

## Shock Accelerometer

### DETAILS

Model B00A00 B00A01 B00A07 B01A08 uniaxial shock acceleration sensor using a unique shear structure, smaller base strain and lateral sensitivity, high-quality piezoelectric ceramics with long-term stability can ensure years of accurate measurement. The housing material is high strength stainless steel with welded seals and industry standard M5 connectors.

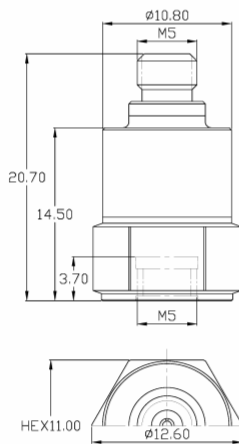
### FEATURES

- IEPE shock acceleration sensor
- Standard series with multiple range options
- Shear structure
- Broadband response

### TYPICAL APPLICATIONS

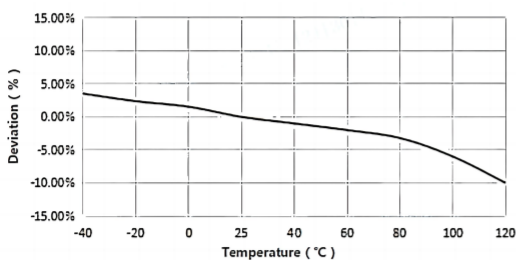
- Drop test
- Burst Impact test

**Fig\_1** Dimensions of B00A00 B00A01 B00A07 B01A08

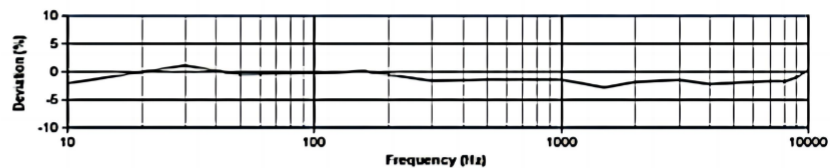


B00A00  
B00A01  
B00A07  
B01A08

**Fig\_2** Typical Temperature Response



**Fig\_3** Typical Frequency Response



## Specifications-B0XA0X

MODEL NUMBER	UNIT	B00A01	B00A00	B00A07	B01A08
<b>PERFORMANCE</b>					
Sensitivity <sup>1</sup>	mV/g	0.5	1	2	5
	mV/(m/s <sup>2</sup> )	0.05	0.1	0.2	0.5
Measurement Range	g	±10000	±5000	±2500	±1000
Broadband Resolution <sup>2</sup>	g rms	0.02	0.01	0.005	0.002
Non-Linearity <sup>3</sup>	%	3	1		
Frequency Range	± 5%(Hz)	-	-	-	3-11k
	±10%(Hz)	110-11k	5-11k	5-11k	2-13k
Resonance Frequency <sup>2</sup>	Hz	≥80k	≥80k	≥80k	≥70k
Discharge Time Constant <sup>2</sup>	s	≤0.5			
Transverse Sensitivity	%	≤5			
<b>ELECTRICAL</b>					
Excitation Voltage	VDC	20-30			
Constant Current Excitation	mA	2-20			
Output Impedance	Ω	≤100			
Output Bias Voltage	V	8-12			
Electrical Isolation	Ω	-			
Spectral Noise <sup>2</sup>	μg/√Hz	3000	1500	750	300
		800	400	200	80
		400	200	100	40
<b>ENVIRONMENTAL</b>					
Sinusoidal Vibration Limit <sup>4</sup>	g	-	6000	3500	3000
Shock Limit <sup>4</sup>	g	13000	10000	7000	8000
Temperature Range	°C	-50-120			
	°F	-58-248			
Temperature Response <sup>2</sup>	%/°C	-0.07			
<b>PHYSICAL</b>					
Sealing	-	Laser welding IP68			
Sensing Element	-	Piezoelectric ceramics			
Housing Material	-	Stainless steel			
Size	mm	HEX 11.00×20.70			
	in	HEX 0.433×0.815			
Electrical Connector	-	M5 Top (Opt. 10-32)			
Mounting Thread	-	M5 (Opt. 10-32)			
Weight <sup>2</sup>	g	5.4	5.4	7.5	7.5
	oz	0.190	0.190	0.265	0.265
TEDS Optional <sup>5</sup>	-	No			

## Additional Information

### Note:

- @ 160Hz, 24VDC, 4mA conditions
- Typical values
- JBT 6822-2018 7.12.1 Vibration Testing Method
- References the mechanical structure of the sensor not being damaged in a non powered state, rather than in a working state
- Some products may have changes in size after adding TEDS

### B0XA0X

Supplied Accessories:

- Product Verification Report
- Install Screws

### OPTIONAL VERSIONS

- A: 10-32 Output Connector
- E: 10-32 Mounting Threads

### COMPLIANCE WITH STANDARDS



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