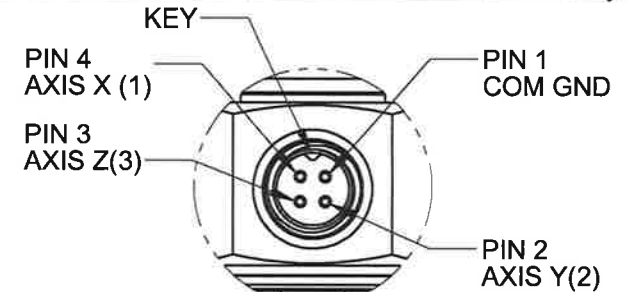
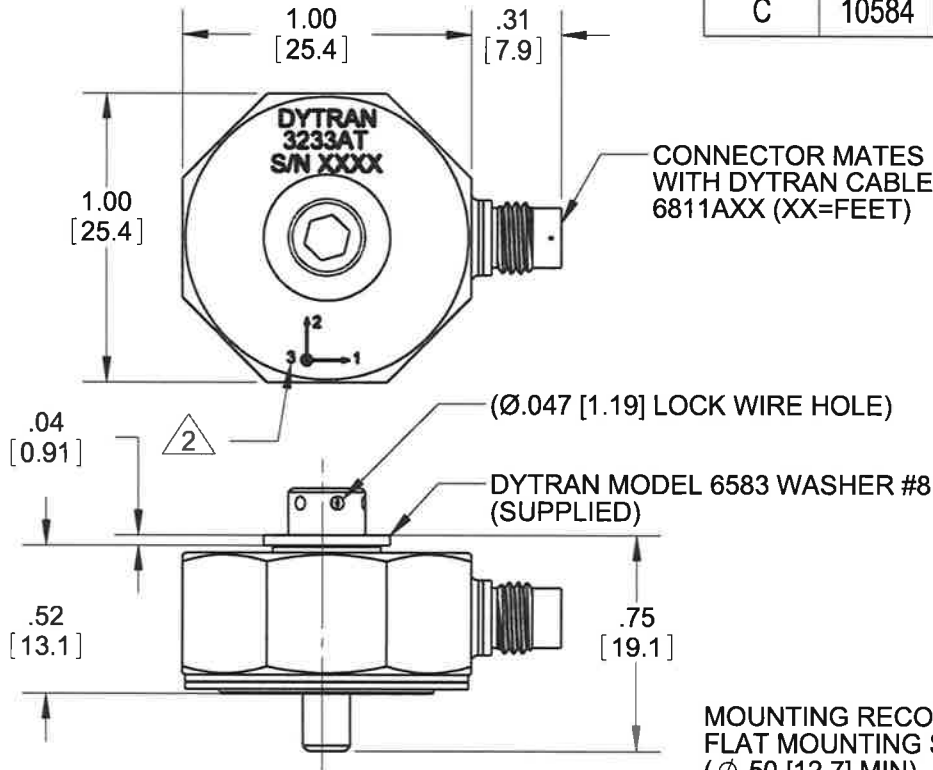


**PROPRIETARY AND CONFIDENTIAL**

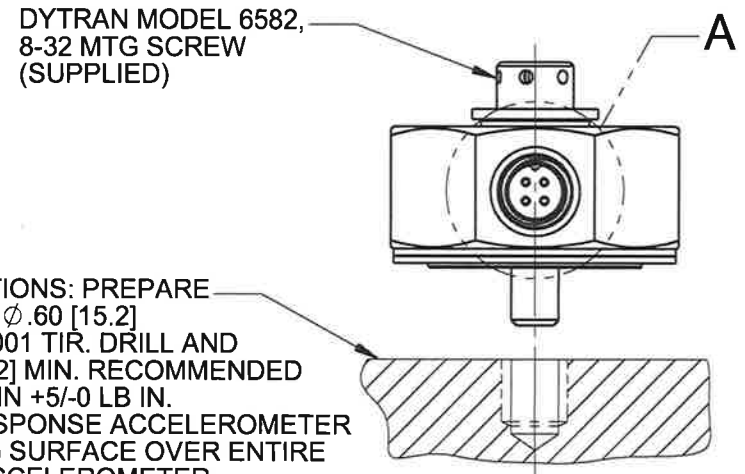
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF DYTRAN INSTRUMENTS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF DYTRAN INSTRUMENTS INC. IS PROHIBITED

**REVISIONS**

| REV | ECN   | DESCRIPTION | BY/DATE      | CHK | APPR |
|-----|-------|-------------|--------------|-----|------|
| B   | 7293  | SEE ECN     | RA, 02/10/11 | EP  | ANS  |
| C   | 10584 | SEE ECN     | RA, 11/26/13 | MH  |      |



**DETAIL A**



**MOUNTING RECOMMENDATIONS: PREPARE FLAT MOUNTING SURFACE Ø.60 [15.2] (Ø.50 [12.7] MIN), FLAT TO .001 TIR. DRILL AND TAP 8-32 UNC-2B ∇.300 [7.62] MIN. RECOMMENDED MOUNTING TORQUE: 15 LB IN +5/-0 LB IN. FOR BEST FREQUENCY RESPONSE ACCELEROMETER MUST CONTACT MOUNTING SURFACE OVER ENTIRE MOUNTING SURFACE OF ACCELEROMETER**

3. WEIGHT: 30 GRAMS.

△ ARROWS INDICATE AXIS AND DIRECTION OF INPUT ACCELERATION FOR POSITIVE OUTPUT SIGNAL.

