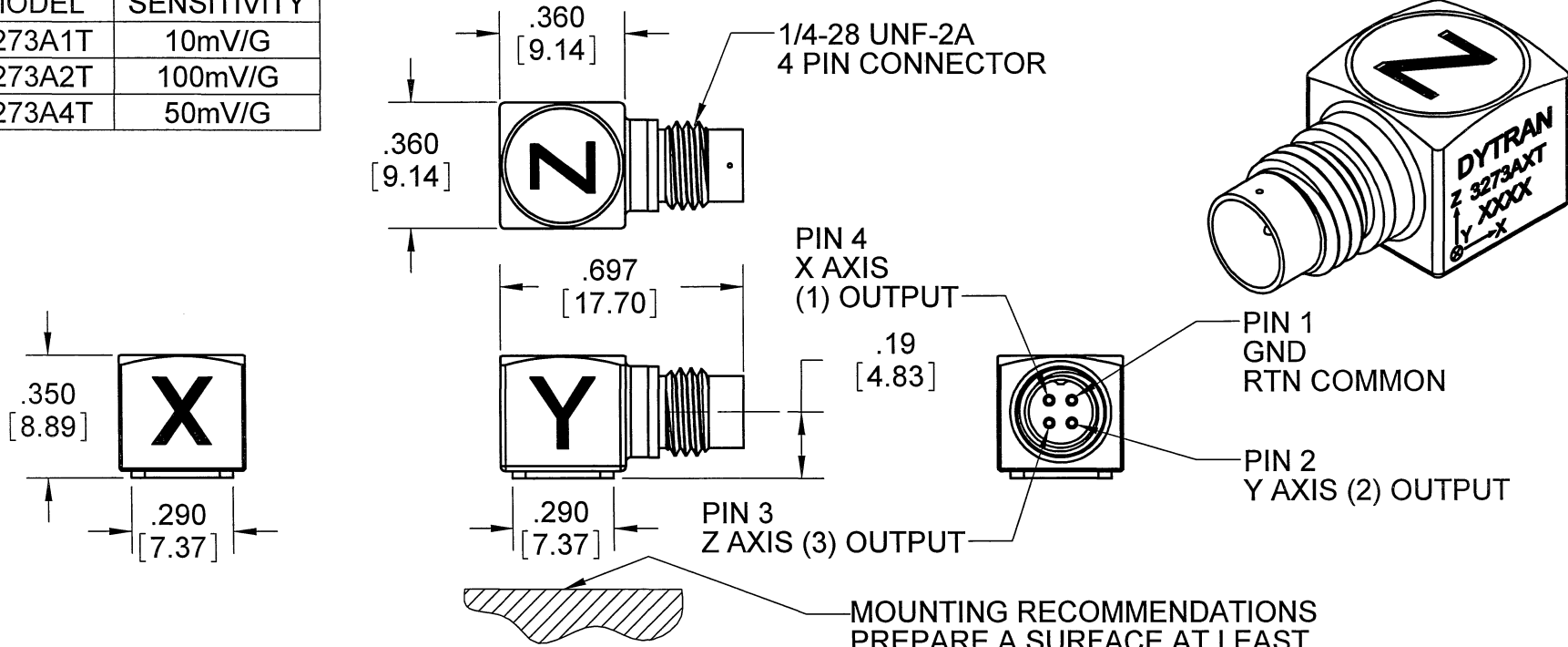
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**REVISIONS**

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



**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.

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.

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	
<b>DO NOT SCALE DRAWING</b>	

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.

63

3273AT SERIES  
 USED ON    NEXT ASSY  
**APPLICATION**  
 THIRD ANGLE PROJECTION USA

CONTRACT NO.

APPROVALS		DATE
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
<b>A</b>	<b>2W033</b>	<b>127-3273AT</b>	<b>B</b>

SCALE: 4:1    SOLIDWORKS    SHEET 1 OF 1

# PERFORMANCE SPECIFICATION

<b>Model Number</b>		<b>DOC NO</b>
3273A1T	<b>Accelerometer, Triaxial, IEPE</b>	<b>PS3273A1T</b>
		REV L, ECN 15711, 04/21/20



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

**PHYSICAL**

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

**PERFORMANCE**

		ENGLISH			SI
Sensitivity, ±10% [2]		10	mV/g	1.02	mV/m/s <sup>2</sup>
Acceleration Range		500	Gpeak	4905	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
Resonance Frequency		>24	kHz	>24	kHz
Phase Response, ± 5°		2.3 to 3000	Hz	2.3 to 3000	Hz
Linearity [3]		1	%F.S.	1	%F.S.
Transverse Sensitivity Max		6	%	6	%
Noise floor, Max		0.003	Grms	0.029	m/s <sup>2</sup> rms
Spectral Noise	1Hz	629	µGrms/sqr(Hz)	6166	µm/s <sup>2</sup> rms/sqr(Hz)
	10Hz	110	µGrms/sqr(Hz)	1074	µm/s <sup>2</sup> rms/sqr(Hz)
	100Hz	67	µGrms/sqr(Hz)	657	µm/s <sup>2</sup> rms/sqr(Hz)
	1000Hz	31	µGrms/sqr(Hz)	304	µm/s <sup>2</sup> rms/sqr(Hz)
	10000Hz	16	µGrms/sqr(Hz)	157	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		0.5 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 +225	°F	-51 to +107	°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 <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
3273A2T	100	50	0.00095	-60 to +165	0.5 - 1.5
3273A4T	50	100	0.002	-60 to +185	0.5 - 1.5

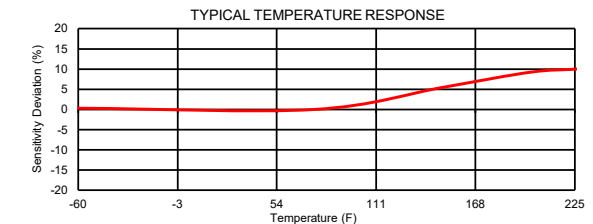
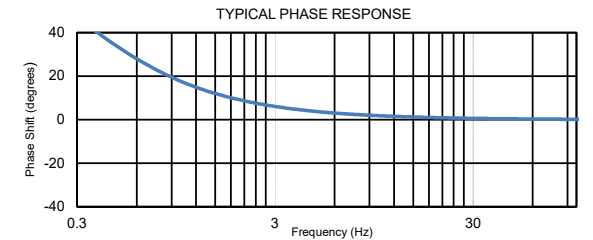
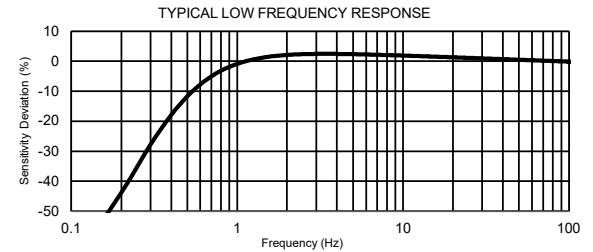
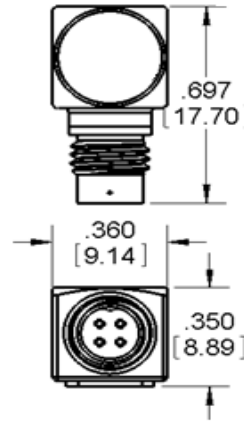
Please, refer to the performance specifications of the products in this family for detailed description

**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 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 127-3273AT for more information.



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