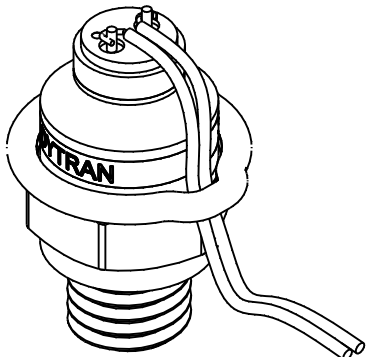
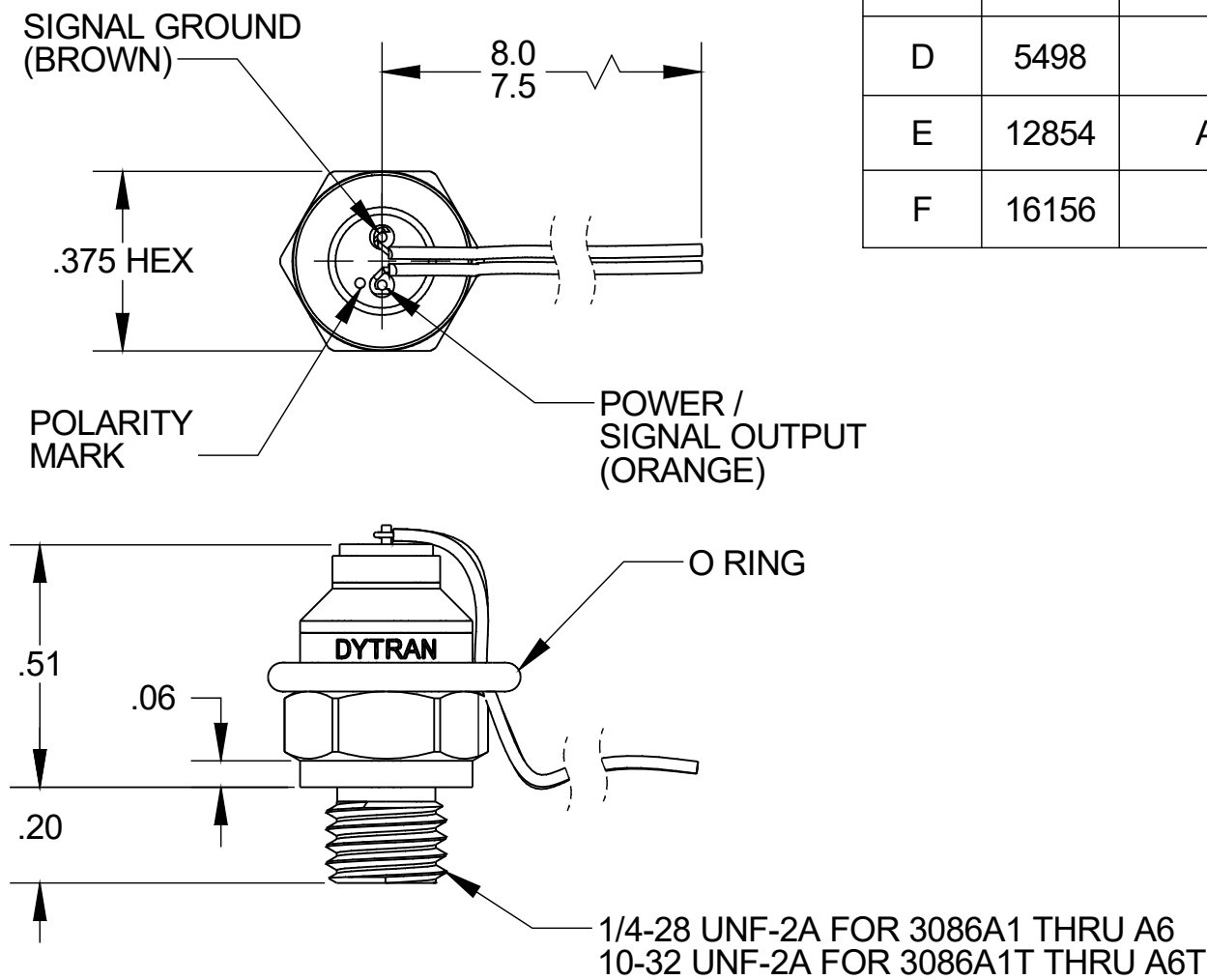


PROPRIETARY AND CONFIDENTIAL

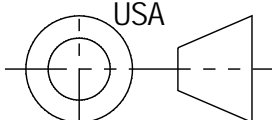
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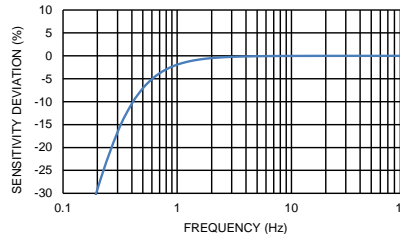
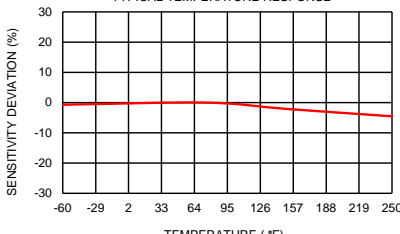
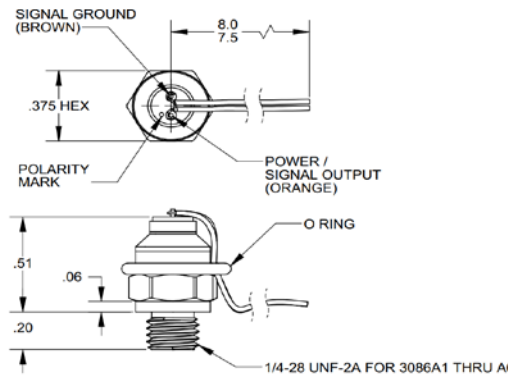
REVISIONS					
REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
C	5057	IS:1/4-28 UNF-2A FOR 3086A1 THRU A6 10-32 UNF-2A FOR 3086A1T THRU A6T WAS: 1/4-28 UNF-2A	RA, 2/13/08	JS	JS
D	5498	ADDED WIRES & O RING	JS 10/16/08	AS	DV
E	12854	ADDED WIRE LENGTH DIMENSION	NDC 07/28/16	LN	RT
F	16156	UPDATED RENDERING	KG 04/26/21	RA	LN




