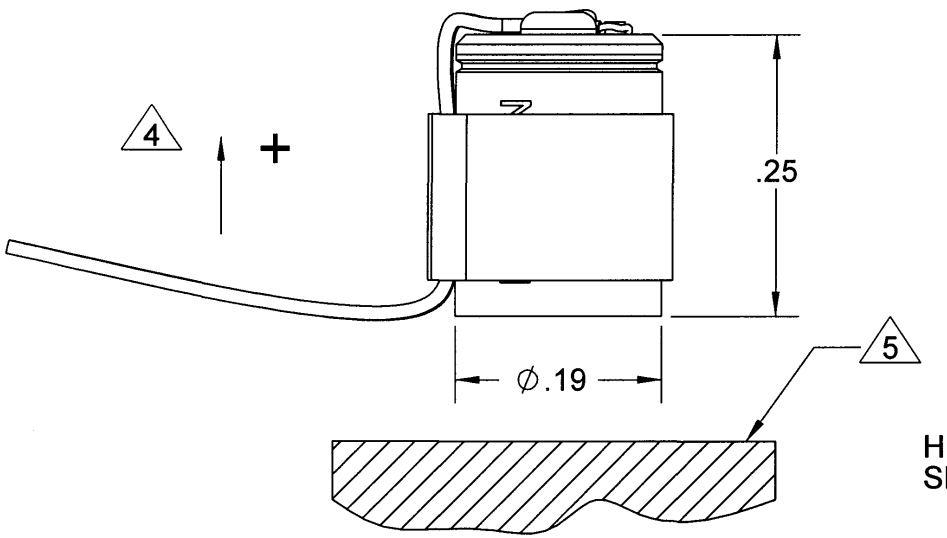
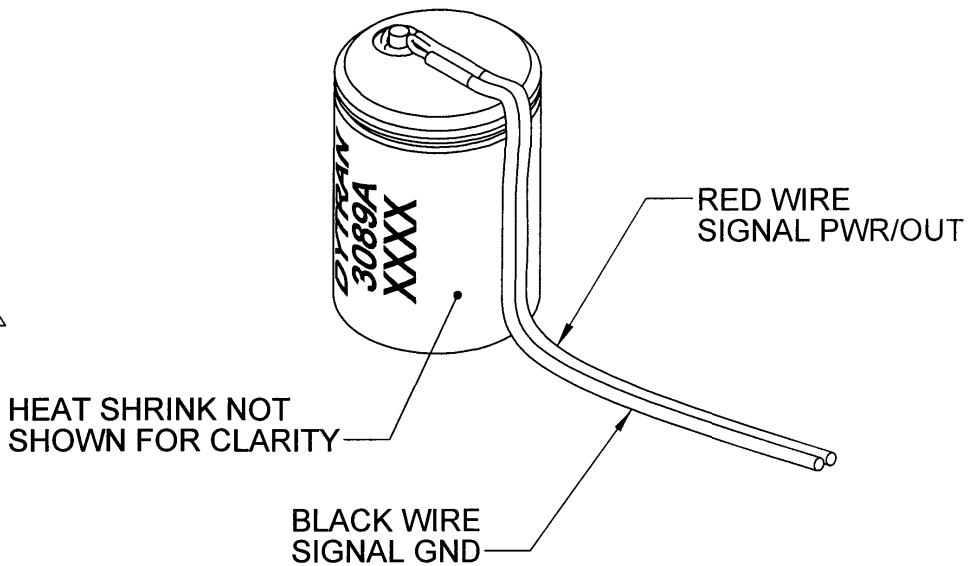
REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
B	5485	48 INCHES WAS 6, ADDED WIRE COLOR/CALL OUT	JS 09/22/08	RA	PML
C	5501	ADDED NOTES 4 & 5	JS 09/25/08	RA	PV





5 MOUNTING RECOMMENDATIONS: PREPARE SURFACE AT LEAST ∅.200, ASSURE FLATNESS OF .0001 TIR OR BETTER. USE CYANOACRYLATE TO MOUNT ACCELEROMETER.

4 ARROW INDICATES DIRECTION OF ACCELERATION FOR POSITIVE OUTPUT.

3. WIRE LENGTH: 48 INCHES
2. SENSITIVITY: 10mV/g ±5%
1. MASS 0.6 GRAMS

DRILL HOLE SIZE	TOLERENCE
.0135 THRU .125	+.004 / -.001
.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

THIRD ANGLE PROJECTION USA

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.
63
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°

MATERIAL

FINISH

DO NOT SCALE DRAWING

CONTRACT NO.

APPROVALS		DATE
ORIG	PML	4/3/2007
CHK	RA	01/21/08
APP	PML	01/21/08
APP		

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

MASTER
ONLY IF IN RED

TITLE:

OUTLINE DRAWING
MODEL 3089A

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3089A	C

SCALE: 6:1 | SOLIDWORKS | SHEET 1 OF 1

172-0081, REV A

SPECIFICATIONS
MODEL 3089A IEPE ACCELEROMETER

SPECIFICATION	VALUE	UNITS
PHYSICAL		
WEIGHT	0.6	grams
SIZE, DIA x HEIGHT	0.19 x 0.25	inch
MOUNTING	adhesive	
OUTPUT WIRES	integral	
WIRE LENGTH	variable	
HOUSING MATERIAL	300 Series	Stainless Steel
PERFORMANCE		
SENSITIVITY, ± 5% [1]	10.0	mV/g
RANGE F.S. FOR ± 5 VOLTS OUTPUT	± 500	g
FREQUENCY RANGE, ± 10%	1 to 10000	Hz
RESONANT FREQUENCY	>50	kHz
EQUIVALENT ELECTRICAL NOISE FLOOR	.0014	g rms
LINEARITY [2]	± 1%	% F.S.
TRANSVERSE SENSITIVITY, MAX.	5	%
STRAIN SENSITIVITY (@250με)	.012	g/με
ENVIRONMENTAL		
MAXIMUM VIBRATION/SHOCK	±600/±3000	g PEAK
TEMPERATURE RANGE	-60 to +250	°F
SEAL, HERMETIC	welded/gtm header	
COEFFICIENT OF THERMAL SENSITIVITY	.03	%/°F
ELECTRICAL		
SUPPLY CURRENT [3]	2 to 20	mA
COMPLIANCE VOLTAGE RANGE	+18 to +30	V
OUTPUT IMPEDANCE, TYP.	100	Ω
BIAS VOLTAGE	+7 to +9	VDC
DISCHARGE TIME CONSTANT, NOM.	0.3 to 0.6	Sec
POLARITY (SEE OUTLINE DWG)	positive	
ELECTRICAL ISOLATION	case grounded	

[1] Measured at 100 Hz, 1 grms per ISA RP 37.2.
[2] Measured using zero-based best straight-line method, % of F.S. or any lesser range.
[3] Do not apply power to this device without current limiting, 20 mA MAX. To do so will destroy the integral IC amplifier.