

**Model Number** DOC NO PERFORMANCE SPECIFICATION 3176B PS3176B IEPE ACCELEROMETER REV B, ECN 15646, 03/24/20

grams

mV/m/s<sup>2</sup>

m/s<sup>2</sup>

Hz

kHz

m/s2 rms

% F.S.

 $m/s^2/\mu\epsilon$ 



ENVIRONMENTAL Maximum Vibration Maximum Shock Temperature Range

Seal

ELECTRICAL

Supply Current Range [3]

Output Impedance, Typ.

Discharge Time Constant

Electrical Isolation, Ground Pin to Case

Output Bias Voltage

Output Signal Polarity

Compliance Voltage Range

- HIGH SENSITIVITY
- ELECTRICALLY ISOLATED
- HERMETICALLY SEALED

		ENGLISH		SI	
PHYSICAL					
Weight, Max.		1.6	oz	44	
Connector	Type	MIL-C-5015		MIL-C-5015	
	Pins	2-PIN		2-PIN	
Mounting Provision		Tapped 10-32 Hole		Tapped 10-32 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	
Range F.S for ± 5 Volts Output		±50	g	±490.5	
Frequency Response, ±10%		0.3 to 10,000	Hz	0.3 to 10,000	
Mounted Resonant Frequency		> 27	kHz	> 27	
Equivalent Electrical Noise Floor		0.0005	Grms	0.005	
Amplitude Non-Linearity, Max. [2]		±2	% F.S.	±2	
Maximum Transverse Sensitivity		5	%	5	
Strain Sensitivity @ 250/μσ		0.0001	g/με	0.001	

500	G's, peak
5000	G's, peak
-60 to +250	°F
Hermetic	

4905	m/s² pea
49050	m/s² pea
-51 to +121	°C
Hermetic	

-	
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

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

<u>his</u>	family	also	includes:	

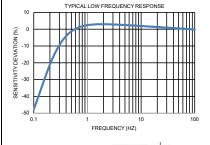
Model	Sensitivity	Range F.S ± 5 Volts	Max Vibration/Shock	Resonant Frequency

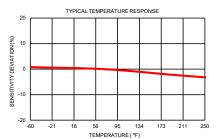
Refer to the performance specifications of the products in this family for detailed description

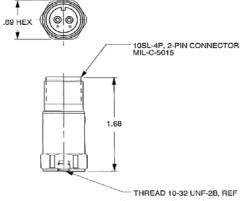
## Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mouting Stud Model 6200S, 10-32 to 10-32

- [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] 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.







Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3176B for more information

