

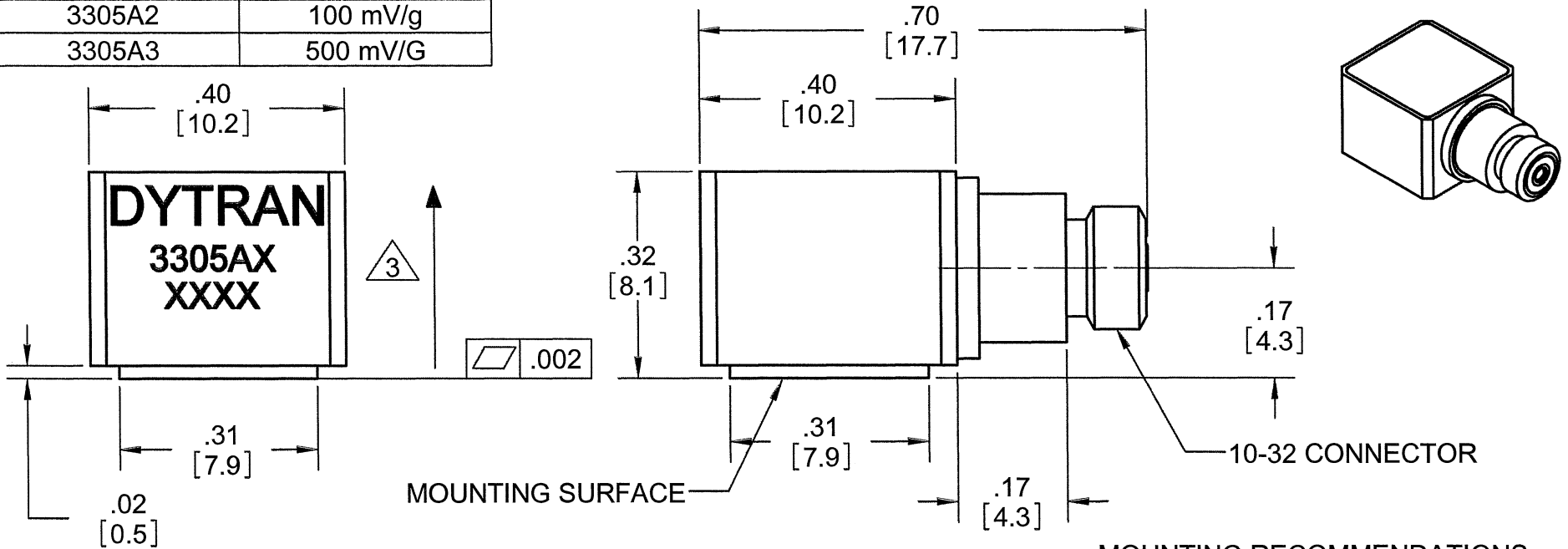
PROPRIETARY AND CONFIDENTIAL

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
A	6692	INITIAL RELEASE	RA 11/03/10	RA	[Signature]

MODEL	SENSITIVITY
3305A1	10 mV/g
3305A2	100 mV/g
3305A3	500 mV/G



3 ARROW SHOWS ACCELERATION DIRECTION FOR POSITIVE OUTPUT

- 2. WEIGHT: 3.7 GRAMS
- 1. MATERIAL: TITANIUM

MOUNTING RECOMMENDATIONS
 PREPARE A SURFACE AT LEAST .32 BY .32. SURFACE FLATNESS MUST BE EQUAL OR BETTER THAN .0001 TIR. USE ONE DROP OF CYANOACRYLATE TO MOUNT THE ACCELEROMETER.

NOTES: UNLESS OTHERWISE SPECIFIED

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.	
3305A	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.
USED ON	NEXT ASSY
APPLICATION	
THIRD ANGLE PROJECTION USA	

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 ± .010 .XX ± 0.25		
MATERIAL		
FINISH		
DO NOT SCALE DRAWING		

CONTRACT NO.		
APPROVALS		DATE
ORIG	RA	10/24/10
CHK	RA	11/22/10
APP	[Signature]	11/22/10
APP		

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

TITLE: **OUTLINE/INSTALLATION DRAWING, 3305A SERIES**

SIZE A	CAGE CODE 2W033	DWG. NO. 127-3305A	REV A
SCALE: NONE		SOLIDWORKS	SHEET 1 OF 1

Model Number 3305A3	PERFORMANCE SPECIFICATION		DOC NO PS3305A3
	SINGLE AXIS IEPE PLANAR SHEAR ACCELEROMETERS		REV B, ECN 16092, 2/19/21



- MINIATURE SIZE
- HERMETICALLY SEALED
- EXCELLENT LINEARITY

PHYSICAL

Weight		
Size	W x H x L	
Connector	Type	
Mounting Provision		
Material : Base, Cap and Connector		
Element Style	Material	
	Type	

