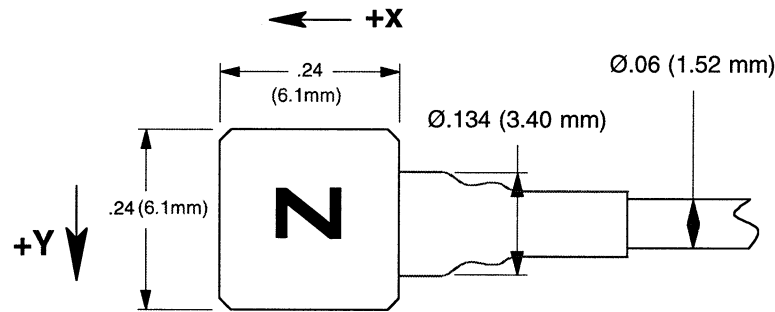


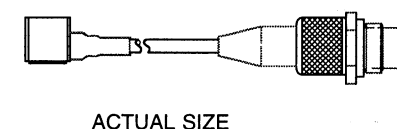
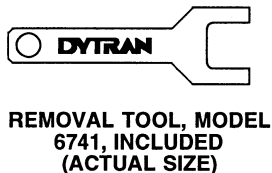
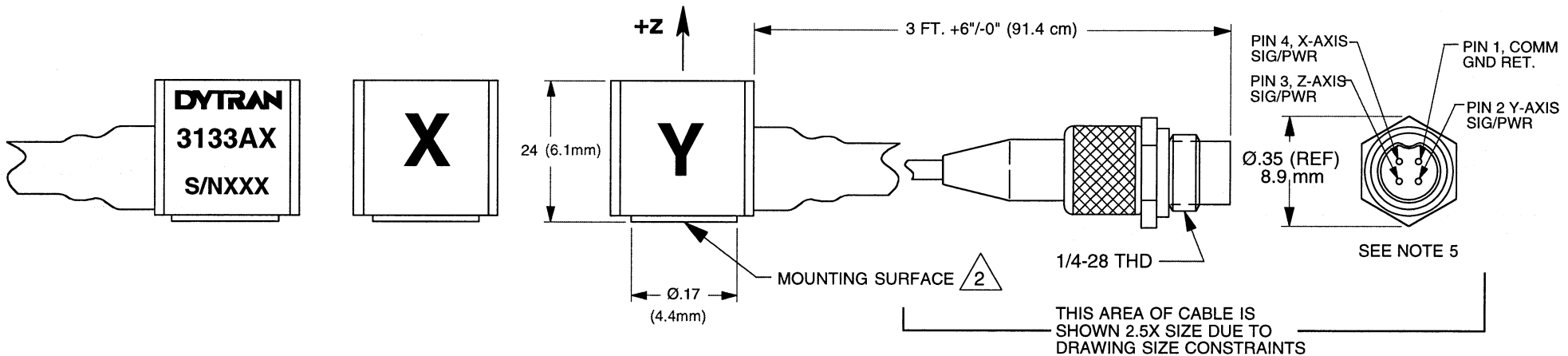
**DYTRAN PROPRIETARY AND CONFIDENTIAL**

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

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
3	-	CHANGED X AND Y AXES ORIENTATION AND MARKING	NC/3-26-09		
A	5992	INITIAL RELEASE	NC/5-14-09	<i>AN</i>	<i>ANS</i>



VARIATION CHART	
MODEL	SENSITIVITY (nom.)
3133A1	10 mV/g
3133A2	2 mV/g
3133A3	5 mV/g



6. MODEL 6298 PETRO MOUNTING WAX IS INCLUDED.
5. MATING CABLES ARE MODELS 6824AXX (SANOPRENE), OR 6811AXX, (TEFLON) 4-PIN CONNECTOR TO 3 BNC's. "XX" IS THE CABLE LENGTH IN FEET.
4. HOUSING MATERIAL: TITANIUM.
3. THE LETTERS "X", "Y", & "Z" INDICATE THE DIRECTION OF ACCELERATION OF EACH AXIS FOR POSITIVE GOING OUTPUT VOLTAGE (AS THE MARKED SURFACE ACCELERATES TOWARD THE VIEWER.) SEE DIRECTIONAL ARROWS ON FACE OF DRAWING.
2. FOR BEST FREQUENCY RESPONSE, PREPARE FLAT MOUNTING SURFACE OF AT LEAST .20 DIAMETER, FLAT TO .0001 TIR. APPLY ONE DROP OF CYANOACRYLATE ADHESIVE TO MOUNT THE ACCELEROMETER.
1. WEIGHT, LESS CABLE: 0.8 GRAMS.

# MASTER

## ONLY IF IN RED

CHATSWORTH, CA.

