#### PROPRIETARY AND CONFIDENTIAL **REVISIONS** THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY REV **ECN** DESCRIPTION BY/DATE **APPR** OF DYTRAN INSTRUMENTS INC. ANY REPRODUCTION IN PART OR AS A CHK WHOLE WITHOUT THE WRITTEN PERMISSION OF DYTRAN INSTRUMENTS INC. IS PROHIBITED D 12604 ADDED NOTE 4 JS 04/05/13 MODEL SENSITIVITY 3233A2T 5mV/q 1mV/g 3233A3T 1.00 3233A4T 25mV/a PIN<sub>1</sub> PIN 4 25.4 COM GND 3233A5T AXIS X (1)KEY 10mV/g .31 7.9 PIN<sub>3</sub> DYTRAN AXIS Z(3) 3233AXT CONNECTOR MATES S/N XXXX WITH DYTRAN CABLE 1.00 PIN<sub>2</sub> 6811AXX (XX=FEET) 25.4 AXIS Y(2) DYTRAN MODEL 6971-10-32 MTG SCREW (SUPPLIED) **DYTRAN MODEL 6979** WASHER(SUPPLIED) .52 .73 [13.1] 18.5 4. MINOR VOIDS, SCARS, SCRATCHES AND MOUNTING BLEMISH/WITNESS MARKS ON EXTERIOR SURFACES ARE ALLOWED DUE TO RESTRAINING AND HANDLING MOUNTING RECOMMENDATIONS: PREPARE DURING TESTING, TRANSPORT OR PROCESSING. FLAT MOUNTING SURFACE Ø .80 [20.3], FLAT TO .001 TIR. DRILL AND TAP 10-32 UNF-3B ▼.300 THESE APPEAR AS INDICATORS THAT DO NOT AFFECT [7.62] MIN. RECOMMENDED MOUNTING FORM, FIT OR FUNCTION AS INTENDED BY DESIGN OR APPLICATION TORQUE: 15 LB IN +5/-0 LB IN FOR BEST 3. WEIGHT: 30 GRAMS MAX FREQUENCY RESPONSE ACCELEROMETER MUST CONTACT MOUNTING SURFACE OVER ARROWS INDICATE DIRECTION OF ENTIRE MOUNTING SURFACE OF ACCELEROMETER ACCELERATION FOR POSITIVE OUTPUT. 1. MATERIAL: TITANIUM ALLOY CONTRACT NO. NOTES: UNLESS OTHERWISE SPECIFIED UNLESS OTHERWISE SPECIFIED: UNLESS OTHERWISE SPECIFIED: INTERPRET DIM & TOL PER DIMENSIONS ARE IN INCHES. INSTRUMENTS. ASME Y14.5M - 1994. DIMENSIONS IN BRACKETS [] REMOVE BURRS. ARE IN MILLIMETERS COUNTERSINK INTERNAL THDS TITLE 90° TO MAJOR DIA. TOLERANCES ARE: CHAM EXT THDS 45° TO MINOR DIA. METRIC ANGLES INCHES OUTLINE/INSTALLATION THD LENGTHS AND DEPTHS ARE FOR XX ± .03 .X ± 0.8 ± 1° MIN FULL THDS. USED ON NEXT ASSY .XXX±.010 XX +0.25 DRAWING, 3233A2T THDS PER MIL-S-7742. **APPROVALS** DATE APPLICATION MATERIAL DIMENSIONS APPLY AFTER FINISHING. THIRD ANGLE PROJECTION ORIG RA 06/14/13 CAGE CODE SIZE DWG. NO. **REV** ALL MACHINED SURFACES. FINISH CHK ЕМ 06/30/13 TOTAL RUNOUT WITHIN .005. 2W033 127-3233A2T D BREAK SHARP EDGES .005 TO .010. APP RT 08/02/13 MACHINED FILLET RADII .005 TO .015. WELDING SYMBOLS PER AWS A2.4. **SOLIDWORKS** DO NOT SCALE DRAWING SHEET 1 OF 1 DV 10/01/14 APP SCALE: NONE ABBREVIATIONS PER MIL-STD-12.

# MODEL NUMBER 3233A3T

# PERFORMANCE SPECIFICATION

DOC NO. **PS3233A3T** 

ACCELEROMETER, TRIAXIAL, IEPE

REV C, ECN 12219, 09/08/15



- TEDS CAPABILITY
- HERMETICALLY SEALED
- CASE ISOLATION
- 10-32 MOUNTING PROVISION

	ENGLISH		SI	
PHYSICAL				
Weight, Max	1.05	oz	30	grams
Mounting	10-32 Screw		10-32 Screw	
Connector Type [1]	4-PIN		4-PIN	
Material, Case/ Connector	Titanium Alloy		Titanium Alloy	
PERFORMANCE				
Sensitivity, +/-10% [2]	1	mV/g	0.1	mV/m/s <sup>2</sup>
Range, Full Scale (Each Axis)	5000	Gpeak	49050	m/s² peak
Frequency Range Axis 1 & 2, ±10%	.4 to 3000	Hz	.4 to 3000	Hz
Frequency Range Axis 3, ± 10%	.4 to 6000	Hz	.4 to 6000	Hz
Element Natural Frequency	>20	kHz	>20	kHz
Equivalent Electrical Noise	0.04	g rms	0.39	m/s² rms
Linearity [3]	±1	%F.S.	±1	%F.S.
Transverse Sensitivity Max	6	%	6	%
ENVIRONMENTAL				
Shock Max	7000	g pk	68670	m/s <sup>2</sup>
Vibration Max	6000	g pk	58860	m/s <sup>2</sup>
Operating Temperature	-60 to +302	°F	-51 to +150	°C
TEDS Operating Temperature	-40 to +185	°F	-40 to +85	°C
Seal	Hermetic		Hermetic	
ELECTRICAL				
Supply Current Range [4]	0.100		0.100	
117	2 to 20	mA	2 to 20	mA VDC
Compliance Voltage Range (Each Axis) Output Impedance, Typ.	+18 to +30	VDC	+18 to +30	
Output Impedance, Typ. Output Bias Voltage	100	Ω VDC	100	Ω VDC
Discharge Time Constant	+7.5 to +9.5		+7.5 to +9.5	
Ground Isolation, Min.	1.0 to 2.0	Sec	1.0 to 2.0	sec
TEDS Feature	10	ΜΩ		ΜΩ
I EDO FEATUIE	IEEE 1451.4		IEEE 1451.4	

This family also includes:									
Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Lemp(°F)	TC				
3233A2T	5	1000	0.01	-60 to 302	1 to 2				
3233A4T	25	200	0.002	-60 to 302	1 to 2				
3233A5T	10	500	0.005	-60 to 302	1 to 2				

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

### Supplied Accessories:

- 1) Accredited Calibration Certificate (ISO 17025)
- 2) Washer 6979 and Mounting Screw 6971

## Notes:

- [1] Connector mates with Dytran Cable Assy. Model 6811 AXX. (XX = Length in feet)
- [2] Measured At 100 Hz, 1 Grms per ISA RP 37.2
- [3] Measured using zero-based best straight-line method, % of F.S. or any lesser range.
- [4] Do not apply power to this device without current limiting, 20mA Max, to do so will destroy the integral IC amplifier
- [5] Case grounded to signal, ground case isolated from mounting surface
- [6] In the Interest of constant product improvement, we reserve the right to change specifications without notice.





