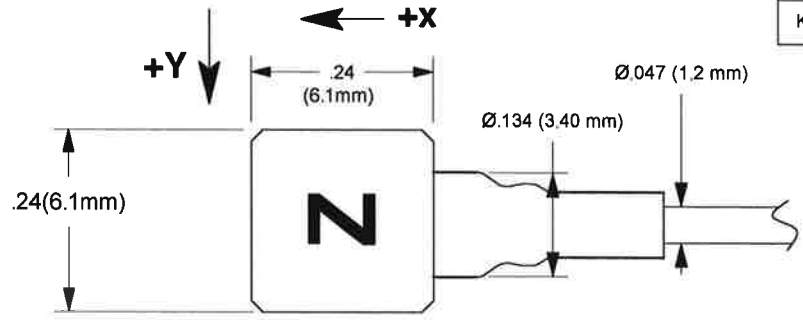


**DYTRAN PROPRIETARY AND CONFIDENTIAL**  
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF  
 DYTRAN INSTRUMENTS, INC. AND ANY REPRODUCTION IN PART OR AS A WHOLE  
 OR ANY OTHER DISSEMINATION OF THIS INFORMATION WITHOUT THE WRITTEN  
 PERMISSION OF DYTRAN INSTRUMENTS, INC. IS PROHIBITED.

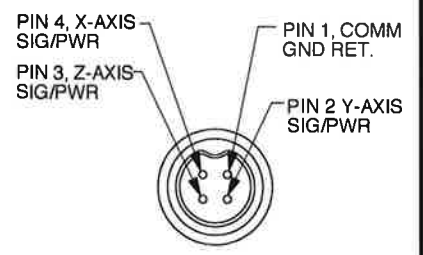
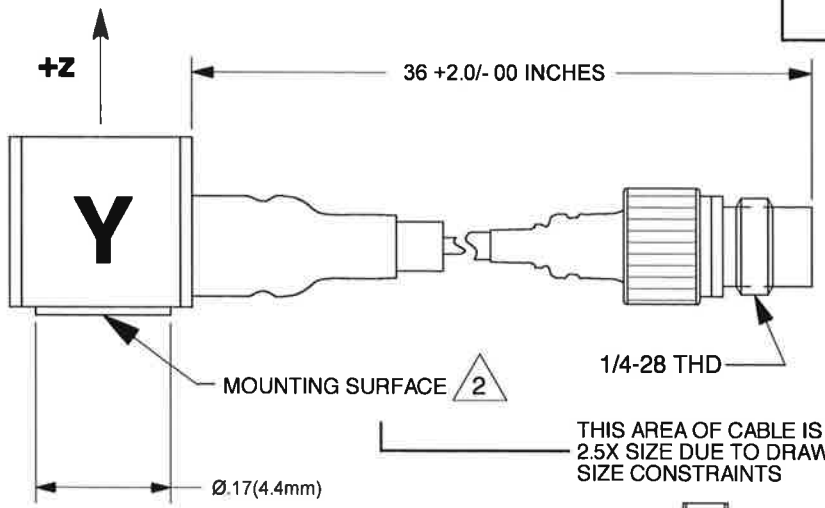
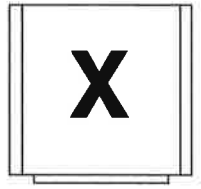
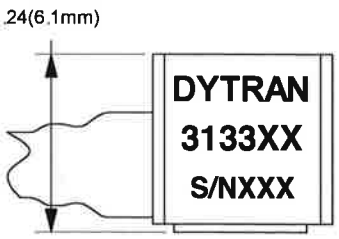
REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
H	12409	UPDATED VIEW OF CONNECTOR (KNUURLING)	JS 12/15/15	LA	LN
J	12992	3133A5 SENSITIVITY WAS: 0.25 Mv/g (+/-25%)	JS 10/07/16	LA	LN
K	13061	REVISED "DYTRAN" TO REFLECT MARKING, AS SHIPPED	JS 10/07/16	RA	LJ



**REMOVAL TOOL MODEL 6741, INCLUDED (ACTUAL SIZE)**

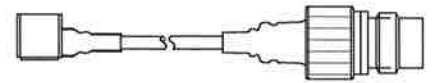


VARIATION CHART	
MODEL	SENSITIVITY
3133A1	10 mV/g (±15%)
3133A2	2 mV/g (±25%)
3133A3	5 mV/g (±20%)
3133A4	0.7 mV/g (±25%)
3133A5	0.2 mV/g (±25%)



SEE NOTE 5

THIS AREA OF CABLE IS SHOWN 2.5X SIZE DUE TO DRAWING SIZE CONSTRAINTS



ACTUAL SIZE

7. UNLESS OTHERWISE INDICATED, ALL DIMENSIONS ARE IN INCHES. mm DIMENSIONS ARE INDICATED BY PARENTHESES.
6. MODEL 6298 PETRO MOUNTING WAX IS INCLUDED.
5. MATING CABLES ARE MODELS 6824AXX (SANTOPRENE), OR 6811AXX, (TEFLON) 4-PIN CONNECTOR TO 3 BNC'S. "XX" IS THE CABLE LENGTH IN FEET. EX.: CABLE MOD. 6811A3 (3 FT. NOM.).
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.

