

Model Number DOC NO PERFORMANCE SPECIFICATIONS 3312A2T PS3312A2T IEPE ACCELEROMETER REV A, ECN 8785, 10/12/12



- >120dB DYNAMIC RANGE
- HERMETICALLY SEALED
- IDEAL LOW FREQUENCY RESPONSE
- TEDS CAPABILITY

		ENGLISH		SI	
PHYSICAL		•			
Weight, Max.		0.88	oz	25	grams
Connector		10-32 Coaxial	Ī	10-32 Coaxial	
Mounting Provision	Tapped Hole	10-32 UNF-2B		10-32 UNF-2B	
Material, Housing/Connector		Titanium	ļ	Titanium	
Sensing Element		Piezoelectric		Piezoelectric	
Element Style		Shear	ļ	Shear	
PERFORMANCE					
Sensitivity, ±5% [1]		100	mV/g	10	mV/m/s ²
Range for ± 5 Volts Output		50	g	491	m/s ²
Frequency Response, ±5%		0.1 to 4000	Hz	0.1 to 4000	Hz
Frequency Response, ±10%		0.06 to 10000	Hz	0.06 to 10000	Hz
Phase Response, Max	0.3 to 0.5 Hz	5.0	deg	5.0	deg
	0.5 to 1.0 Hz	3.0	deg	3.0	deg
	1 to 1.5 Hz	1.5	deg	1.5	deg
	1.5 Hz to 3000 Hz	1.0	deg	1.0	deg
Resonant Frequency		> 32	kHz	> 32	kHz
Broad Band Resolution		0.0006	G rms	0.0059	m/s² rms
Spectral Noise	1Hz	0.000200	Grms/√(Hz)	0.001962	m/s ² rms/v(Hz)
	10Hz	0.000050	Grms/√(Hz)	0.0004905	m/s ² rms/v(Hz)
	100Hz	0.000008	Grms/√(Hz)	0.00007848	m/s2 rms/v(Hz)
	1000Hz	0.000006	Grms/√(Hz)	0.00005886	m/s² rms/√(Hz)
	4000Hz	0.000004	Grms/√(Hz)	0.00003924	m/s2 rms/v(Hz)
Linearity [2]		1	% F.S.	1	% F.S.
Maximum Transverse sensitivity		≤5	%	≤5	%
Strain Sensitivity @ 250με		0.003	g/με	0.03	m/s²/με
ENVIRONMENTAL					
Maximum Vibration		± 500	Gpeak	± 4905	m/s ² peak
Maximum Shock		± 10000	Gpeak	± 98100	m/s² peak
Magnetic Sensitivity		0.1	μG/gauss	0.1	μG/gauss
Thermal Transient Sensitivity		0.2	G/°F	0.4	G/°F
Temperature Range		-65 to +250	°F	-54 to +121	°C
Seal		Hermetic	İ	Hermetic	
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		≤100	Ω	≤100	Ω
Bias Voltage		7 to 9	VDC	7 to 9	VDC
Discharge Time Constant		> 6.2	Sec	> 6.2	Sec
1					

This family also includes:								
Model	Sensitivity (mV/g)	Frequency Response (Hz)	Time Constant (Sec)	Operating Temp (°F)				

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

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Model 6200 mounting stud, qty 1.

Notes:

- [1] Measured at 100Hz, 1 Grms per ISA RP 37.2.
- [2] Measured using zero-based straight line method, % of F.S. or any lesser range.
- [3] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.
- [4] Due to the extremely long dischange time constant the sensor might exhibit spiking during fast thermal transients [5] In the interest of constant product improvement, we reserve the right to change specifications without notice.