1. MATERIAL: TITANIUM ALLOY

NOTES: UNLESS OTHERWISE SPECIFIED

|   |           |   |
|---|-----------|---|
| UNLESS OTHERWISE SPECIFIED:<br>INTERPRET DIM & TOL PER ASME Y14.5M - 1994.<br>REMOVE BURRS.<br>COUNTERSINK INTERNAL THDS 90° TO MAJOR DIA.<br>CHAM EXT THDS 45° TO MINOR DIA.<br>THD LENGTHS AND DEPTHS ARE FOR MIN FULL THDS.<br>THDS PER MIL-S-7742.<br>DIMENSIONS APPLY AFTER FINISHING. |           | UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN INCHES.<br>DIMENSIONS IN BRACKETS [ ] ARE IN MILLIMETERS<br>TOLERANCES ARE:<br>INCHES METRIC ANGLES<br>.XX ± .03 .X ± 0.8 ± 1°<br>.XXX ± .010 .XX ± 0.25 |
| USED ON   | NEXT ASSY | MATERIAL  |
| APPLICATION   |           | FINISH  |
| THIRD ANGLE PROJECTION USA  |           | DO NOT SCALE DRAWING  |
| <br>ALL MACHINED SURFACES. TOTAL RUNOUT WITHIN .005.<br>BREAK SHARP EDGES .005 TO .010.<br>MACHINED FILLET RADII .005 TO .015.<br>WELDING SYMBOLS PER AWS A2.4.<br>ABBREVIATIONS PER MIL-STD-12.  |           |   |

|              |          |
|--------------|----------|
| CONTRACT NO. |          |
| APPROVALS    | DATE     |
| ORIG JS      | 02/08/10 |
| CHK RA       | 02/22/10 |
| APP DV       | 02/15/10 |
| APP          |          |

**DYTRAN INSTRUMENTS, INC.** MASTER COPY IN RED  
 Chatsworth, CA

TITLE: **OUTLINE/INSTALLATION DRAWING, 3233AT**

|          |              |                   |          |
|----------|--------------|-------------------|----------|
| SIZE     | CAGE CODE    | DWG. NO.          | REV      |
| <b>A</b> | <b>2W033</b> | <b>127-3233AT</b> | <b>C</b> |

SCALE: NONE      SOLIDWORKS      SHEET 1 OF 1

|                                      |                                      |                                   |
|--------------------------------------|--------------------------------------|-----------------------------------|
| <b>MODEL NUMBER</b><br><b>3233AT</b> | <b>PERFORMANCE SPECIFICATION</b>     | <b>DOC NO.</b><br><b>PS3233AT</b> |
|                                      | <b>ACCELEROMETER, TRIAXIAL, IEPE</b> | REV D, ECN 13949, 01/03/18        |



- **TEDS CAPABILITY**
- **HERMETICALLY SEALED**
- **BASE ISOLATED**
- **8-32 MOUNTING PROVISION**

**PHYSICAL**

Weight, Max

Mounting

Connector Type [1]

Material, Case/ Connector

| ENGLISH        |    | SI             |       |
|----------------|----|----------------|-------|
| 1.05           | oz | 30             | grams |
| 8-32 Screw     |    | 8-32 Screw     |       |
| 4-Pin          |    | 4-Pin          |       |
| Titanium Alloy |    | Titanium Alloy |       |

**PERFORMANCE**

Sensitivity, ( $\pm 10\%$ ) [2]

Range, Full Scale (Each Axis)

Frequency Range, All Axes ( $\pm 5\%$ )

Frequency Range Axis 1 & 2, ( $\pm 10\%$ )

Frequency Range Axis 3, ( $\pm 10\%$ )

