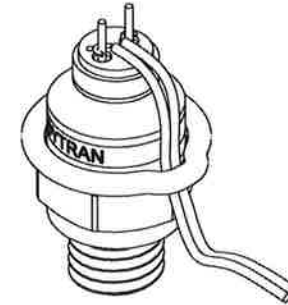
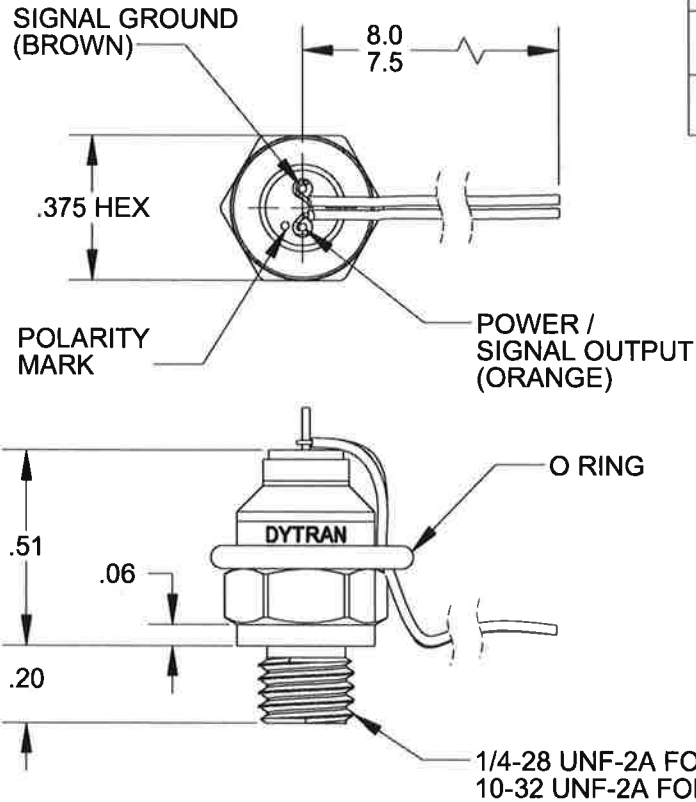


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REVISIONS

| REV. | ECN | DESCRIPTION | BY/DATE | CHK | APPR |
|------|-------|--|-----------------|-----|------|
| C | 5057 | IS:1/4-28 UNF-2A FOR 3086A1 THRU A6 10-32 UNF-2A FOR 3086A1T THRU A6T WAS: 1/4-28 UNF-2A | RA, 2/13/08 | JS | JS |
| D | 5498 | ADDED WIRES & O RING | JS 10/16/08 | AS | DV |
| E | 12854 | ADDED WIRE LENGTH DIMENSION | NDC 07/28/16 | hw | pt |



2. HOUSING MATERIAL: TITANIUM ALLOY

1. RECOMMENDED MOUNTING TORQUE:
30 LB-IN

| DRILL HOLE SIZE | TOLERANCE |
|------------------|---------------|
| .0135 THRU .125 | +0.04 / -.001 |
| .1260 THRU .250 | +0.05 / -.001 |
| .2510 THRU .500 | +0.06 / -.001 |
| .5010 THRU .750 | +0.08 / -.001 |
| .7510 THRU 1.000 | +0.10 / -.001 |
| 1.001 THRU 2.000 | +0.12 / -.001 |

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.
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.

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES.
TOLERANCES ARE:

| | |
|-------------|--------|
| DECIMALS | ANGLES |
| .XX ± .010 | ± 1° |
| .XXX ± .005 | |

MATERIAL

FINISH

DO NOT SCALE DRAWING

| | |
|---------------|----------|
| CONTRACT NO. | |
| APPROVALS | DATE |
| ORIG PML | 3/28/07 |
| CHK JS | 2/15/08 |
| APP DV | 10/17/08 |
| APP <i>hw</i> | 8/16/16 |

MASTER COPY ONLY IF IN RED

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

TITLE: **OUTLINE DRAWING, 3086A**

| | | | |
|---------------|------------------------|---------------------------|--------------|
| SIZE A | CAGE CODE 2W033 | DWG. NO. 127-3086A | REV E |
| SCALE: 4:1 | | SOLIDWORKS | SHEET 1 OF 1 |



- **MINIATURE SIZE**
- **EXCELLENT LINEARITY**
- **HERMETICALLY SEALED**

PHYSICAL

Weight
 Connector Top Mounted
 Mounting Provision Integral Stud
 Material Accelerometer and Connector
 Element Style Titanium Alloy

| ENGLISH | | SI | |
|--------------------|----|--------------------|-------|
| 0.12 | oz | 3.5 | grams |
| Solder Pins | | Solder Pins | |
| 1/4-28 UNF-2A | | 1/4-28 UNF-2A | |
| Titanium Alloy | | Titanium Alloy | |
| Quartz Compression | | Quartz Compression | |