2. HOUSING MATERIAL: TITANIUM ALLOY

1. RECOMMENDED MOUNTING TORQUE:  
30 LB-IN

DRILL HOLE SIZE		TOLERANCE	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 .XX ± .010 .XXX±.005	ANGLES ± 1°	DYTRAN INSTRUMENTS, INC.		Chatsworth, CA	
.0135 THRU .125	+.004 / -.001	TITLE:  <b>OUTLINE DRAWING, 3086A</b>							
.1260 THRU .250	+.005 / -.001								
.2510 THRU .500	+.006 / -.001								
.5010 THRU .750	+.008 / -.001								
.7510 THRU 1.000	+.010 / -.001								
1.001 THRU 2.000	+.012 / -.001	APPROVALS				DATE	SIZE <b>A</b>	CAGE CODE <b>2W033</b>	DWG. NO. <b>127-3086A</b>
THIRD ANGLE PROJECTION USA 		ORIG	PML	3/28/07					
		CHK	JS	2/15/08					
MATERIAL		APP	DV	10/17/08					
		DO NOT SCALE DRAWING		APP		SCALE: 4:1	SOLIDWORKS	SHEET 1 OF 1	

Model Number 3086A1		PERFORMANCE SPECIFICATION				DOC NO PS3086A1	
		MINIATURE IEPE ACCELEROMETER				REV C, ECN 16156, 04/27/21	
		<ul style="list-style-type: none"><li>• MINIATURE SIZE</li><li>• HERMETICALLY SEALED</li></ul>					
		ENGLISH		SI			
<b>PHYSICAL</b>							
Weight		0.12	oz	3.5	grams		
Connector	Top Mounted	Solder Pins		Solder Pins			
Mounting Provision	Integral Stud	1/4-28 UNF-2A		1/4-28 UNF-2A			
Material	Accelerometer and Connector	Titanium Alloy		Titanium Alloy			
Element Style		Quartz Compression		Quartz Compression			
<b>PERFORMANCE</b>							
Sensitivity, Nom. [1]		0.05	mV/g	0.005	mV/m/s <sup>2</sup>		
Range Full Scale		±70000	g pk	±686000	m/s <sup>2</sup> pk		
Low Frequency -3dB Point, Nom		0.16	Hz	0.16	Hz		
Low Frequency -5% Point		0.5	Hz	0.5	Hz		
Frequency Response, ±10%		0.35 to 10000	Hz	0.35 to 10000	Hz		
Resonant Frequency		>100	kHz	>100	kHz		
Isolation Cup Resonance		>45	kHz	>45	kHz		
Electrical Noise		1.40	g RMS	13.73	m/s <sup>2</sup> RMS		
Linearity [2]		±1	% F.S.	±1	% F.S.		
Maximum Transverse Sensitivity		3	%	3	%		
<b>ENVIRONMENTAL</b>							
Maximum Shock		±100000	g pk	±980000	m/s <sup>2</sup> pk		
Temperature Range		-60 to +250	°F	-51 to +121	°C		
Environmental Seal		Hermetic		Hermetic			
<b>ELECTRICAL</b>							
Supply Current Range [3]		2 to 20	mA	2 to 20	mA		
Compliance Voltage Range [3]		+18 to +30	Volts	+18 to +30	Volts		
Output Impedance, Nom		100	Ω	100	Ω		
Bias Voltage		+7.5 to +9.5	VDC	+7.5 to +9.5	VDC		
Discharge Time Constant		0.8 to 2.0	Sec	0.8 to 2.0	Sec		
Ground Isolation, Case to Mounting Surface, Min		10	MΩ	10	MΩ		
		<b>This family also includes:</b>					
		Model	Sensitivity (mV/g)	Range F.S. (g pk)	Maximum Shock (g pk)	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					
		<b>Supplied Accessories:</b>					
		1) Accredited calibration certificate (ISO 17025)					
		<b>Notes:</b>					
		[1] Measured by impacting against calibrated force sensor. NIST traceable.					
		[2] Percent of full scale or any lesser 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. To do so will destroy the integral electronics. This will void the warranty.					
		[4] Recommended Cable: Dytran Part No. 128-6869AXX (XX denotes length in feet)					
		[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 over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.					
		[6] All specifications are at room temperature unless otherwise specified.					
		<div><div>TYPICAL LOW FREQUENCY RESPONSE</div></div> <div><div>TYPICAL TEMPERATURE RESPONSE</div></div> <div></div>					
		Units on the line drawing are in inches. Refer to 127-3086A for more information.					



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