


PROPRIETARY AND CONFIDENTIAL

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REVISIONS

| REV. | ECN | DESCRIPTION | BY/DATE | CHK | APPR |
|------|-------|--|-----------------|-----|------|
| D | 13003 | ADDED 3133D1T-17 | JS 11/09/16 | EP | AS |
| E | 13437 | ADDED "LOW OUTGASSING" NOTE | JB 5/9/2017 | MH | LN |
| F | 13902 | INITIAL RELEASE 3133D2T-17, 3133D2T-17, 3133D3T-17, 3133D4T-17, 3133D5T-17 | RA, 12/08/17 | Em | W |

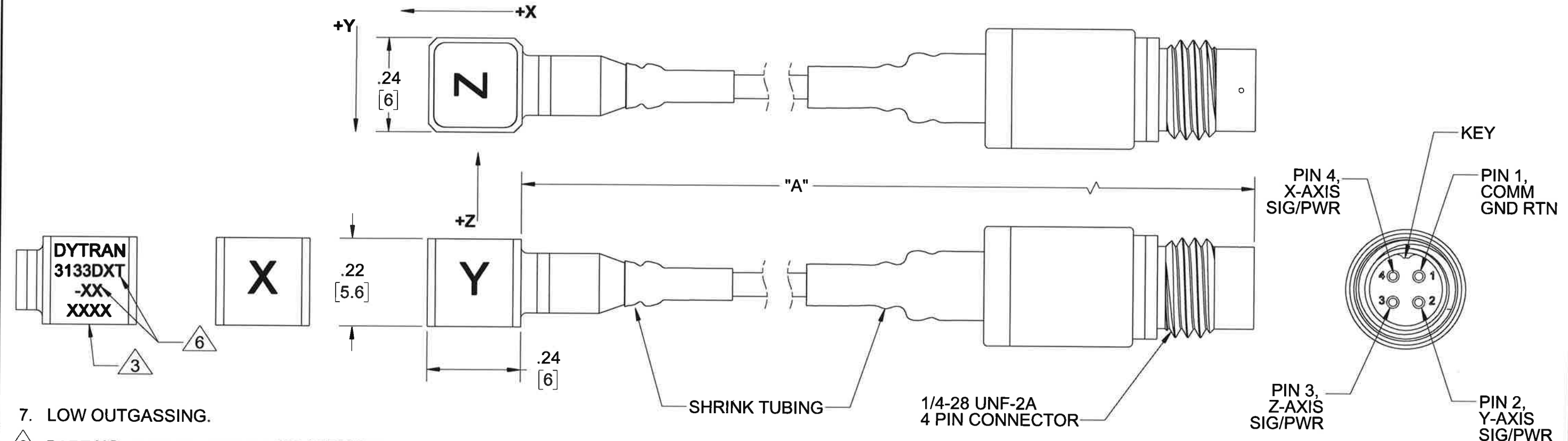
| MODEL | SENSITIVITY | DIM "A"  |
|------------|-------------|---|
| 3133D1T | 10 mV/g | 36.00 IN +3.00/-0.00 IN |
| 3133D2T | 2 mV/g | 36.00 IN +3.00/-0.00 IN |
| 3133D3T | 5 mV/g | 36.00 IN +3.00/-0.00 IN |
| 3133D4T | 0.7 mV/g | 36.00 IN +3.00/-0.00 IN |
| 3133D5T | 0.25 mV/g | 36.00 IN +3.00/-0.00 IN |
| 3133D1T-17 | 10 mV/g | 17.00 FT +6.00/-0.00 IN |
| 3133D2T-17 | 2 mV/g | 17.00 FT +6.00/-0.00 IN |
| 3133D3T-17 | 5 mV/g | 17.00 FT +6.00/-0.00 IN |
| 3133D4T-17 | 0.7 mV/g | 17.00 FT +6.00/-0.00 IN |
| 3133D5T-17 | 0.25 mV/g | 17.00 FT +6.00/-0.00 IN |





C

B

A



- 7. LOW OUTGASSING.
-  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 $\phi .39$, FLAT TO $.0001$ 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

| | | | |
|---|---------------------------------|---|--|
| 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. DIMENSIONS APPLY AFTER FINISHING. | | UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS TOLERANCES ARE: | |
| DECIMALS .XX ±.03 .XXX ±.010 | METRIC .X ± 0.8 .XX ±0.25 | ANGLES ±1° | |
| APPROVALS | | DATE | |
| ORIG | AB | 11/15/13 | |
| CHK | LN | 12/22/15 | |
| APP | AS | 12/23/15 | |
| DO NOT SCALE DRAWING | | THIRD ANGLE PROJECTION | |

DYTRAN INSTRUMENTS, INC. MASTER CHATSWORTH, CA

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

| | | | |
|---------------|------------------------|--------------------------|--------------|
| SIZE B | CAGE CODE 2W033 | DWG NO 127-3133DT | REV F |
|---------------|------------------------|--------------------------|--------------|

SCALE: 1:1 SHEET 1 OF 1

| | | |
|-------------------------|----------------------------------|----------------------------|
| Model Number 3133D3T | PERFORMANCE SPECIFICATION | DOC NO PS3133D3T |
| | Accelerometer, Triaxial, IEPE | REV H, ECN 14743, 12/13/18 |



