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REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
C	13002	ZONE 4B .22 [5.6] WAS" .23 [5.8], ZONE 3B .24 [6] WAS: $\phi$ .18 [4.6], NOTE 3 ..... $\phi$ .39 WAS: $\phi$ .20	JS 10/02/16	LA	LN

MODEL	SENSITIVITY
3133D1T	10 mV/g ( $\pm 15\%$ )
3133D2T	2 mV/g ( $\pm 25\%$ )
3133D3T	5 mV/g ( $\pm 20\%$ )
3133D4T	0.7 mV/g ( $\pm 25\%$ )
3133D5T	0.25 mV/g ( $\pm 25\%$ )

D

D

C

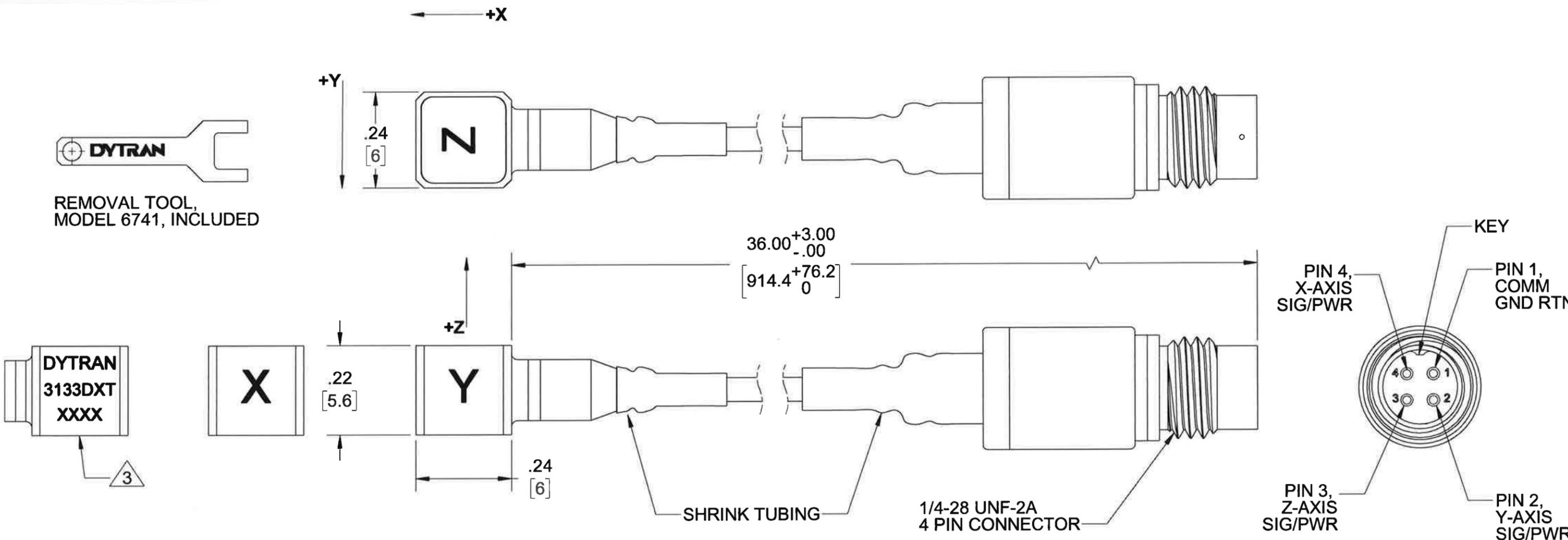
C

B

B

A

A



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

4. ARROWS INDICATE DIRECTION OF ACCELERATION FOR POSITIVE OUTPUT.

3. 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.

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.

