

## 3093M23 PERFORMANCE SPECIFICATION DOC NO PS3093M23 Accelerometer, Triaxial, IEPE REV.F. ECN 15062, 05/21/2019



- TWO POLE ELECTRICAL FILTERED
- GROUND ISOLATED
- HERMETICALLY SEALED
- STUD MOUNT

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PHYSICAL					
Weight, Max		0.5	oz	15	grams
Mounting		10-32 Stud Mount		10-32 Stud Mount	
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	
	Element	Shear		Shear	
PERFORMANCE			-		_
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		0.4- 00	1	0.4 00	1
Supply Current Range [4] Compliance Voltage Range		2 to 20 +18 to +30	mA VDC	2 to 20 +18 to +30	mA VDC
Output Impedance, Typ.		100	νυς	100	νυς
Output Impedance, Typ.  Output Bias Voltage		+7 to +13	VDC	+7 to +13	VDC
Discharge Time Constant		0.15 to 0.5	Sec	0.15 to 0.5	Sec
Filter (2 Pole, Butterworth)		6	kHz	6	kHz
Electical Isolation, Min.		10	GΩ	10	GΩ
			1		4
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
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Model	Sensitivity (mV/g)	Range (Gpeak)	Noise Resolution (Grms)	Temp Range (°F)	Time Constant (sec)

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

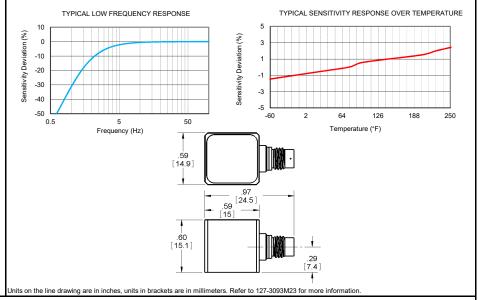
## Supplied Accessories:

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

## Notes:

- [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.

[5] In the interest of constant product improvement, we reserve the rights to change the specifications without notice. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.





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