

3093M23 PERFORMANCE SPECIFICATION DOC NO PS3093M23 Accelerometer, Triaxial, IEPE REV C, ECN 10287, 08/16/2013



- GROUND ISOLATED
- HERMETICALLY SEALED
- STUD MOUNT

		ENGLISH		SI	
PHYSICAL			<u>.</u>		
Weight, Max		0.5	oz	15	grams
Mounting		10-32 Stud Mount		10-32 Stud Mount	ĺ
Connector [1]	Type	4-pin		4-pin]
	Material	Ti-6 AL-4V		Ti-6 AL-4V	
Housing	Material	Ti-6 AL-4V		Ti-6 AL-4V]
	Isolation	Case Isolated		Case Isolated]
Sensing Element	Material	Piezoelectric		Piezoelectric	1
	Element	Shear		Shear	
PERFORMANCE			=		<u> </u>
Sensitivity, ±5% [2]		5	mV/g	0.51	mV/m/s^2
Acceleration Range, ±		1000	Gpeak	9810	m/s^2 peak
Frequency Range, ±5%		3.3-1000	Hz	3.3-1000	Hz
Frequency Range, ±15%		2.2-3000	Hz	2.2-3000	Hz
Frequency Range, ±3dB		1.1-6000	Hz	1.1-6000	Hz
Resonance Frequency		>50	kHz	>50	kHz
Linearity [3]		1	%F.S.	1	%F.S.
Transverse Sensitivity, Max		6	%	6	%
Noise floor		0.007	Grms	0.069	m/s^2 rms
Spectral Noise	1Hz	1000	μGrms/sqr(Hz)	9810	µm/s^2 rms/sqr(Hz)
	10Hz	500	μGrms/sqr(Hz)	4905	μm/s^2 rms/sqr(Hz)
	100Hz	100	μGrms/sqr(Hz)	981	μm/s^2 rms/sqr(Hz)
	1000Hz	60	μGrms/sqr(Hz)	589	µm/s^2 rms/sqr(Hz)
	10000Hz	50	μGrms/sqr(Hz)	491	μm/s^2 rms/sqr(Hz)
ELECTRICAL					1 .
Supply Current Range [4]		2 to 20	mA	2 to 20	mA
Compliance Voltage Range		+18 to +30	VDC	+18 to +30	VDC
Output Impedance, Typ.		100	Ω VDC	100	Ω VDC
Output Bias Voltage Discharge Time Constant		+7 to +11 0.15 to 0.5	Sec	+7 to +11 0.15 to 0.5	Sec
Discharge Time Constant		0.15 to 0.5	Sec	0.15 to 0.5	Sec
ENVIRONMENTAL			_		_
Shock Max		5000	g pk	49050	m/s^2
Vibration Max		1500	g pk	14715	m/s^2
Operating Temperature		-60 to +250	°F	-51 to +121	°C
Seal		Hermetic		Hermetic	
Base Strain Sensitivity		0.002	g/με	0.02	m/s^2/με

This family	y also	includes:
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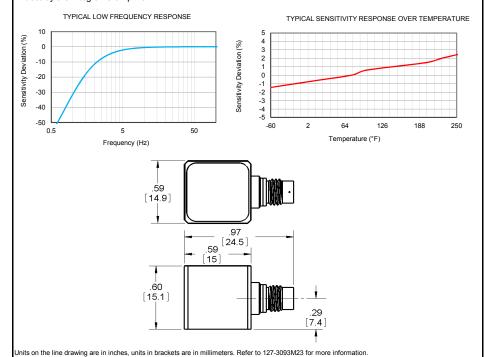
Model	Sensitivity (mV/g)	Range (Gpeak)	Noise Resolution (Grms)	Temp Range (°F)	Time Constant (sec)
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Please refer to the performance specifications of the products in this family for detailed description.

Supplied Accessories:

- 1) Accredited Calibration Certificate (ISO 17025).
- 2) Mounting stud model 6200, (10-32 to 10-32).

- [1] Glass to Metal Seal connector. Mates with Dytran cable Model 6811AXX (XX=length in feet). [2] Measured At 100 Hz, 1 Grms per ISA RP 37.2.
- [3] Measured using zero-based best straight-line method.
- [4] Do not apply power to this device without current limiting, 20mA Max, to do so will destroy the integral IC amplifier.





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