ENGLISH		SI	
0.13	oz	3.7	grams
.40 x .32 x .70	Inches	10 x 8.1x 17.8	mm
10-32 Coaxial		10-32 Coaxial	
Adhesive		Adhesive	
Titanium		Titanium	
Ceramic		Ceramic	
Planar Shear		Planar Shear	

PERFORMANCE

Sensitivity, ±5% [1]		
Range F.S for ± 5 Volts Output		
Frequency Response, ±5%		
±15%		
Resonant Frequency, Nominal		
Equivalent Electrical Noise Floor		
Spectral Noise	1Hz	
	10Hz	
	100Hz	
	1000Hz	
	10000Hz	
Linearity [2]		
Phase Response (±5°)		
Maximum Transverse sensitivity		
Strain Sensitivity		

500	mV/g	51.02	mV/m/s ²
±10	g pk	±98	m/s ² pk
0.23 to 5000	Hz	0.23 to 5000	Hz
0.15 to 10,000	Hz	0.15 to 10,000	Hz
40	kHz	40	kHz
0.0002	g RMS	0.002	m/s ² RMS
8.9	µg RMS/√(Hz)	87.31	µm/s ² RMS/√(Hz)
8.7	µg RMS/√(Hz)	85.35	µm/s ² RMS/√(Hz)
3.0	µg RMS/√(Hz)	29.43	µm/s ² RMS/√(Hz)
1.7	µg RMS/√(Hz)	16.68	µm/s ² RMS/√(Hz)
0.7	µg RMS/√(Hz)	6.87	µm/s ² RMS/√(Hz)
± 1%	% F.S.	± 1%	% F.S.
5 to 3000	Hz	5 to 3000	Hz
5	%	5	%
0.04	g/µσ	0.39	m/s ² /µσ

ENVIRONMENTAL

Maximum Shock		
Temperature Range		
Seal, Hermetic		

±5000	g pk	±49050	m/s ² pk
-60 to +150	°F	-51 to +65	°C
Glass-to-metal/Welded		Glass-to-metal/Welded	

ELECTRICAL

Supply Current Range [3]		
Compliance Voltage Range		
Output Impedence, Typ		
Bias Voltage		
Discharge Time Constant, Nom		
Output Signal Polarity for Acceleration Towards Top		

2 to 20	mA	2 to 20	mA
+ 18 to +30	Volts	+18 to +30	Volts
100	Ω	100	Ω
+11 to +13	VDC	+11 to +13	VDC
1.5 to 2.5	Sec	1.5 to 2.5	Sec
Positive		Positive	

This family also includes:

Model	Sensitivity (mV/g)	Range F.S ± 5 Volts (g pk)	Max Shock(± g pk)	Resonant Frequency (kHz)
3305A1	10	±500	600/5000	> 35
3305A2	100	±50	400/5000	> 35

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

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)

Notes:

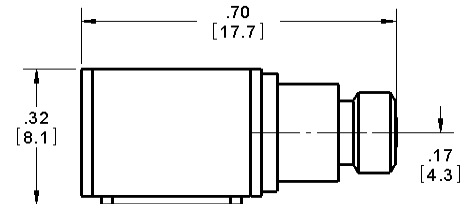
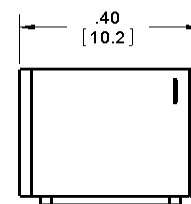
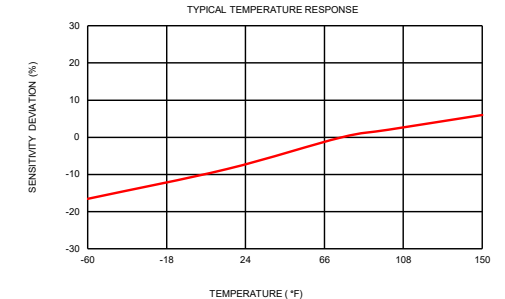
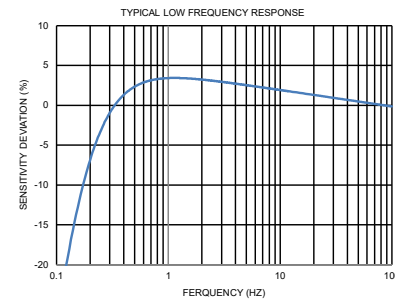
[1] Measured at 100Hz, 1 g RMS per ISA RP 37.2.

[2] Measure using zero-based straight line method, % of F.S. or any lesser range.

[3] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.

[4] 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.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3305A for more information.



21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax: 818.698.0362 www.dytran.com
For permission to reprint this content, please contact info@dytran.com