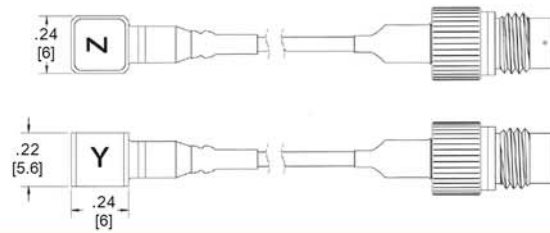


APPLICATIONS:

- Board mounted components and other miniature electronic products
- General purpose triaxial vibration measurements
- Environmental Stress Screening (ESS)
- Modal and structural analysis
- Shock and vibration testing
- Product response testing
- Space hardware testing
- Printed circuit boards
- HALT/ HASS



SENSOR SNAPSHOT:



Dimensions: .24 L X .24 W X .22" H

Low profile, voltage mode IEPE

Three axis vibration sensing

Low mass design, 0.8 grams

WHAT THIS SENSOR DOES FOR YOU:

Today's electronic devices continue to decrease in size yet require more development testing than ever before to survive in rugged environments and stand up to harsh daily use. Dytran series 3133D is a line of ultra miniature, hermetically sealed, IEPE triaxial accelerometers that weigh just 0.8 grams. This series is characterized by its exceptionally small size which allows it to be mounted in spaces that are inaccessible to other types of triaxial accelerometers. The low mass of the accelerometer has minimal impact on the natural frequency behavior and will not mass load the test article. Series 3133D is offered in several sensitivity ranges from 0.25mV/g to 10mV/g and is adhesively mounted. The series features a permanently attached 3 ft. long coaxial cable with a 4-pin connector designed to mate with several models of extension cables for connection to IEPE power sources.

DEVICE FEATURES:

Ultra miniature accelerometer designed to mount in spaces inaccessible to other types of accelerometers

The low mass of the accelerometer will not "mass load" the test article

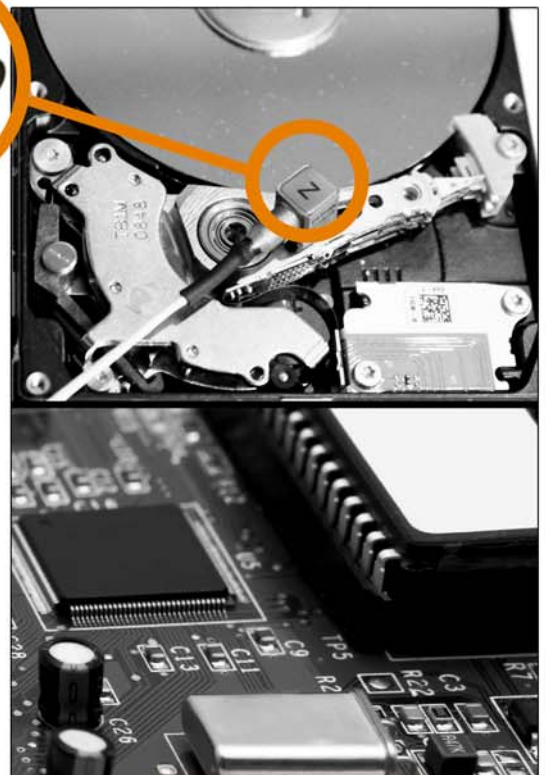
Hermetically sealed with a titanium case

Low base strain sensitivity

Low frequency response

TEDS options available

Low outgassing



LEARN
MORE

818-700-7818
www.dytran.com
info@dytran.com

Since its founding, Dytran has built a solid 35+ year industry reputation for trusted, field proven experience in the design and manufacture of sensors for dynamic testing.



PRODUCT SPECIFICATIONS

SERIES 3133D

PHYSICAL

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

PERFORMANCE

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

ENVIRONMENTAL

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

ELECTRICAL

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

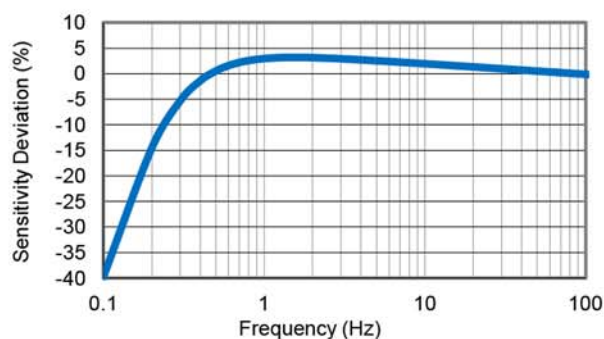
ENGLISH		SI	
0.03	oz	0.8	grams
Adhesive		Adhesive	
3	ft	914	mm
4-pin		4-pin	
Titanium		Titanium	
Case Ground		Case Ground	
Ceramic		Ceramic	
Shear		Shear	
10	mV/g	1.0	mV/m/s ²
500	Gpeak	4905	m/s ² peak
0.3 to 6000	Hz	0.3 to 6000	Hz
0.25 to 10000	Hz	0.25 to 10000	Hz
± 1	% F.S.	± 1	% F.S.
>27	kHz	>27	kHz
6	%	6	%
100	Ω	100	Ω
0.02	Grms	0.20	m/s ² rms
3,000	Gpeak	29430	m/s ²
900	Gpeak	8829	m/s ²
-67 to +320	$^{\circ}\text{F}$	-55 to 160	$^{\circ}\text{C}$
Hermetic		Hermetic	
0.0002	g/Gauss	0.002	m/s ² /Gauss
0.001	g/ $\mu\epsilon$	0.01	m/s ² / $\mu\epsilon$
+18 to +30	VDC	+18 to +30	VDC
2 to 20	mA	2 to 20	mA
+8 to +10	VDC	+8 to +10	VDC
1.1 to 1.7	seconds	1.1 to 1.7	seconds
100	Ω	100	Ω

This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp($^{\circ}\text{F}$)	TC
3133D2	2	2,500	0.15	-67 to 320	0.3 to 2.5
3133D3	5	1,000	0.06	-67 to 320	1.1 to 1.7
3133D4	0.7	5,000	0.3	-67 to 320	0.5 to 2.5
3133D5	0.25	20,000	0.5	-67 to 320	0.5 to 4.0

TYPICAL RESPONSE GRAPHS

TYPICAL LOW FREQUENCY RESPONSE



TYPICAL TEMPERATURE RESPONSE

