

Model Number DOC NO PERFORMANCE SPECIFICATIONS 3097A2 PS3097A2 IEPE ACCELEROMETER REV D, ECN 7642, 06/29/11



- MINIATURE SIZE
- HERMETICALLY SEALED
- EXCELLENT LINEARITY

		ENGLISH		SI	
PHYSICAL					
Weight		0.15	OZ	4.3	grams
Connector [1]	Туре	10-32		10-32	
Mounting Provision	Tapped Hole	5-40 UNC-2B		5-40 UNC-2B	
Material, Housing/Connector		TITANIUM		TITANIUM	
Sensing Element Element Style		CERAMIC PLANAR SHEAR		CERAMIC PLANAR SHEAR	
Element Style		PLANAR SHEAR		PLANAR SHEAR]
PERFORMANCE					
Sensitivity, ±5% [2]		100	mV/G	10	mV/m/s ²
Range for ± 5 Volts Output		50	G peak	491	m/s ²
Frequency Response, ±5%		0.3 to 5,000	Hz	0.3 to 5,000	Hz
±15%		0.15 to 10,000	Hz	0.15 to 10,000	Hz
Resonant Frequency		> 35	kHz	> 35	kHz
Broad Band Resolution		0.0004	G rms	0.004	m/s² rms
Spectral Noise	1Hz	0.00006	Grms/√(Hz)	0.001	m/s2 rms/v(Hz)
	10Hz	0.00001	Grms/v(Hz)	0.0001	m/s ² rms/v(Hz)
	100Hz	0.00004	Grms/v(Hz)	0.00039	m/s ² rms/v(Hz)
	1000Hz	0.000002	Grms/v(Hz)	0.00002	m/s ² rms/v(Hz)
	10000HZ	0.000008	Grms/v(Hz)	0.00008	m/s ² rms/v(Hz)
Linearity [2]		±1	% F.S.	±1	% F.S.
Maximum Transverse sensitivity		5	%	5	%
Strain Sensitivity @ 250με		0.002	G/με	0.02	m/s²/με
Phase Response ±5°		5 to 3000	Hz	5 to 3000	Hz
ENVIRONMENTAL					
Maximum Vibration		400	G peak	3924	m/s² peak
Maximum Shock		5000	G peak G peak	49050	m/s² peak
Temperature Range		-60 to 180	°F	-51 to 82	°C
Seal		HERMETIC	•	HERMETIC	Ĭ
		TIETWIETTO		TIETUMETIO	l
ELECTRICAL		_			
Supply Current Range [3]		2 to 20	mA	2 to 20	mA
Compliance Voltage Range		+18 to +30	Volts	+18 to +30	Volts
Output Impedence, Typ Bias Voltage		100	Ω	100	Ω
Discharge Time Constant		+11 to +13 1.5 to 2.5	VDC Sec	+11 to +13 1.5 to 2.5	VDC Sec
Discharge Time Constant		1.5 (0 2.5	360	1.5 to 2.5	Sec

This family also includes:

Model	Sensitivity (mV/g)	Frequency Response ±5%, (Hz)	Time Constant (Sec)	Operating Temp (°F)		
3097A1	10	0.3 to 5,000	1.5 to 2.5	-60 to 200		
3097A3	500	0.3 to 5,000	1.5 to 2.5	-60 to 150		
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Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Model 6580 mounting stud (5-40 to 5-40), qty 1

Notes:

- [1] Coaxial, 10-32 connector. Mates with Dytran cable Model 6010AXX or 6011AXX
- [2] Measured at 100Hz, 1 Grms per ISA RP 37.2.
 [3] Measure using zero-based straight line method, % of F.S. or any lesser range.
- [5] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.
- [6] In the interest of constant product improvement, we reserve the right to change specifications without notice.



