

## **MODEL NUMBER** DOC NO. PERFORMANCE SPECIFICATION PS3023M27 3023M27 ACCELEROMETER, TRIAXIAL, IEPE REV G, ECN 13417, 04/20/17



- HIGH TEMPERATURE
- HERMETICALLY SEALED
- MINIATURE SIZE

	Г	ENGLISH		SI	
PHYSICAL	<u> </u>				_
Weight		0.11	0Z	3.0	grams
Mounting		Adhesive	] [	Adhesive	
Connector [1]	L	4-pin	] [	4-pin	
Material, Housing / Connector	L	Titanium	] [	Titanium	
PERFORMANCE					
Sensitivity, -10 /+15% [2]		10	mV/g	1	mV/m/s <sup>2</sup>
Range F.S. (each axis)		±500	g	± 4905	m/s <sup>2</sup>
Frequency Response, -5 /+15%		1.2 to 10000	Hz	1.2 to 10000	Hz
Element Natural Frequency		30	kHz	30	kHz
Equivalent Electrical Noise		0.007	Grms	0.069	m/s <sup>2</sup> rms
Spectral Noise	1.25Hz	0.003	Grms/v(Hz)	0.029	m/s <sup>2</sup> rms/v(Hz
	10Hz	0.001	Grms/v(Hz)	0.010	m/s <sup>2</sup> rms/v(Hz
	100Hz	0.0002	Grms/v(Hz)	0.0020	m/s <sup>2</sup> rms/v(Hz
	1000Hz	0.00005	Grms/v(Hz)	0.00049	m/s <sup>2</sup> rms/v(Hz
	10000Hz	0.00004	Grms/v(Hz)	0.00039	m/s <sup>2</sup> rms/v(Hz
Linearity [3]		1	%F.S.	1	%F.S.
Transverse Sensitivity Max		6	%	6	%
Signal Polarity		[5]	] [	[5]	
ENVIRONMENTAL					
Maximum Shock	Г	5000	g pk	49050	m/s <sup>2</sup>
Maximum Vibration	-	±600	g pk	±5880	m/s <sup>2</sup>
Temperature Range	-	-60 to +250	°F	-51 to +121	°C
Environmental Seal [6]	-	Hermetic	1 1	Hermetic	
Coefficient of Thermal Sensitivity		0.03	% / °F	0.06	% / °C
ELECTRICAL					
Supply Current Range [4]	Г	2 to 20	mA [	2 to 20	T mA
Compliance Voltage Range	-	+18 to +30	VDC	+18 to +30	VDC
Output Impedance, Typ.	-	100	Ω	100	Ω
Output Bias Voltage		+7 to +9	VDC	+7 to +9	VDC
Discharge Time Constant		0.2 to 1.0	sec	0.2 to 1.0	sec

This family also includes:									
Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (grms)	Oper. Temp (°F)	TC (sec.)				
3023A5	1	5000	0.08	250	0.2 to 1.0				

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.

- [1] Connector mates with Dytran cable assy. Model 6811AXX. (xx = length in feet)
- [2] Measured At 100 Hz, 1 Grms per ISA RP 37.2
- [3] Measured using zero-based best straight-line method, % of F.S. or any lesser range.
  [4] Power only with Dytran IEPE power unit or other Dytran-compatible constant current type power unit. If power is applied without current limiting protection, the internal amplifier will be destroyed.
- [5] Positive for motion in direction of arrows on housing.
- [6] Low outgassing, use with Dytran cable assembly model 6951AXX (XX=Length in feet)



