

 
 Model Number 3176B1
 PERFORMANCE SPECIFICATION
 DOC NO PS3176B1

 IEPE ACCELEROMETER
 REV B, ECN 15646, 03/24/20

m/s2 peak

m/s2 peak



- HIGH SENSITIVITY
- ELECTRICALLY ISOLATED
- HERMETICALLY SEALED

		ENGLISH		SI		
PHYSICAL						
Veight, Max.		1.6	oz	44	grams	
Connector	Type	MIL-C-5015		MIL-C-5015		
	Pins	2-PIN		2-PIN		
Mounting Provision		Tapped 1/4-28 Hole		Tapped 1/4-28 Hole		
Material (Case/Connector)		300 Series S.S.		300 Series S.S.		
Element Type		Piezoceramic, Planar Shear		Piezoceramic, Planar Shear		
PERFORMANCE						
Sensitivity, ±5% [1]		100	mV/g	10.2	mV/m/s <sup>2</sup>	
Range F.S for ± 5 Volts Output		±50	g	±490.5	m/s <sup>2</sup>	
requency Response, ±10%		0.3 to 10,000	Hz	0.3 to 10,000	Hz	
Mounted Resonant Frequency		> 27	kHz	> 27	kHz	
Equivalent Electrical Noise Floor		0.0005	Grms	0.005	m/s² rms	
Amplitude Non-Linearity, Max. [2]		±2	% F.S.	±2	% F.S.	
Maximum Transverse Sensitivity		5	%	5	%	
Strain Sensitivity @ 250/μσ		0.0001	g/με	0.001	m/s²/με	

Maximum Vibration		500
Maximum Shock		5000
Temperature Range		-60 to +250
Seal		Hermetic
ELECTRICAL		_
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Supply Current Range [3]	
Compliance Voltage Range	
Output Impedance, Typ.	
Output Bias Voltage	
Discharge Time Constant	

Output Signal Polarity

ENVIRONMENTAL

Electrical Isolation, Ground Pin to Case

2 to 20	mA
+20 to +30	Volts
200	Ω
+11 to +13	VDC
0.9 to 2.0	Sec
Positive for Acceleration Toward Top	
10	GΩ, min

G's, peak

G's, peak

2 to 20	mA
+20 to +30	Volts
200	Ω
+11 to +13	VDC
0.9 to 2.0	Sec
Positive for Acceleration Toward Top	
10	GΩ, min

4905

49050

-51 to +121

Hermetic

This family a	his family also includes:			
Model	Sensitivity	Range F.S ± 5 Volts	Max Vibration/Shock	Resonant Frequency

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

## Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mouting Stud Model 6176, 1/4-28 to 1/4-28

## 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 limting, 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.

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 overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.





