

 Model Number
 DOC NO

 3023A4
 PERFORMANCE SPECIFICATIONS
 PS3023A4

 TRI AXIAL IEPE ACCELEROMETER
 REV C, ECN 12512, 02/26/16



- STUD MOUNT
- EXCELLENT LINEARITY
- ULTRA LOW WEIGHT

		ENGLI	ENGLISH		SI	
PHYSICAL			-	•		
Weight, Max.		0.14	OZ	4.0	grams	
Connector		4- PIN		4- PIN]	
Mounting Provision		5-40 Tapped Hole		5-40 Tapped Hole		
Material, Housing/Connector	r	Titanium Alloy		Titanium Alloy	1	
Sensing Element		Quartz		Quartz	1	
Element Style		Shear]	Shear]	
PERFORMANCE						
Sensitivity, -10 / +15% [1]		5	mV/g	0.5	mV/m/s ²	
Range for ± 5 Volts Output		±1000	g	±9806.65	m/s ²	
Frequency Response	±5%	1.5 to 4000	Hz	1.5 to 4000	Hz	
	-5 / +15%	1.5 to 10000	Hz	1.5 to 10000	Hz	
Resonant Frequency		> 40	kHz	> 40	kHz	
Broad Band Resolution		0.014	Grms	0.137	m/s² rms	
Spectral Noise	1.25Hz	0.006	μGrms/v(Hz)	0.059	μm/s ² rms/v(Hz)	
	10Hz	0.002	μGrms/v(Hz)	0.0196	μm/s ² rms/v(Hz)	
	100Hz	0.0004	μGrms/v(Hz)	0.0039	μm/s ² rms/v(Hz)	
	1000Hz	0.0001	μGrms/v(Hz)	0.00098	µm/s ² rms/v(Hz)	
	10000Hz	0.00008	μGrms/v(Hz)	0.00078	μm/s ² rms/v(Hz)	
Linearity [2]		1	% F.S.	1	% F.S.	
Maximum Transverse Sensi	tivity	5	%	5	%	
Strain Sensitivity @ 250με		0.006	g/με	0.06	m/s²/με	
ENVIRONMENTAL						
Maximum Vibration		±1000	Gpeak	±9807	m/s² peak	
Maximum Shock		5000	Gpeak	49033	m/s² peak	
Temperature Range		-60 to +250	°F	-51 to +121	°C	
Seal		Hermetic		Hermetic	1	
Magnetic Sensitivity at 100 (Gauss	0.00005	g/Gauss	4.905	m/s ² /T	
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 Impedance,Typ		100	Ω	100	Ω	
Bias Voltage		7 to 11	VDC	7 to 11	VDC	
Discharge Time Constant		0.3 to 1.5	Sec	0.3 to 1.5	Sec	
Electrical Isolation		Case Grounded	GΩ,min	Case Grounded	GΩ,min	
1						

This family also includes:						
Model	Sensitivity (mV/g)	Frequency Response (Hz)	Mounting	Operating Temp (°F)		
3023A	10 (-10 to +15%)	1.5 to 10000 (-5 to +15%)	Adhesive	-60 to +250		
3023A1	10 (-10 to +15%)	1.5 to 10000 (-5 to +15%)	5-40 Tapped Hole	-60 to +250		
3023A2	10 (-10 to +15%)	1.5 to 10000 (-5 to +15%)	10-32 Tapped Hole	-60 to +250		
3023A3	5 (-10 to +15%)	1.5 to 10000 (-5 to +15%)	Adhesive	-60 to +250		
3023A5	1 (±5%)	1.5 to 10000 (-5 to +15%)	Adhesive	-60 to +250		
3023A6	5 (-10 to +15%)	1.5 to 10000 (-5 to +15%)	10-32 Tapped Hole	-60 to +250		
3023A9	1 (±10%)	1.5 to 10000 (-5 to +15%)	10-32 Tapped Hole	-60 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 6580 Mounting Stud, Quantity 1

Notes:

- [1] Measured at 100Hz, 1 Grms per ISA RP 37.2.
- [2] Measure 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] In the interest of constant product improvement, we reserve the right to change specifications without notice.