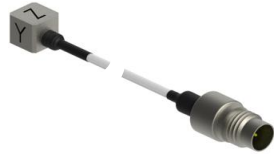
# MASTER

ONLY IF IN RED

CHATSWORTH, CA

SCALE 4X	DESIGN N.C.	DATE 11-10-08			
DRAWN N.C.	DATE 11-10-08	PART NO. SEE CHART			
CHECKED D.V.	DATE 05-18-09	MAT'L			REV K
APPROVED ANS	DATE 05-26-09	NEXT ASSEMBLY	USED ON	3133A1, A2, A3, A4, A5	
TITLE <b>OUTLINE/INSTALLATION DRAWING, MODEL SERIES 3133A TRIAXIAL ACCELEROMETERS</b>				DWG NO. <b>127-3133A</b>	
SHEET 1 OF 1					

Model Number	<b>PERFORMANCE SPECIFICATION</b>		DOC NO
			PS3133A5
3133A5	Accelerometer, Triaxial, IEPE		REV F, ECN 12956, 09/14/16



• **ULTRA MINIATURE SIZE**  
 • **IDEAL LOW FREQUENCY RESPONSE**

**PHYSICAL**

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

ENGLISH		SI	
	0.03	oz	0.8
	0.24	inch	6.1
	0.24	inch	6.1
	Adhesive		Adhesive
	3	ft	914
	TFE		TFE
	4-pin		4-pin
	Titanium		Titanium
	Case Ground		Case Ground
	Quartz		Quartz
	Shear		Shear

**PERFORMANCE**

Sensitivity [1], [2], ± 25%	0.2	mV/g	0.020	mV/m/s <sup>2</sup>
Acceleration Range	20,000	Gpeak	196200	m/s <sup>2</sup> 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	>35	kHz	>35	kHz
Transverse Sensitivity	6	%	6	%
Bias Voltage	+7 to +9	VDC	+7 to +9	VDC
Output Impedance	100	Ω	100	Ω
Noise floor	0.35	Grms	3.43	m/s <sup>2</sup> rms
Discharge Time Constant	.5 to 4	seconds	.5 to 4	seconds
Spectral Noise	1Hz	160,000	μGrms/sqr(Hz)	1569600
	10Hz	80,000	μGrms/sqr(Hz)	784800
	100Hz	20,000	μGrms/sqr(Hz)	196200
	1000Hz	8,000	μGrms/sqr(Hz)	78480
	10000Hz	3,600	μGrms/sqr(Hz)	35316

**ENVIRONMENTAL**

Maximum Shock	25,000	Gpeak	245250	m/s <sup>2</sup>
Maximum Vibration	22,000	Gpeak	215820	m/s <sup>2</sup>
Operating Temperature	-67 to +320	°F	-55 to +160	°C
Seal	Epoxy		Epoxy	
Magnetic Sensitivity at 100 Gauss	0.00004	g/Gauss	0.00039	m/s <sup>2</sup> /Gauss
Base Strain Sensitivity	0.15	g/με	1.47	m/s <sup>2</sup> /με

**POWER**

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

**This family also includes:**

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3133A1	10	500	0.02	-67 to 320	1.0 to 1.5
3133A2	2	2500	0.15	-67 to 320	0.3 to 2.5
3133A3	5	1000	0.06	-67 to 320	1.0 to 1.5
3133A4	0.7	5000	0.15	-67 to 320	0.5 to 2.5

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

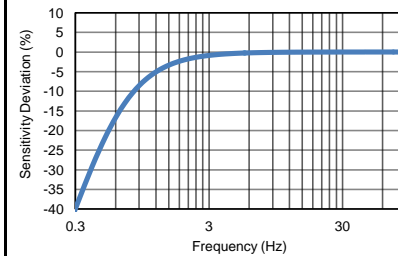
**Supplied Accessories:**

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

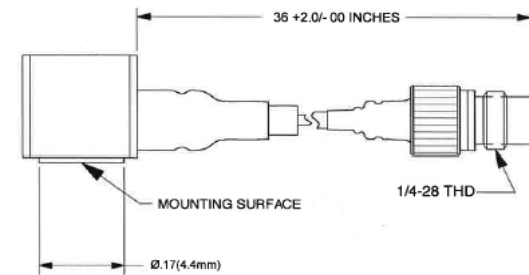
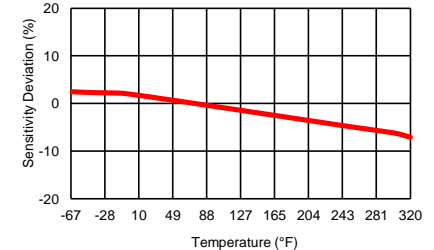
**Notes:**

- [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.

TYPICAL LOW FREQUENCY RESPONSE



TYPICAL TEMPERATURE RESPONSE



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