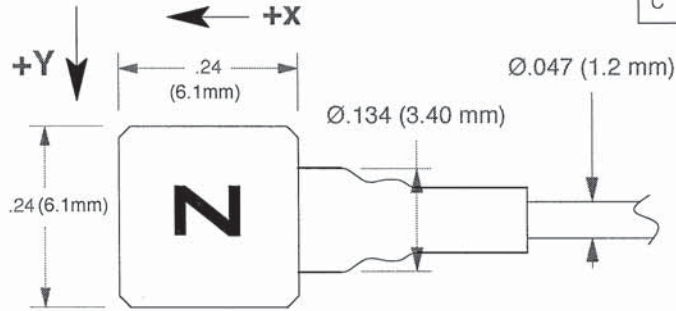
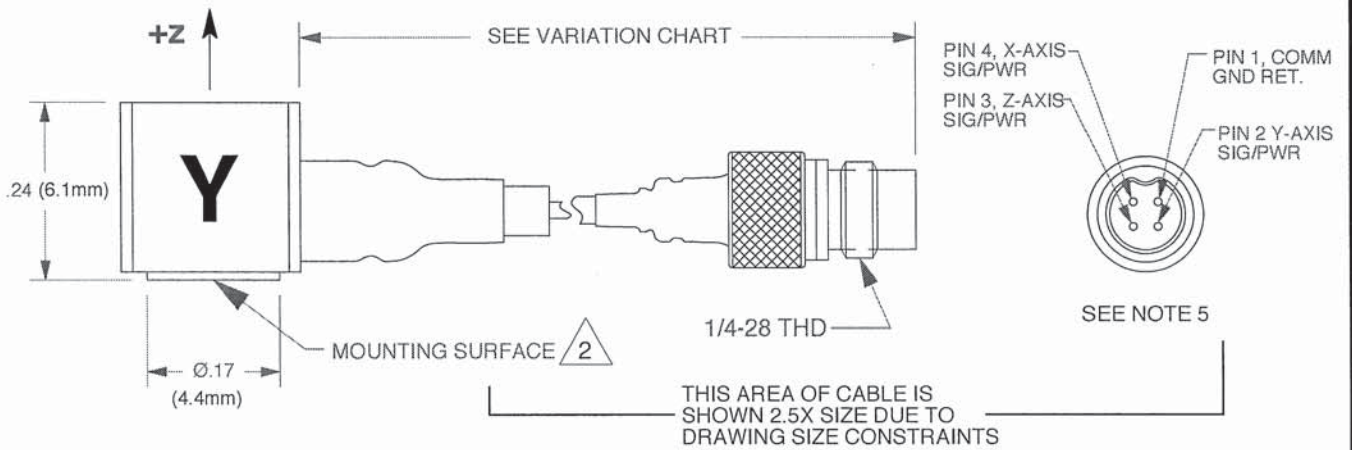


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REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	5992	INITIAL RELEASE	NC/5-14-09	DV	ANS
B	6368	UPDATED DRAWING WITH SMALLER CABLE DIAMETER	NC/10-13-09	DV	ANS
C	6531	3133A1 SENSITIVITY IS: 9-14 mV/g WAS: 10-15 mV/g	RA/01-26-10	JJ	DV




VARIATION CHART	
MODEL	SENSITIVITY
3133A1	9-14 mV/g
3133A2	2-5 mV/g
3133A3	5-10 mV/g



REMOVAL TOOL, MODEL 6741, INCLUDED (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 (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 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 C
APPROVED ANS	DATE 05-26-09	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				

<b>Model Number</b> 3133A1	<b>PERFORMANCE SPECIFICATION</b>	<b>DOC NO</b> PS3133A1
	<b>Accelerometer, Triaxial, IEPE</b>	REV E, ECN 7210, 11/15/10



Actual Size

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

**This family also includes:**

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3133A2	2	2500	0.15	-60 to 300	0.3 to 0.5
3133A3	5	1000	0.06	-60 to 250	1.1 to 1.5

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 wi destroy the integral IC amplifier

**PHYSICAL**

		ENGLISH		SI	
Weight		oz	0.03	grams	0.8
Size	Width	inch	0.24	mm	6.1
	Height	inch	0.24	mm	6.1
Mounting			Adhesive		Adhesive
Integral Cable	Length	ft	3	mm	914.4
	Type		TFE		TFE
Connector Housing	Type		4-pin		4-pin
	Material		Titanium		Titanium
Sensing Element	Isolation		Case Ground		Case Ground
	Material		Ceramic		Ceramic
	Mode		Shear		Shear

**PERFORMANCE**

		ENGLISH		SI	
Sensitivity [1], [2], ±15%		mV/g	10	mV/m/s <sup>2</sup>	1.02
Acceleration Range		Gpeak	500	m/s <sup>2</sup> peak	4905
Frequency Range Axis 1 & 2, ±10%		Hz	0.25 to 7000	Hz	0.25 to 7000
	Frequency Range Axis 3, ±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	0.02	m/s <sup>2</sup> rms	0.20
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)	883

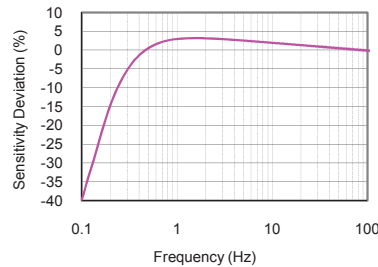
**ENVIRONMENTAL**

Shock		Gpeak	3000	m/s <sup>2</sup>	29430
Vibration		Gpeak	900	m/s <sup>2</sup>	8829
Operating Temperature		°F	-60 to +250	°C	-51 to 121
Seal			Epoxy		Epoxy
Magnetic Sensitivity at 100 Gauss		g/Gauss	0.00004	m/s <sup>2</sup> /Gauss	0.00039
Base Strain Sensitivity		g/με	0.15	m/s <sup>2</sup> /με	1.47

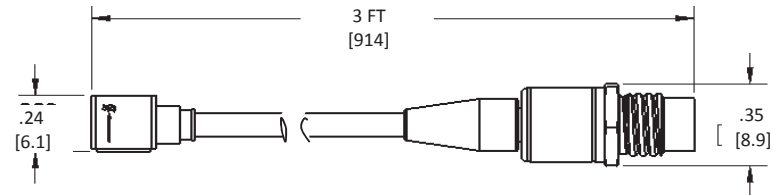
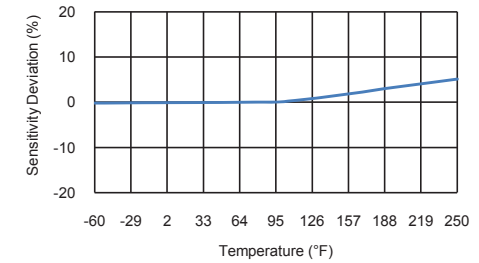
**POWER**

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

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.



Presented by: Absolute Gauge Technologies  
 sales@absolutegauge.com; www.absolutegauge.com,  
 Toronto: 416 754 3168, Montreal: 514 695 5147, Toll Free: 1 888 754 7008