PERFORMANCE

Sensitivity, Nom. [1]
 Range Full Scale
 Low Frequency -3dB Point, Nom
 Low Frequency -5% Point
 Frequency Response, ±10%
 Resonant Frequency
 Isolation Cup Resonance
 Electrical Noise
 Linearity [2]
 Maximum Transverse Sensitivity

| | | | |
|---------------|--------|---------------|----------------------|
| 0.50 | mV/g | 0.05 | mV/m/s ² |
| ±10000 | g | ±98000 | m/s ² |
| 0.16 | Hz | 0.16 | Hz |
| 0.5 | Hz | 0.5 | Hz |
| 0.35 to 10000 | Hz | 0.35 to 10000 | Hz |
| >100 | kHz | >100 | kHz |
| >45 | kHz | >45 | kHz |
| 0.14 | Grms | 1.37 | m/s ² rms |
| ±1 | % F.S. | ±1 | % F.S. |
| 3 | % | 3 | % |

ENVIRONMENTAL

Maximum Shock
 Temperature Range
 Environmental Seal

| | | | |
|-------------|-------|------------|-----------------------|
| ±50000 | Gpeak | ±490000 | m/s ² peak |
| -60 to +250 | °F | -51 to 121 | °C |
| Hermetic | | Hermetic | |

ELECTRICAL

Supply Current Range [3]
 Compliance Voltage Range [3]
 Output Impedance, Nom
 Bias Voltage
 Discharge Time Constant
 Ground Isolation, Case to Mounting Surface, Min

| | | | |
|--------------|-------|--------------|-------|
| 2 to 20 | mA | 2 to 20 | mA |
| +18 to +20 | Volts | +18 to +20 | Volts |
| 100 | Ω | 100 | Ω |
| +7.5 to +9.5 | VDC | +7.5 to +9.5 | VDC |
| 0.8 to 2.0 | Sec | 0.8 to 2.0 | Sec |
| 10 | MΩ | 10 | MΩ |

This family also includes:

| Model | Sensitivity (mV/g) | Range F.S. (g) | Maximum Shock (g) | Operating Temp (°F) |
|--------|--------------------|----------------|-------------------|---------------------|
| 3086A1 | 0.05 | 70,000 | 100,000 | -60 to +250 |
| 3086A2 | 0.1 | 50,000 | 100,000 | -60 to +250 |
| 3086A3 | 0.25 | 20,000 | 100,000 | -60 to +250 |
| 3086A5 | 1.0 | 5,000 | 50,000 | -60 to +250 |
| 3086A6 | 2.0 | 2,500 | 50,000 | -60 to +250 |

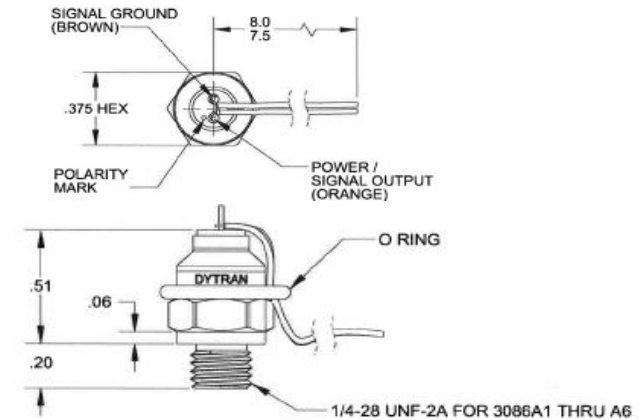
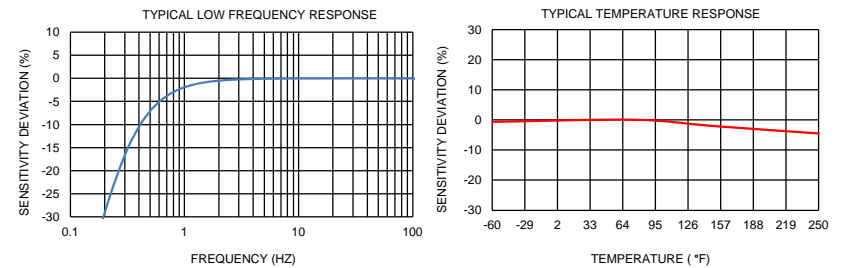
Please refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)

Notes:

- [1] Measured by impacting against calibrated force sensor. NIST traceable.
- [2] Percent of full scale or any lessor full scale range, zero-based best fit straight line method.
- [3] Power only with Dytran or Dytran approved current source type power unit. Do not supply power without current limiting. You will destroy the integral electronics. This will void the warranty.
- [4] Recommended Cable: Dytran Part No. 128-6869AXX (XX denotes length in feet)



Units on the line drawing are in inches. Refer to 127-3086A for more information.

