

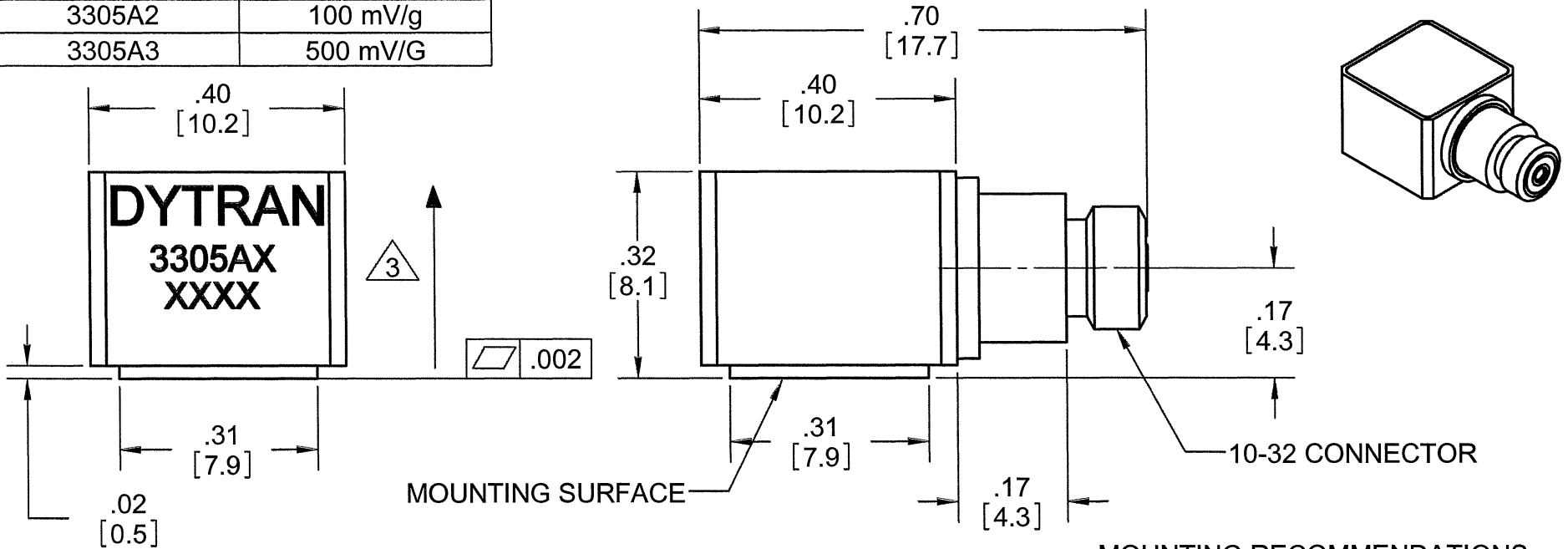
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REVISIONS

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	[Signature]	11/22/10
APP	[Signature]	11/22/10
APP		

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

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

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

Model Number 3305A2	PERFORMANCE SPECIFICATION	DOC NO PS3305A2
	SINGLE AXIS IEPE PLANAR SHEAR ACCELEROMETERS	REV A, ECN 6692, 11/19/10



- 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	
Weight	0.13	oz	3.7	grams
Size	.40 x .32 x .70	Inches	10 x 8.1 x 17.8	mm
Connector	10-32 Coaxial		10-32 Coaxial	
Mounting Provision	Adhesive		Adhesive	
Material	Titanium		Titanium	
Element Style	Ceramic		Ceramic	
	Planar Shear		Planar Shear	

PERFORMANCE

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

Sensitivity	100	mV/g	10.20	mV/m/s ²
Range F.S	±50	G's	±490	m/s ²
Frequency Response	0.3 to 5000	Hz	0.3 to 5000	Hz
	0.15 to 10,000	Hz	0.15 to 10,000	Hz
Resonant Frequency	> 35	kHz	> 35	kHz
Equivalent Electrical Noise Floor	0.0004	Grms	0.004	m/s ² rms
Linearity [2]	± 1%	% F.S.	± 1%	% F.S.
Phase Response (±5°)	5 to 3000	Hz	5 to 3000	Hz
Maximum Transverse sensitivity	5	%	5	%
Strain Sensitivity	0.04	g/μσ	0.39	m/s ² /μσ

ENVIRONMENTAL

Maximum Vibration
Maximum Shock
Temperature Range
Seal, Hermetic

Maximum Vibration	±400	Gpeak	±3924	m/s ² peak
Maximum Shock	±5000	Gpeak	±49050	m/s ² peak
Temperature Range	-60 to +180	°F	-51 to +82	°C
Seal, Hermetic	Glass-to-metal/Welded		Glass-to-metal/Welded	

ELECTRICAL

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

Supply Current Range [3]	2 to 20	mA	2 to 20	mA
Compliance Voltage Range	+ 18 to +30	Volts	+18 to +30	Volts
Output Impedance, Typ	100	Ω	100	Ω
Bias Voltage	+11 to +13	VDC	+11 to +13	VDC
Discharge Time Constant	1.5 to 2.5	Sec	1.5 to 2.5	Sec
Output Signal Polarity for Acceleration Towards Top	Positive		Positive	

This family also includes:

Model	Sensitivity (mV/g)	Range F.S ± 5 Volts (G's)	Max Vibration/Shock(± Gpeak)	Resonant Frequency (kHz)
3305A1	10	±500	600/5000	> 35
3305A3	500	±10	200/5000	> 35

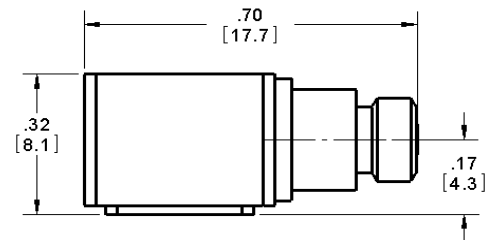
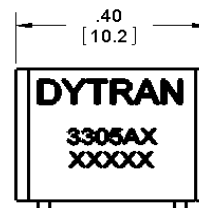
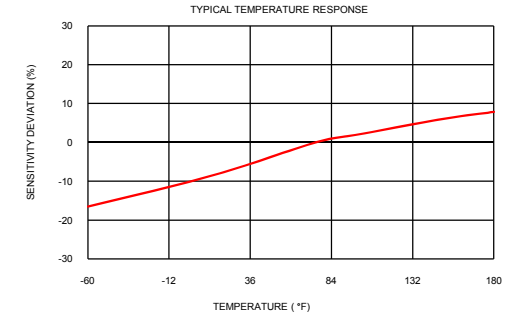
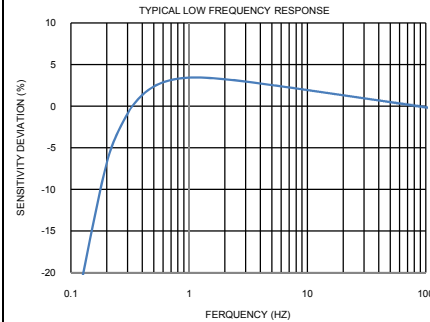
Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)

Notes:

- [1] Measure at 100Hz, 1 Grms 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 the specification without notice



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