DECIMALS		METRIC		ANGLES
.XX $\pm$ .03	.X $\pm$ 0.8	.XX $\pm$ 0.25		$\pm 1^\circ$
.XXX $\pm$ .010				

APPROVALS		DATE
ORIG	AB	11/15/13
CHK	LN	12/22/15
APP	AS	12/23/15

DO NOT SCALE DRAWING

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**DYTRAN INSTRUMENTS, INC.** Chatsworth, CA

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

SIZE <b>B</b>	CAGE CODE <b>2W033</b>	DWG NO <b>127-3133DT</b>	REV <b>C</b>
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SCALE: 1:1 SHEET 1 OF 1

<b>Model Number</b>	<b>PERFORMANCE SPECIFICATION</b>			<b>DOC NO</b> <b>PS3133D4T</b>
<b>3133D4T</b>	<b>Accelerometer, Triaxial, IEPE</b>			REV E, ECN 13002, 10/05/16



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

**PHYSICAL**

Weight  
Mounting  
Integral Cable Length  
Connector Type  
Housing Material  
Isolation  
Sensing Element Material  
Mode

ENGLISH		SI	
0.03	oz	0.8	grams
Adhesive		Adhesive	
3	ft	914	mm
4-pin		4-pin	
Titanium		Titanium	
Case Ground		Case Ground	
Quartz		Quartz	
Shear		Shear	

**PERFORMANCE**

Sensitivity [1], [2], ± 25%  
Acceleration Range  
Frequency Range, ±5%  
Frequency Range, ±10%  
Linearity [4]  
Resonance Frequency  
Transverse Sensitivity  
Output Impedance  
Noise floor, Max.

0.7	mV/g	0.071	mV/m/s <sup>2</sup>
5,000	Gpeak	49050	m/s <sup>2</sup> peak
0.7 to 6000	Hz	0.7 to 6000	Hz
0.7 to 10000	Hz	0.7 to 10000	Hz
± 1	% F.S.	± 1	% F.S.
>27	kHz	>27	kHz
6	%	6	%
100	Ω	100	Ω
0.30	Grms	2.94	m/s <sup>2</sup> rms

**ENVIRONMENTAL**

Maximum Shock  
Maximum Vibration  
Operating Temperature  
Seal  
Magnetic Sensitivity at 100 Gauss  
Base Strain Sensitivity

7,000	Gpeak	68670	m/s <sup>2</sup>
6,000	Gpeak	58860	m/s <sup>2</sup>
-67 to +320	°F	-55 to 160	°C
Hermetic		Hermetic	
0.0002	g/Gauss	0.002	m/s <sup>2</sup> /Gauss
0.001	g/με	0.01	m/s <sup>2</sup> /με

**ELECTRICAL**

Compliance Voltage  
Current Range [4]  
Bias Voltage  
Discharge Time Constant  
Output Impedance  
TEDS Feature [5]

+18 to +30	VDC	+18 to +30	VDC
2 to 20	mA	2 to 20	mA
+7 to +9	VDC	+7 to +9	VDC
0.5 to 2.5	seconds	0.5 to 2.5	seconds
100	Ω	100	Ω
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 1.7
3133D2T	2	2,500	0.15	-67 to 320	0.5 to 2.5
3133D3T	5	1,000	0.06	-67 to 320	1.1 to 1.7
3133D5T	0.25	20,000	0.50	-67 to 320	0.5 to 4

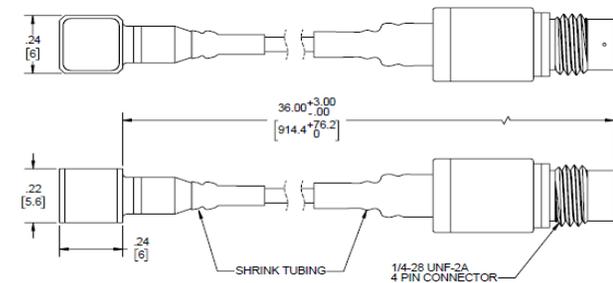
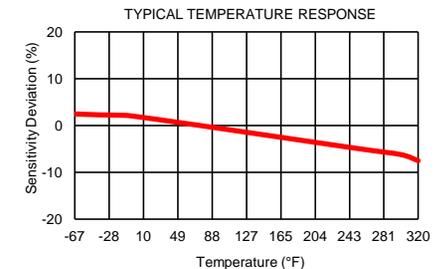
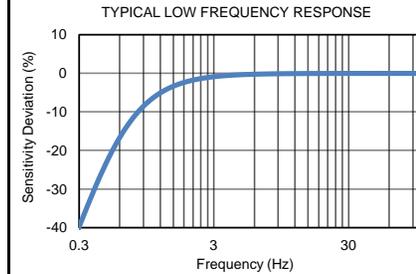
Refer to the performance specifications of the products in this family for detailed description

**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] 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] TEDS operational temperature: -40° F to +185° F [-40° C to +85° C]



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



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