

Model Number 3099A6-XX	PERFORMANCE SPECIFICATION	DOC NO PS3099A6-XX
	SHOCK ACCELEROMETER, IEPE	REV B, ECN 16173, 05/03/21



- MECHANICALLY & ELECTRICALLY FILTERED
- INTEGRAL CABLE W/ 10-32 CONNECTOR
- CASE ISOLATED

		ENGLISH		SI	
PHYSICAL					
Weight, Max. (Less Cable)		0.28	oz	8	grams
Mounting Provision		1/4-28 UNF-2A		1/4-28 UNF-2A	
Integral Cable		Twisted Pair, PTFE		Twisted Pair, PTFE	
Connector		Coaxial 10-32 Plug		Coaxial 10-32 Plug	
Material	Housing	Titanium		Titanium	
Element Style	Material	Quartz		Quartz	
	Туре	Planar Shear		Planar Shear	
PERFORMANCE					
Sensitivity, ±20% [2]		0.1	mV/g	0.010	mV/m/s <sup>2</sup>
Measurement Range		±50,000	g pk	±490,500	m/s² pk
Frequency Range, ±3dB		10 to 10,000	Hz	10 to 10,000	Hz
Resonant Frequency	Mechanical Filter	> 10.5	kHz	> 10.5	kHz
	Element	> 120	kHz	> 120	kHz
Linearity [3]		± 1	%	± 1	%
Broadband Resolution		0.70	g RMS	6.87	m/s <sup>2</sup> RMS
Maximum Transverse Sensiti	ivity	5	%	5	%
Strain Sensitivity	[	0.0005	g/με	0.0049	m/s²/με
ELECTRICAL					
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	100	Ω
Output Bias Voltage		7.0 to 12.0	VDC	7.0 to 9.0	VDC
Discharge Time Constant		1.0 to 2.0	sec	1.0 to 2.0	sec
Warm up time (within 10% of	Bias)	< 8	sec	< 8	sec
Electrical Filter		Two Pole		Two Pole	
•	Cutoff Frequency	7	kHz	7	kHz
Ground Isolation	[	>10	ΜΩ	>10	ΜΩ
ENVIRONMENTAL	_		_		_
Maximum Shock		±100,000	g pk	±981,000	m/s <sup>2</sup> pk
Temperature Range, Sensor		-10 to +250	°F	-12 to +121	°C
Temperature Range, Integral	Cable	-76 to +392	°F	-60 to +200	°C
Coefficient of Thermal Sens.		0.03	%F	0.05	%C
01					<b>∃</b> [

Hermetic

nis	family	also	includes:	

Model	Sensitivity (mV/g)	Measurement Range (g pk)	Maximum Shock (g pk)	Temperature (°F)
3099A5-XX	0.05	±60,000	±120,000	-10 to +250
3099A7-XX	0.2	±25,000	±50,000	-10 to +250

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

## Supplied Accessories:

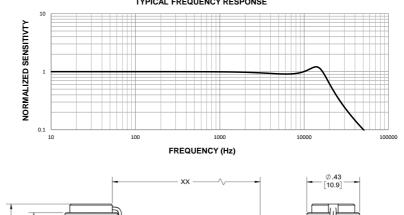
- 1) Accredited calibration certificate (ISO 17025)
- 2) Model 6109 Cable Joiner, 10-32 Jack / 10-32 Jack

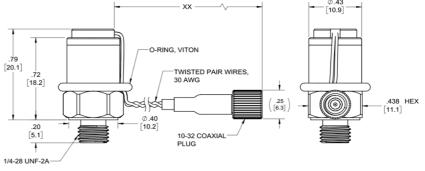
## Notes:

- [1] All specifications are at room temperature unless otherwise specified.
- [2] Measured at 100Hz, 10 g RMS per ISA RP 37.2
- [3] Measured using zero-based straight line method, % of F.S. or any lesser range.
- [4] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC amplifier [5] In the interest of constant product improvement, we reserve the right to change 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 over time. All operating parameters,

including typical parameters, must be validated for each customer application by the customer's technical experts.

## TYPICAL FREQUENCY RESPONSE





Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3099A5-XX for more information.



Seal

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