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

| | ENGLISH | | SI | |
|-------------------------------|---------------|----|---------------|-------|
| Weight | 0.03 | oz | 0.8 | grams |
| Mounting | Adhesive | | Adhesive | |
| Integral Cable Length | 3 | ft | 914 | mm |
| Connector Type | 4-pin | | 4-pin | |
| Housing Material | Titanium | | Titanium | |
| Isolation | Case Ground | | Case Ground | |
| Sensing Element Material Mode | Ceramic Shear | | Ceramic Shear | |

| | ENGLISH | | SI | |
|-----------------------------|---------------|--------|---------------|-----------------------|
| PERFORMANCE | | | | |
| Sensitivity [1], [2], ± 25% | 5 | mV/g | 0.5 | mV/m/s ² |
| Acceleration Range | 1,000 | Gpeak | 9810 | m/s ² peak |
| Frequency Range, ±5% | 0.3 to 6000 | Hz | 0.3 to 6000 | Hz |
| Frequency Range, ±10% | 0.25 to 10000 | Hz | 0.25 to 10000 | Hz |
| Linearity [4] | ± 1 | % F.S. | ± 1 | % F.S. |
| Resonance Frequency | >27 | kHz | >27 | kHz |
| Transverse Sensitivity | 6 | % | 6 | % |
| Output Impedance | 100 | Ω | 100 | Ω |
| Noise floor, Max. | 0.06 | Grms | 0.59 | m/s ² rms |

| | ENGLISH | | SI | |
|-----------------------------------|-------------|---------|------------|-------------------------|
| ENVIRONMENTAL | | | | |
| Maximum Shock | 3,000 | Gpeak | 29430 | m/s ² |
| Maximum Vibration | 1,500 | Gpeak | 14715 | m/s ² |
| Operating Temperature | -67 to +320 | °F | -55 to 160 | °C |
| TEDS Operating Temperature | -40 to +185 | °F | -40 to +85 | °C |
| Seal | Hermetic | | Hermetic | |
| Magnetic Sensitivity at 100 Gauss | 0.0002 | g/Gauss | 0.002 | m/s ² /Gauss |
| Base Strain Sensitivity | 0.001 | g/με | 0.01 | m/s ² /με |

| | ENGLISH | | SI | |
|-------------------------|-------------|---------|-------------|---------|
| ELECTRICAL | | | | |
| Compliance Voltage | +18 to +30 | VDC | +18 to +30 | VDC |
| Current Range [4] | 2 to 20 | mA | 2 to 20 | mA |
| Bias Voltage | +8 to +10 | VDC | +8 to +10 | VDC |
| Discharge Time Constant | 1.1 to 2.5 | seconds | 1.1 to 2.5 | seconds |
| Output Impedance | 100 | Ω | 100 | Ω |
| TEDS Feature [5] | IEEE 1451.4 | | IEEE 1451.4 | |

This family also includes:

| Model | Sensitivity (mV/g) | Range (Gpeak) | Resolution (Grms) | Oper. Temp(°F) | TC |
|---------|--------------------|---------------|-------------------|----------------|------------|
| 3133D1T | 10 | 500 | 0.02 | -67 to 320 | 1.1 to 2.5 |
| 3133D2T | 2 | 2,500 | 0.15 | -67 to 320 | 0.5 to 2.5 |
| 3133D4T | 0.7 | 5,000 | 0.3 | -67 to 320 | 0.5 to 2.5 |
| 3133D5T | 0.25 | 20,000 | 0.5 | -67 to 320 | 0.5 to 4.0 |

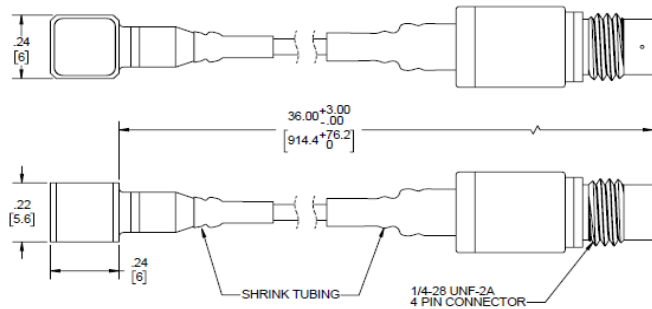
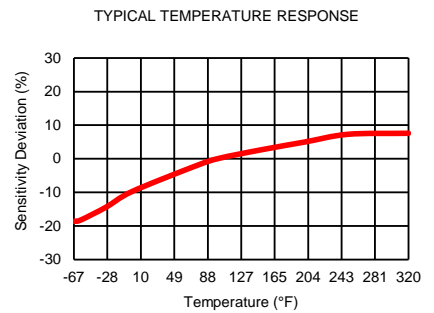
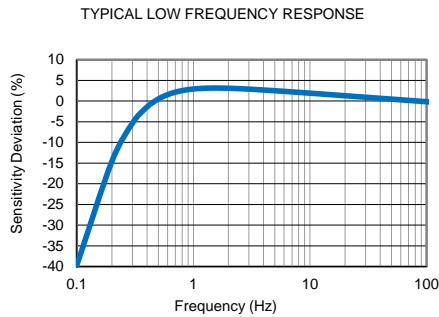
Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

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

Notes:

- [1] Measured at 100 Hz, 10 Grms
- [2] Actual sensitivity is given on a calibration certificate
- [3] Do not apply power to this device without current limiting, 20mA max, to do so will destroy the integral IC amplifier
- [4] Measured using zero-based straight line method, % of F.S. or any lesser range.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3133DT for more information.