Element Natural Frequency

Equivalent Electrical Noise

Spectral Noise

1Hz  
10Hz  
100Hz  
1000Hz

|             |                                 |             |   |
|-------------|---------------------------------|-------------|---|
| 1000        | mV/g                            | 102         | mV/ m/s <sup>2</sup>                      |
| 5           | $\pm$ g pk                      | 49.1        | $\pm$ m/s <sup>2</sup> pk                 |
| 0.5 to 3000 | Hz                              | 0.5 to 3000 | Hz  |
| 0.3 to 4000 | Hz                              | 0.3 to 4000 | Hz  |
| 0.3 to 6000 | Hz                              | 0.3 to 6000 | Hz  |
| >20         | kHz                             | >20         | kHz                                       |
| 0.00005     | g rms                           | 0.0005      | m/s <sup>2</sup> rms                      |
| 12          | $\mu$ g rms/ $\sqrt{\text{Hz}}$ | 118         | $\mu\text{m/s}^2$ rms/ $\sqrt{\text{Hz}}$ |
| 4           | $\mu$ g rms/ $\sqrt{\text{Hz}}$ | 39          | $\mu\text{m/s}^2$ rms/ $\sqrt{\text{Hz}}$ |
| 1.2         | $\mu$ g rms/ $\sqrt{\text{Hz}}$ | 12          | $\mu\text{m/s}^2$ rms/ $\sqrt{\text{Hz}}$ |
| 0.5         | $\mu$ g rms/ $\sqrt{\text{Hz}}$ | 5           | $\mu\text{m/s}^2$ rms/ $\sqrt{\text{Hz}}$ |
| $\pm 1$     | % F.S.                          | $\pm 1$     | % F.S.                                    |
| 5           | %                               | 5           | %   |

**ENVIRONMENTAL**

Vibration Max

Shock Max

Temperature Range (<3% Deviation)

Operating Temperature

Storage Temperature

TEDS Operating Temperature

Seal

|             |              |             |                           |
|-------------|--------------|-------------|---------------------------|
| 500         | $\pm$ g pk   | 4905        | $\pm$ m/s <sup>2</sup> pk |
| 5000        | $\pm$ g pk   | 49050       | $\pm$ m/s <sup>2</sup> pk |
| +50 to +100 | $^{\circ}$ F | +10 to +38  | $^{\circ}$ C              |
| -60 to +200 | $^{\circ}$ F | -51 to +93  | $^{\circ}$ C              |
| -60 to +250 | $^{\circ}$ F | -51 to +121 | $^{\circ}$ C              |
| -40 to +185 | $^{\circ}$ F | -40 to +85  | $^{\circ}$ C              |
| Hermetic    |              | Hermetic    |                           |

**ELECTRICAL**

Supply Current Range [4]

Compliance Voltage Range (Each Axis)

Output Impedance, Typ.

Output Bias Voltage

Discharge Time Constant

Ground Isolation, Min. [5]

TEDS Feature

|             |            |             |            |
|-------------|------------|-------------|------------|
| 2 to 20     | mA         | 2 to 20     | mA         |
| +18 to +30  | VDC        | +18 to +30  | VDC        |
| 100         | $\Omega$   | 100         | $\Omega$   |
| +11 to +13  | VDC        | +11 to +13  | VDC        |
| 0.9 to 2.0  | Sec        | 0.9 to 2.0  | Sec        |
| 10          | M $\Omega$ | 10          | M $\Omega$ |
| IEEE 1451.4 |            | IEEE 1451.4 |            |

**This family also includes:**

| Model | Sensitivity (mV/g) | Range (Gpeak) | Resolution (Grms) | Oper. Temp ( $^{\circ}$ F) | TC |
|-------|--------------------|---------------|-------------------|----------------------------|----|
|       |                    |               |                   |                            |    |
|       |                    |               |                   |                            |    |
|       |                    |               |                   |                            |    |

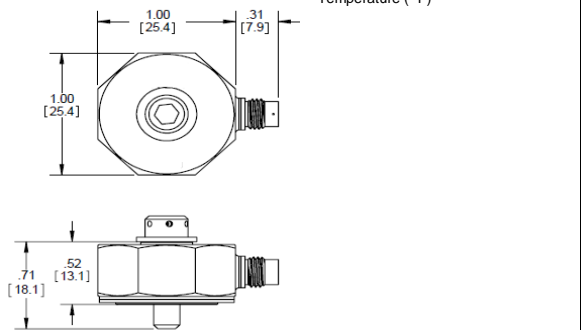
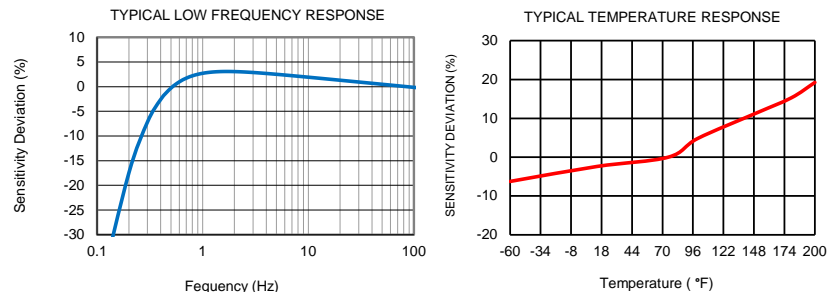
Refer to the performance specifications of the products in this family for detailed description.

**Supplied Accessories:**

- 1) Accredited Calibration Certificate (ISO 17025)
- 2) Washer 6583 and Mounting Screw 6582

**Notes:**

- [1] Connector mates with Dytran Cable Assy. Model 6811AXX. (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



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3233AT for more information.



21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax:818.700.7880 www.dytran.com For permission to reprint this content, please contact info@dytran.com