

Model Number PERFORMANCE SPECIFICATION 3133A1

DOC NO PS3133A1

Accelerometer, Triaxial, IEPE

REV E, ECN 7210, 11/15/10



- ULTRA MINIATURE SIZE
- HIGH SENSITIVITY

ENGLISH

• IDEAL LOW FREQUENCY RESPONSE

Actual	Size
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		ENGLISH		SI	
PHYSICAL					
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	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], ±15%		mV/g	10	mV/m/s^2	1.02
Acceleration Range		Gpeak	500	m/s^2 peak	4905
Frequency Range Axis 1 & 2	, ±10%	Hz	0.25 to 7000	Hz	0.25 to 7000
Frequency Range Axis 3, ±1	0%	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^2 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^2 rms/sqr(Hz)	39240
	10Hz	μGrms/sqr(Hz)	2000	μm/s^2 rms/sqr(Hz)	19620
	100Hz	μGrms/sqr(Hz)	500	μm/s^2 rms/sqr(Hz)	4905
	1000Hz	μ Grms/sqr(Hz)	200	μm/s^2 rms/sqr(Hz)	1962
ENN/ID ON MENTAL	10000Hz	μGrms/sqr(Hz)	90	μm/s^2 rms/sqr(Hz)	883
ENVIRONMENTAL					
Shock		Gpeak	3000	m/s^2	29430
Vibration		Gpeak	900	m/s^2	8829
Operating Temperature Seal		°F	-60 to +250	°C	-51 to 121
			Epoxy		Epoxy
Magnetic Sensitivity at 100 G	auss	g/Gauss	0.00004	m/s^2/Gauss	0.00039
Base Strain Sensitivity		g/με	0.15	m/s^2/με	1.47
POWER					
Compliance Voltage		VDC	+18 to +30	VDC	+18 to +30
Current Range		mA	2 to 20	mA	2 to 20

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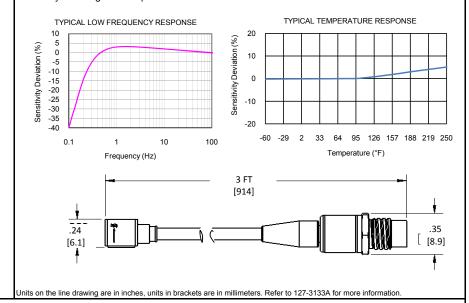
Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3133A2	2	2500	0.15	-60 to 300	0.3 to 0.5
3133A3	5	1000	0.06	-60 to 250	1.1 to 1.5

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 widestroy the integral IC amplifier





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