
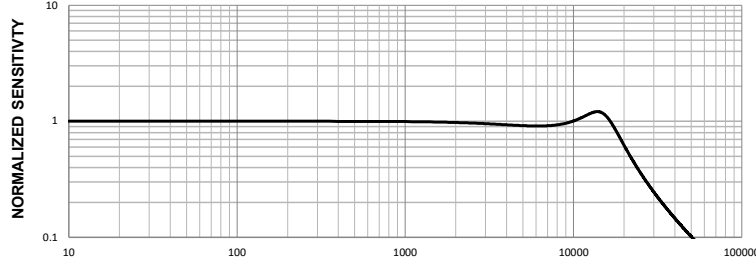
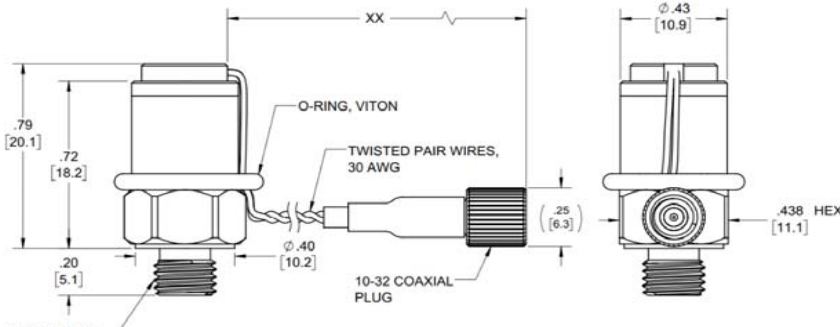



Model Number 3099A7-XX		PERFORMANCE SPECIFICATION				DOC NO PS3099A7-XX	
		SHOCK ACCELEROMETER, IEPE				REV A, ECN 15957, 01/07/21	
		• MECHANICALLY & ELECTRICALLY FILTERED • INTEGRAL CABLE W/ 10-32 CONNECTOR • CASE ISOLATED					
		ENGLISH		SI			
		0.28	oz	8	grams		
		1/4-28 UNF-2A		1/4-28 UNF-2A			
Integral Cable		Twisted Pair, PTFE		Twisted Pair, PTFE			
Connector		Coaxial 10-32 Plug		Coaxial 10-32 Plug			
Material	Housing	Titanium Alloy		Titanium Alloy			
Element Style	Material	Quartz		Quartz			
	Type	Planar Shear		Planar Shear			
PERFORMANCE							
Sensitivity, ±20%[2]		0.2	mV/g	0.020	mV/m/s ²		
Measurement Range		±25,000	g pk	±245,166	m/s ² pk		
Frequency Range, ±3dB		10 to 10,000	Hz	10 to 10,000	Hz		
Resonant Frequency	Mechanical Filter Element	> 10.5	kHz	> 10.5	kHz		
		> 120	kHz	> 120	kHz		
Linearity [3]		± 1	%	± 1	%		
Broadband Resolution		0.50	g RMS	4.91	m/s ² RMS		
Maximum Transverse Sensitivity		5	%	5	%		
Strain Sensitivity		0.0005	g/με	0.0049	m/s ² /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 12.0	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	Cutoff Frequency	Two Pole		Two Pole			
		7	kHz	7	kHz		
Ground Isolation		>10	MΩ	>10	MΩ		
ENVIRONMENTAL							
Maximum Shock		±50,000	g pk	±490,500	m/s ² 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		
Seal		Hermetic		Hermetic			
		This 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			
3099A6-XX	0.1	±50,000	±100,000	-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)							
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.							



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