REVISIONS THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY DESCRIPTION **REV ECN APPR** BY/DATE CHK OF DYTRAN INSTRUMENTS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF DYTRAN INSTRUMENTS, INC. IS PROHIBITED D 7027 ADDED NOTE 4 JS 08/18/10 MODEL **SENSITIVITY** .360 1/4-28 UNF-2A 3273A1 10mV/G 9.14 **4 PIN CONNECTOR** 3273A2 100mV/G 3273A4 50mV/G .360 9.14 PIN 4 X AXIS .697 (1) OUTPUT 17.70 PIN 1 .19 **GND** [4.83] RTN COMMON .3508.89 PIN 2 Y AXIS (2) OUTPUT .290 PIN₃ .290 Z AXIS (3) OUTPUT MOUNTING RECOMMENDATIONS PREPARE A SURFACE AT LEAST .300 BY .300. SURFACE FLATNESS MUST BE EQUAL OR BETTER THAN .0001 TIR. 4. TO MATE CABLE TO CONNECTOR INSERT PLUG AND USE ONE DROP OF CYANOACRYLATE ENGAGE KEYWAY BEFORE TURNING COUPLING NUT. TO MOUNT THE ACCELEROMETER. 3. HOUSING/CONNECTOR MATERIAL: TITANIUM 2. ARROWS INDICATE DIRECTIONS OF ACCELERATION FOR POSITIVE OUTPUT. WEIGHT: 3.0 GRAMS CONTRACT NO. NOTES: UNLESS OTHERWISE SPECIFIED. UNLESS OTHERWISE SPECIFIED: INTERPRET DIM & TOL PER DIMENSIONS ARE IN INCHES. ASME Y14.5M - 1994 DIMENSIONS IN BRACKETS [] REMOVE BURRS. ARE IN MILLIMETERS COUNTERSINK INTERNAL THDS TITLE: 90° TO MAJOR DIA TOLERANCES ARE: CHAM EXT THDS 45° TO MINOR DIA. **INCHES** METRIC ANGLES **OUTLINE/INSTALLATION** SERIES THD LENGTHS AND DEPTHS ARE FOR .XX ± .03 .X ± 0.8 ± 1° MIN FULL THDS. USED ON NEXT ASSY

APPLICATION

THIRD ANGLE PROJECTION

ALL MACHINED SURFACES. \lor 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

DIMENSIONS APPLY AFTER FINISHING.

THDS PER MIL-S-7742.

.XX ±0.25 .XXX±.010

APPROVALS DATE MATERIAL ORIG R.A. 9/30/08 FINISH CHK DV 10/17/08 APP ANS 10/17/08 DO NOT SCALE DRAWING APP

DRAWING, 3273A SERIES

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

Model Number 3273A2	PERF	PERFORMANCE SPECIFICATION		
		Accelerometer, Triaxial, IEPE		REV N, ECN 15610, 02/25/20



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

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		ENGLISH		SI	
PHYSICAL					
Weight		0.096	oz	2.7	grams
Mounting		Adhesive		Adhesive	ľ
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					
Sensitivity, ±10%[2]		100	mV/g	10.19	mV/m/s^2
Acceleration Range		+/-50	Gpeak	+/-491	m/s^2 peak
Frequency Range, ±5%		.7 - 3000	Hz	.7 - 3000	Hz
Frequency Range, ±15%		.42 - 10,000	Hz	.42 - 10,000	Hz
Phase Response, ±5°		4.0 to 3000	Hz	4.0 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		0.00095	Grms	0.009	m/s^2 rms
Spectral Noise	1Hz	207	μGrms/sqr(Hz)	2031	µm/s^2 rms/sqr(Hz)
	10Hz	52	μGrms/sqr(Hz)	510	µm/s^2 rms/sqr(Hz)
	100Hz	32	μGrms/sqr(Hz)	314	µm/s^2 rms/sqr(Hz)
	1000Hz	11	μGrms/sqr(Hz)	108	µm/s^2 rms/sqr(Hz)
	10000Hz	8	μGrms/sqr(Hz)	78	µm/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. Output Bias Voltage		100	Ω	100	Ω
		+11 to +13	VDC	+11 to +13	VDC
Discharge Time Constant		0.5 to 1.5	sec	0.5 to 1.5	sec
ENVIRONMENTAL					1 40
Snock Max Vibration Max		5000	g pk	49050	m/s^2
		3000	g pk	29430	m/s^2
Operating Temperature		-60 to +165	°F	-51 to +74	°C
Seal		Hermetic		Hermetic	
Magnetic Sensitivity at 100 G	Sauss	0.000013	g/Gauss	0.00013 0.1962	m/s^2/Gauss m/s^2/με
Base Strain Sensitivity		0.02	g/με		

Γhis	family	also	incl	udes:

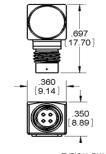
Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3273A1	10	500	0.003	-60 to +225	0.5 - 1.5
3273A4	50	100	0.002	-60 to +185	0.5 - 1.5

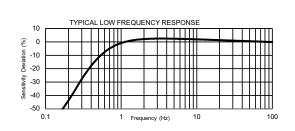
Please, refer to the performance specifications of the products in this family for detailed description **Supplied Accessories**:

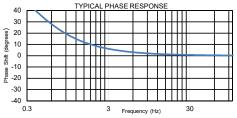
1) Accredited calibration certificate (ISO 17025)

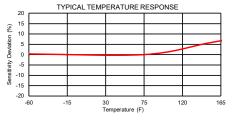
Notes:

- [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 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.

