

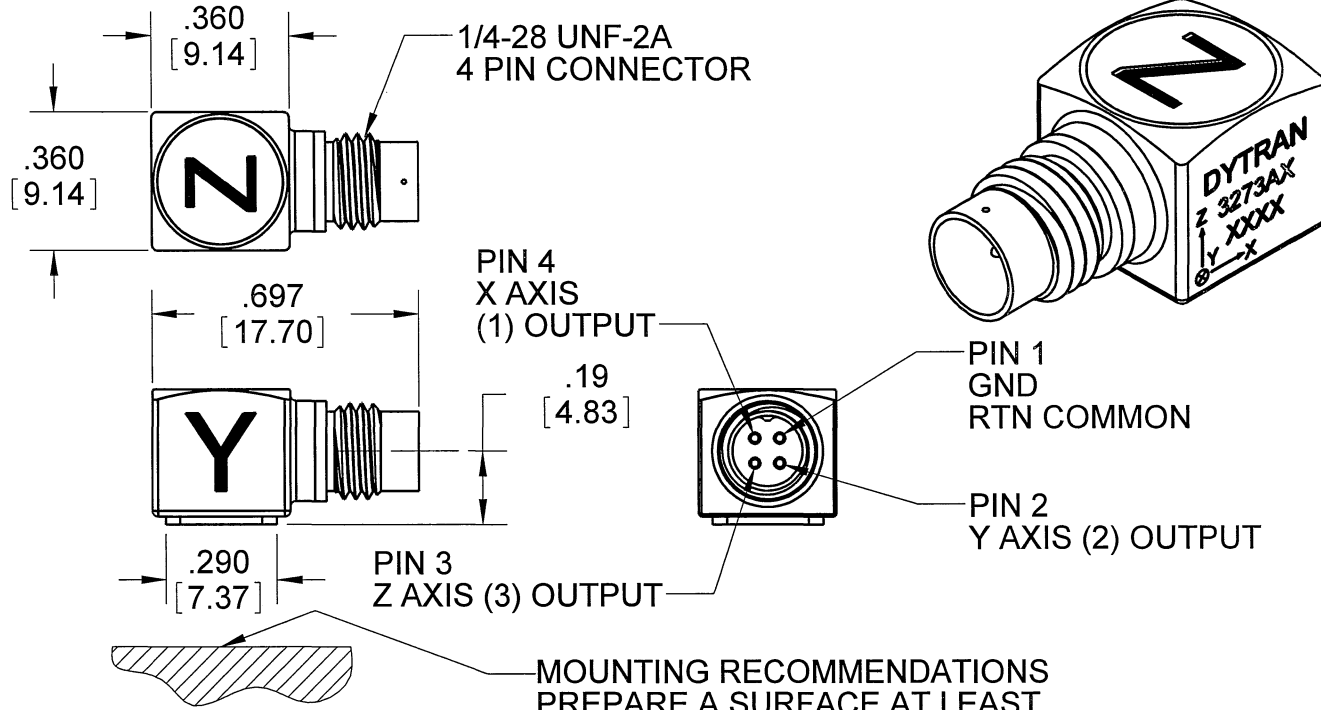
PROPRIETARY AND CONFIDENTIAL

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REVISIONS

| REV | ECN | DESCRIPTION | BY/DATE | CHK | APPR |
|-----|------|--------------|-------------|-----|------|
| D | 7027 | ADDED NOTE 4 | JS 08/18/10 | RA | JS |

| MODEL | SENSITIVITY |
|--------|-------------|
| 3273A1 | 10mV/G |
| 3273A2 | 100mV/G |
| 3273A4 | 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
- 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. | |
| SERIES | |
| USED ON | NEXT ASSY |
| APPLICATION | |
| THIRD ANGLE PROJECTION USA | |
| ALL MACHINED SURFACES. ⁶³ 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 ± 0.10 .XX ± 0.25 | |
| MATERIAL | |
| FINISH | |
| DO NOT SCALE DRAWING | |

| | |
|--------------|--------------|
| CONTRACT NO. | |
| APPROVALS | |
| ORIG | DATE |
| CHK | 9/30/08 |
| APP | DV 10/17/08 |
| APP | ANS 10/17/08 |



Chatsworth, CA

**MASTER
ONLY IF IN RED**

TITLE: **OUTLINE/INSTALLATION
DRAWING, 3273A SERIES**

| | | | |
|----------|--------------|------------------|----------|
| SIZE | CAGE CODE | DWG. NO. | REV |
| A | 2W033 | 127-3273A | D |

SCALE: 4:1 SOLIDWORKS SHEET 1 OF 1

| | | | |
|-------------------------------|--------------------------------------|--|----------------------------|
| Model Number 3273A2 | PERFORMANCE SPECIFICATION | | DOC NO PS3273A2 |
| | Accelerometer, Triaxial, IEPE | | REV N, ECN 15610, 02/25/20 |



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

| | ENGLISH | | SI | |
|-----------------|-------------|-----------|-------------|-------|
| PHYSICAL | | | | |
| Weight | 0.096 | oz | 2.7 | grams |
| Mounting | Adhesive | | Adhesive | |
| Connector [1] | 4-pin | Type | 4-pin | |
| | Ti-6 AL-4V | Material | Ti-6 AL-4V | |
| Housing | Ti-6 AL-4V | Material | Ti-6 AL-4V | |
| | Case ground | Isolation | Case ground | |
| Sensing Element | Ceramic | Material | Ceramic | |
| | Shear | Mode | 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. | 100 | Ω | 100 | Ω |
| Output Bias Voltage | +11 to +13 | VDC | +11 to +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 Seal | -60 to +165 | °F | -51 to +74 | °C |
| Magnetic Sensitivity at 100 Gauss | 0.000013 | g/Gauss | 0.00013 | m/s ² /Gauss |
| Base Strain Sensitivity | 0.02 | g/µε | 0.1962 | m/s ² /µε |

This family also includes:

| 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:

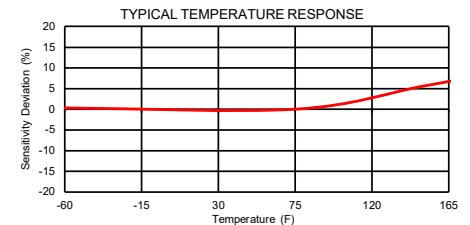
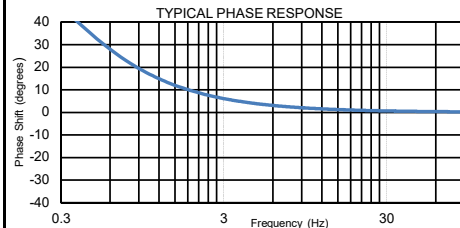
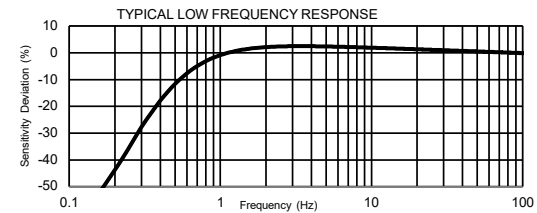
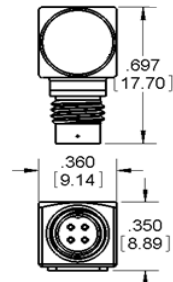
[1] Glass to metal Seal connector. Mates with Dytran cable model 6811AXX or 6824AXX (XX=length in feet)

[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.



21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax:818.700.7880 www.dytran.com For permission to reprint this content, please contact info@dytran.com