

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

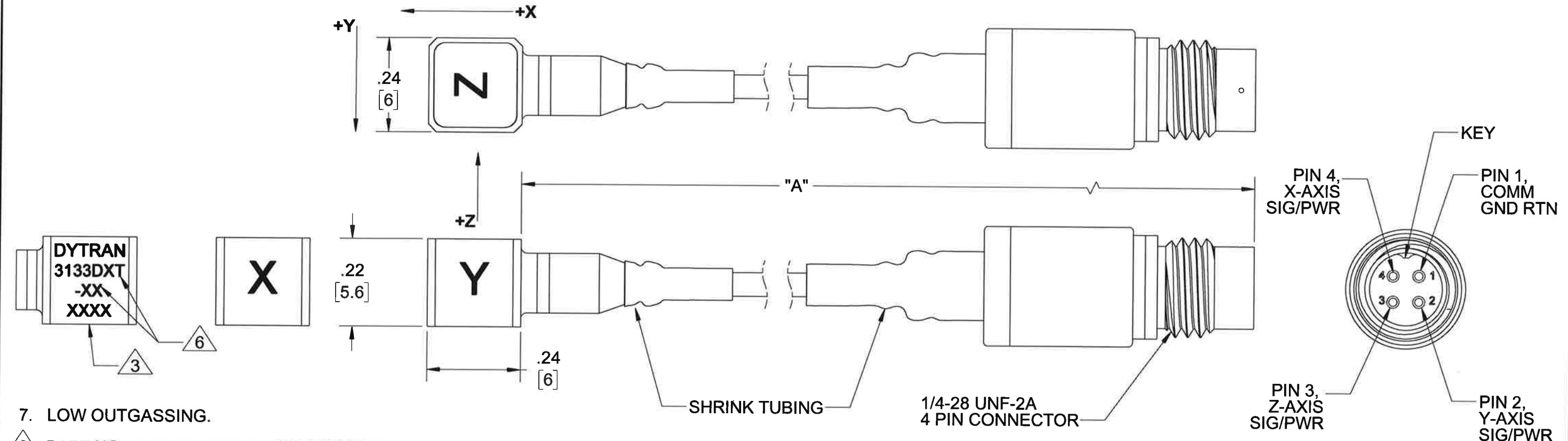
MODEL	SENSITIVITY	DIM "A"
3133D1T	10 mV/g	36.00 IN +3.00/-0.00 IN
3133D2T	2 mV/g	36.00 IN +3.00/-0.00 IN
3133D3T	5 mV/g	36.00 IN +3.00/-0.00 IN
3133D4T	0.7 mV/g	36.00 IN +3.00/-0.00 IN
3133D5T	0.25 mV/g	36.00 IN +3.00/-0.00 IN
3133D1T-17	10 mV/g	17.00 FT +6.00/-0.00 IN
3133D2T-17	2 mV/g	17.00 FT +6.00/-0.00 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
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SCALE: 1:1 SHEET 1 OF 1

Model Number	PERFORMANCE SPECIFICATION		DOC NO PS3133D2T
3133D2T	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**

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

	ENGLISH	SI
Sensitivity [1], [2], ± 25%	2.0 mV/g	0.20 mV/m/s ²
Acceleration Range	2,500 Gpeak	24525 m/s ² peak
Frequency Range, ±5%	0.7 to 6000 Hz	0.7 to 6000 Hz
Frequency Range, ±10%	0.7 to 10000 Hz	0.7 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.	0.15 Grms	1.47 m/s ² rms

ENVIRONMENTAL

	ENGLISH	SI
Maximum Shock	4,000 Gpeak	39240 m/s ²
Maximum Vibration	3,000 Gpeak	29430 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

ELECTRICAL

	ENGLISH	SI
Compliance Voltage	+18 to +30 VDC	+18 to +30 VDC
Current Range [4]	2 to 20 mA	2 to 20 mA
Bias Voltage	+7 to +9 VDC	+7 to +9 VDC
Discharge Time Constant	0.5 to 2.5 seconds	0.5 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
3133D3T	5	1,000	0.06	-67 to 320	1.1 to 2.5
3133D4T	0.7	5,000	0.3	-67 to 320	0.5 to 2.5
3133D5T	0.25	20,000	0.50	-67 to 320	0.5 to 4

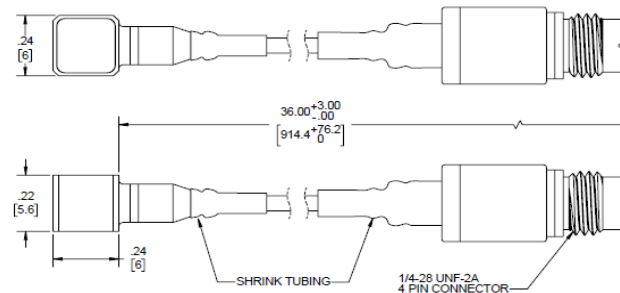
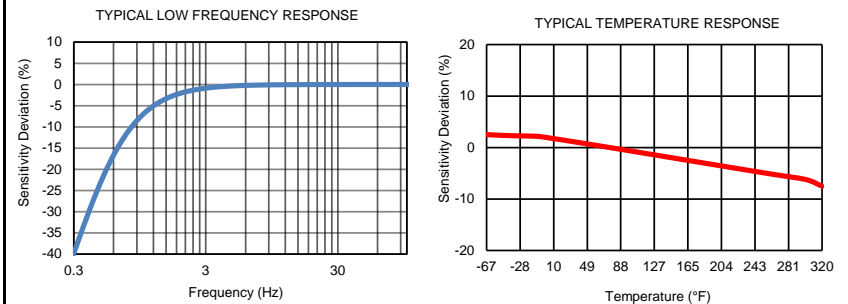
Refer to the performance specifications of the products in this family for detailed description

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



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