SCALE <b>4X</b>	DESIGN N.C.	DATE 11-10-08		
DRAWN N.C.	DATE 11-10-08	PART NO. SEE CHART		
CHECKED <i>AN</i>	DATE 5/18/09	MAT'L		REV A
APPROVED <i>ANS</i>	DATE 5/26/09	NEXT ASSEMBLY	USED ON 3133A1, 3133A2, 3133A3	
TITLE <b>OUTLINE/INSTALLATION DRAWING, MODEL SERIES 3133A TRIAXIAL ACCELEROMETERS</b>			DWG NO. <b>127-3133A</b>	
			SHEET 1 OF 1	

# 3133A1

# PERFORMANCE SPECIFICATION

REV A, ECN 5992, 05/15/09

Accelerometer, Triaxial, IEPE



Actual Size

- ULTRA MINIATURE SIZE
- HIGH SENSITIVITY
- IDEAL LOW FREQUENCY RESPONSE

		ENGLISH		SI	
PHYSICAL	Weight	oz	0.03	grams	0.8
	Size	inch	0.24	mm	6.10
	Height	inch	0.24	mm	5.59
Mounting			Adhesive		Adhesive
Integral Cable	Length	ft	3	mm	914.4
	Type		TFE		TFE
Connector	Type		4-pin		4-pin
Housing	Material		Titanium		Titanium
	Isolation		Case Ground		Case Ground
Sensing Element	Material		Ceramic		Ceramic
	Mode		Shear		Shear

## PERFORMANCE

Sensitivity [1], [2]	mV/g	10 to 15	mV/m/s <sup>2</sup>	1.02 to 1.53	
Acceleration Range	Gpeak	500	m/s <sup>2</sup> peak	4905.00	
Frequency Range, ±10%	Hz	0.25 to 10,000	Hz	0.25 to 10,000	
Resonance Frequency	kHz	>35	kHz	>35	
Transverse Sensitivity	%	6	%	6	
Bias Voltage	VDC	+8 to +10	VDC	+8 to +10	
Output Impedance	Ω	100	Ω	100	
Noise floor	Grms	0.016	m/s <sup>2</sup> rms	0.157	
Discharge Time Constant	seconds	1.0 to 1.5	seconds	1.0 to 1.5	
Spectral Noise	1Hz	μGrms/sqr(Hz)	4000	μm/s <sup>2</sup> rms/sqr(Hz)	39240
	10Hz	μGrms/sqr(Hz)	2000	μm/s <sup>2</sup> rms/sqr(Hz)	19620
	100Hz	μGrms/sqr(Hz)	500	μm/s <sup>2</sup> rms/sqr(Hz)	4905
	1000Hz	μGrms/sqr(Hz)	200	μm/s <sup>2</sup> rms/sqr(Hz)	1962
	10000Hz	μGrms/sqr(Hz)	90	μm/s <sup>2</sup> rms/sqr(Hz)	882.9

## ENVIRONMENTAL

Shock	Gpeak	3000	m/s <sup>2</sup>	29430
Vibration	Gpeak	900	m/s <sup>2</sup>	8829
Operating Temperature	°F	-60 to +300	°C	-51 to 148
Seal		Epoxy		Epoxy
Magnetic Sensitivity at 100 Gauss	g/Gauss	0.00004	m/s <sup>2</sup> /Gauss	0.0003924
Base Strain Sensitivity	g/με	0.15	m/s <sup>2</sup> /με	1.4715

## POWER

Compliance Voltage	VDC	+18 to +30	VDC	+18 to +30
Current Range	mA	2 to 20	mA	2 to 20

## This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3133A2	2	2500	0.033	-60 to 300	0.4
3133A3	5	1000	0.032	-60 to 300	1.1

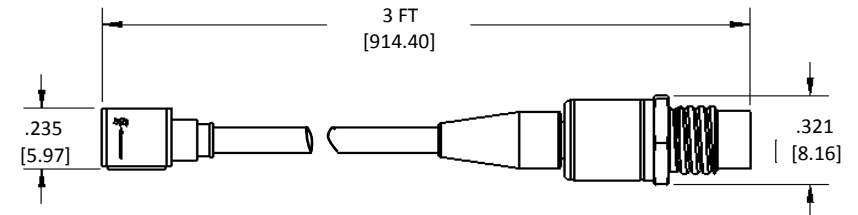
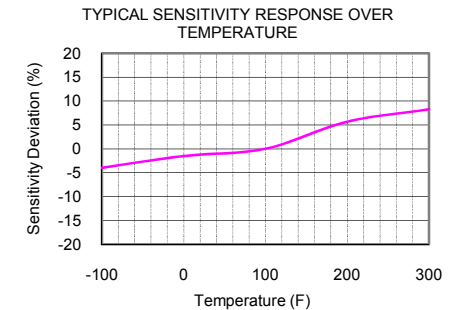
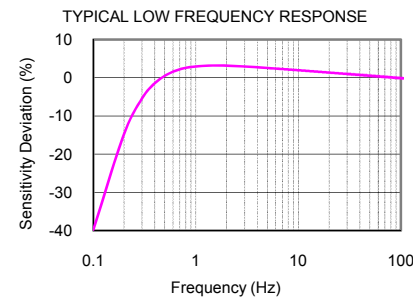
Please, refer to the performance specifications of the products in this family for detailed description

## Supplied Accessories:

- 1) Model 6298 Small Petro Wax
- 2) Model 6741 Removal Tool
- 3) Accreditate 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



Units on the line drawing are in inches, units in brackets are in millimeters



21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax: 818.700.7880  
[www.dytran.com](http://www.dytran.com) For permission to reprint this content, please contact [info@dytran.com](mailto:info@dytran.com)