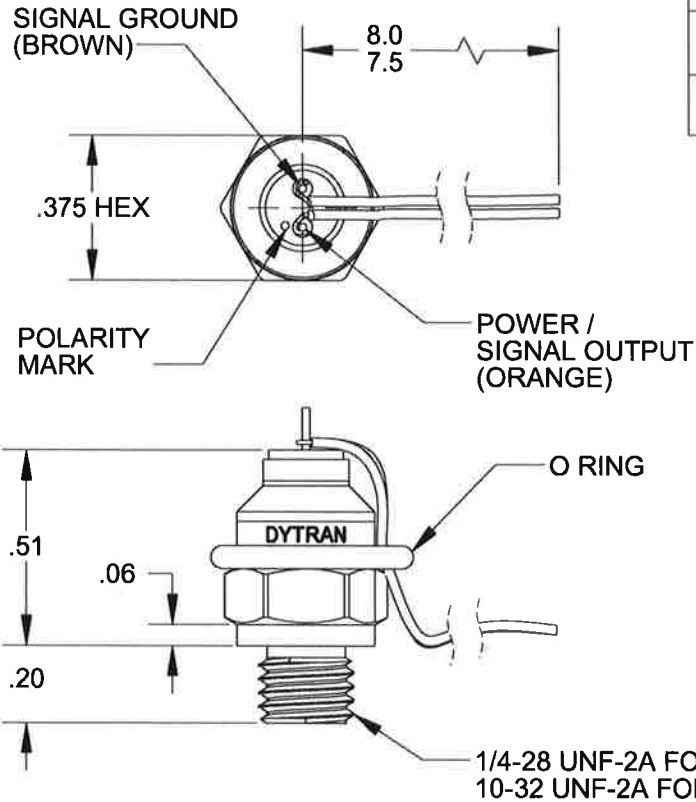


PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF DYTRAN INSTRUMENTS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF DYTRAN INSTRUMENTS, INC. IS PROHIBITED

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	<i>h</i>	<i>pt</i>



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>h</i>	8/16/16

DYTRAN INSTRUMENTS, INC. **MASTER** ONLY IF IN RED
Ghatsworth, CA

TITLE: **OUTLINE DRAWING, 3086A**

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

Model Number 3086A1	PERFORMANCE SPECIFICATION	DOC NO PS3086A1
MINIATURE IEPE ACCELEROMETER		REV A, ECN 12943, 09/06/16



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

PHYSICAL

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

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

0.05	mV/g	0.005	mV/m/s ²
±70000	g	±686000	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
1.40	Grms	13.73	m/s ² rms
±1	% F.S.	±1	% F.S.
3	%	3	%

ENVIRONMENTAL

Maximum Shock
Temperature Range
Environmental Seal

±100000	Gpeak	±980000	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)
3086A2	0.1	50,000	100,000	-60 to +250
3086A3	0.25	20,000	100,000	-60 to +250
3086A4	0.5	10,000	50,000	-60 to +250
3086A5	1.0	5,000	50,000	-60 to +250
3086A6	2.0	2,500	50,000	-60 to +250

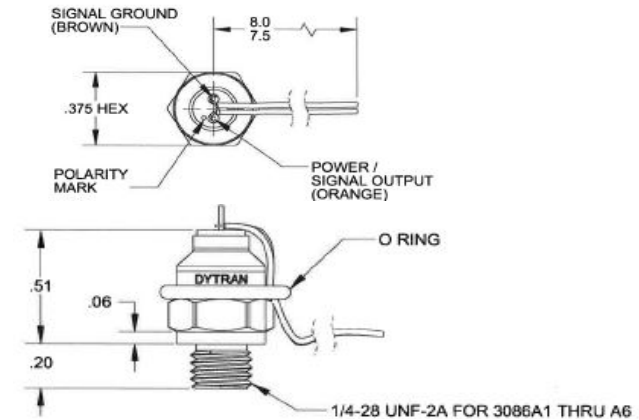
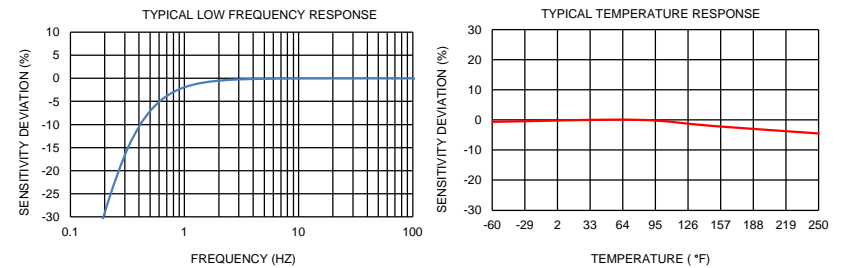
Please refer to the performance specifications of the products in this family for detailed description

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.



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