

Model Number
3176B

PERFORMANCE SPECIFICATION

DOC NO
PS3176B

IEPE ACCELEROMETER

REV A, ECN 12601, 04/04/16



ELECTRICAL
Supply Current Range [3]
Compliance Voltage Range

Output Impedance, Typ.
Output Bias Voltage
Discharge Time Constant
Output Signal Polarity

Electrical Isolation, Ground Pin to Case

- HIGH SENSITIVITY
- ELECTRICALLY ISOLATED
- HERMETICALLY SEALED

		ENGLISH		SI	
PHYSICAL					
Weight, Max.		1.6	oz	44	grams
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	$mV/m/s^2$
			_		, 2

PERFORMANCE		
Sensitivity, ±5% [1]	100	mV/g
Range F.S for ± 5 Volts Output	±50	g
Frequency Response, ±10%	0.3 to 10,000	Hz
Mounted Resonant Frequency	> 27	kHz
Equivalent Electrical Noise Floor	0.00002	Grms
Amplitude Non-Linearity, Max. [2]	±2	% F.S.
Maximum Transverse Sensitivity	5	%
Strain Sensitivity @ 250/μσ	0.0001	g/με

ı	10.2	mV/m/s ²
	±490.5	m/s ²
	0.3 to 10,000	Hz
	> 27	kHz
3	0.0002	m/s ² rms
5.	±2	% F.S.
	5	%
	0.001	m/s²/με

ENVIRONMENTAL		
Maximum Vibration	500	G's, peak
Maximum Shock	5000	G's, peak
Temperature Range	-60 to +250	°F
Seal	Hermetic	I
		-

	_
4905	m/s² peak
49050	m/s² peak
-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	CO min

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 6200S, 10-32 to 10-32

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.





