7. CABLE IS LOW OUT-GASSING PER NASA SPECIFICATIONS OF TML (TOTAL MASS LOSS) LESS THAN 1%; AND CVCM (COLLECTED VOLATILE CONDENSABLE MASS) LESS THAN 0.1%.

8. PART NO: 3133DXT-XX (WHERE APPLICABLE, -XX DENOTES LENGTH IN FEET). SEE TABLE FOR LENGTH TOLERANCE.

5. DYTRAN MODEL 6298 PETRO MOUNTING WAX AND MODEL 6741 REMOVAL TOOL, SUPPLIED.

4. ARROWS INDICATE DIRECTION OF ACCELERATION FOR POSITIVE OUTPUT.

FOR BEST FREQUENCY RESPONSE, PREPARE A FLAT MOUNTING SURFACE OF AT LEAST 0.39 FLAT TO 0.001 TIR. APPLY ONE DROP OF CYANOACRYLATE ADHESIVE TO MOUNT THE ACCELEROMETER.

2. HOUSING MATERIAL: TITANIUM ALLOY.

1. WEIGHT: 1.3 GRAMS MAX, LESS CABLE.

NOTES: UNLESS OTHERWISE SPECIFIED

---

**Model Sensitivity**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>SENSITIVITY</th>
<th>DIM &quot;A&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>3133DT</td>
<td>10 mV/g</td>
<td>36.00 IN ±3.00/-.000 IN</td>
</tr>
<tr>
<td>3133DT2</td>
<td>2 mV/g</td>
<td>36.00 IN ±3.00/-.000 IN</td>
</tr>
<tr>
<td>3133D3T</td>
<td>5 mV/g</td>
<td>36.00 IN ±3.00/-.000 IN</td>
</tr>
<tr>
<td>3133D4T</td>
<td>0.7 mV/g</td>
<td>36.00 IN ±3.00/-.000 IN</td>
</tr>
<tr>
<td>3133D5T</td>
<td>0.25 mV/g</td>
<td>36.00 IN ±3.00/-.000 IN</td>
</tr>
<tr>
<td>3133D1T-17</td>
<td>10 mV/g</td>
<td>17.00 FT ±6.00/-.000 IN</td>
</tr>
<tr>
<td>3133D2T-17</td>
<td>2 mV/g</td>
<td>17.00 FT ±6.00/-.000 IN</td>
</tr>
<tr>
<td>3133D3T-17</td>
<td>5 mV/g</td>
<td>17.00 FT ±6.00/-.000 IN</td>
</tr>
<tr>
<td>3133D4T-17</td>
<td>0.7 mV/g</td>
<td>17.00 FT ±6.00/-.000 IN</td>
</tr>
<tr>
<td>3133D5T-17</td>
<td>0.25 mV/g</td>
<td>17.00 FT ±6.00/-.000 IN</td>
</tr>
</tbody>
</table>

---

**Marking**

- PIN 4, X-AXIS SIG/PWR
- PIN 1, COMM GND RTN
- PIN 3, Z-AXIS SIG/PWR
- PIN 2, Y-AXIS SIG/PWR

---

**DIYTRAN**

Chatsworth, CA

**OUTLINE/INSTALLATION DWG, TRIAXIAL ACCEL WITH TEDS, 3133DT SERIES**

**APPROVALS**

- ORIG: AB 11/15/13
- CHK: LN 12/22/15
- APP: AS 12/23/15

**SCALE**

1:1

**DWG NO**

127-3133DT
## PERFORMANCE SPECIFICATION

### PHYSICAL

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Accelerometer, Triaxial, IEPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3133D4T-XX</td>
<td></td>
</tr>
</tbody>
</table>

- **ULTRA MINIATURE SIZE**
- **IDEAL LOW FREQUENCY RESPONSE**
- **LOW BASE STRAIN SENSITIVITY**
- **TEDS FEATURE**
- **LOW OUTGASSING**

### ENGLISH

<table>
<thead>
<tr>
<th>Model</th>
<th>Sensitivity (mV/g)</th>
<th>Range (Gpeak)</th>
<th>Resolution (Grms)</th>
<th>Oper. Temp(°F)</th>
<th>TC</th>
</tr>
</thead>
<tbody>
<tr>
<td>3133D1T-XX</td>
<td>500</td>
<td>-67 to 320</td>
<td>1.1 to 2.5</td>
<td>20mA max, 0.5 to 4.0</td>
<td></td>
</tr>
<tr>
<td>3133D2T-XX</td>
<td>2,500</td>
<td>-67 to 320</td>
<td>0.5 to 2.5</td>
<td>20mA max, 0.5 to 4.0</td>
<td></td>
</tr>
<tr>
<td>3133D3T-XX</td>
<td>1,000</td>
<td>-67 to 320</td>
<td>1.1 to 2.5</td>
<td>20mA max, 0.5 to 4.0</td>
<td></td>
</tr>
<tr>
<td>3133D5T-XX</td>
<td>20,000</td>
<td>-67 to 320</td>
<td>0.5 to 4.0</td>
<td>20mA max, 0.5 to 4.0</td>
<td></td>
</tr>
</tbody>
</table>

### SI

- **Model Number**: PS3133D4T-XX (REV C, ECN 15407, 11/18/19)

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### TEMPORALLY LOW FREQUENCY RESPONSE

![Typical Low Frequency Response Graph](image)

### TYPICAL TEMPERATURE RESPONSE

![Typical Temperature Response Graph](image)

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### Notes:

1. Measured at 100 Hz, 10 Grms
2. Actual sensitivity is given on a calibration certificate
3. Measured using zero-based 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. In the interest of constant product improvement, we reserve the rights to change the 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 overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer’s technical experts.

---

### Supplied Accessories:

1. Model 6298 small petro wax
2. Model 6741 removal tool
3. Accredited calibration certificate (ISO 17025)

---

### ELECTRICAL

<table>
<thead>
<tr>
<th>Model</th>
<th>Compliance Voltage</th>
<th>Range</th>
<th>Current Range</th>
<th>Bias Voltage</th>
<th>Discharge Time Constant</th>
<th>Output Impedance</th>
<th>TEDS Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VDC</td>
<td>+18 to +30</td>
<td>2 to 20</td>
<td>+7 to 10</td>
<td>0.5 to 2.5</td>
<td>100</td>
<td>IEEE 1451.4</td>
</tr>
</tbody>
</table>

---

### ENVIRONMENTAL

<table>
<thead>
<tr>
<th>Model</th>
<th>Maximum Shock</th>
<th>Operating Temperature</th>
<th>TEDS Operating Temperature</th>
<th>Seal</th>
<th>Magnetic Sensitivity at 100 Gauss</th>
<th>Base Strain Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7,000 Gpeak</td>
<td>-67 to +320 °F</td>
<td>-40 to +185 °F</td>
<td>Hermetic</td>
<td>0.0002 g/Gauss</td>
<td>0.001 g/µε</td>
</tr>
</tbody>
</table>

---

### PHYSICAL

<table>
<thead>
<tr>
<th>Model</th>
<th>Weight</th>
<th>Mounting Type</th>
<th>Connector Type</th>
<th>Housing Material</th>
<th>Isolation</th>
<th>Sensing Element Material</th>
<th>Sensing Mode</th>
<th>Sensing Element Material</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.03 oz</td>
<td>Adhesive</td>
<td>4-pin</td>
<td>Titanium</td>
<td>Case Ground</td>
<td>Quartz</td>
<td>Shear</td>
<td>Quartz</td>
</tr>
</tbody>
</table>

---

### Electrical

- **Compliance Voltage**: VDC +18 to +30
- **Current Range**: mA 2 to 20
- **Bias Voltage**: VDC +7 to +10
- **Discharge Time Constant**: seconds 0.5 to 2.5
- **Output Impedance**: Ω 100
- **TEDS Feature**: IEEE 1451.4

---

### Compliance

- **Compliance**: VDC +18 to +30
- **Current Range**: mA 2 to 20
- **Bias Voltage**: VDC +7 to +10
- **Discharge Time Constant**: seconds 0.5 to 2.5
- **Output Impedance**: Ω 100
- **TEDS Feature**: IEEE 1451.4

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**DYTRAN, INC.**

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