

## Universal Testing Type Accelerometer

### DETAILS

The B00AGX series of single-axis shock acceleration sensors utilize a unique shear structure for smaller base strains and lateral sensitivity, and high quality piezoelectric ceramics with long term stability to ensure years of accurate measurements. The unique double shielded construction is insulated to ground and the one-piece screws are strong and reliable.

### FEATURES

- IEPE Universal Acceleration Sensor
- Standard series with multiple range options
- Shear structure
- Broadband response

### TYPICAL APPLICATIONS

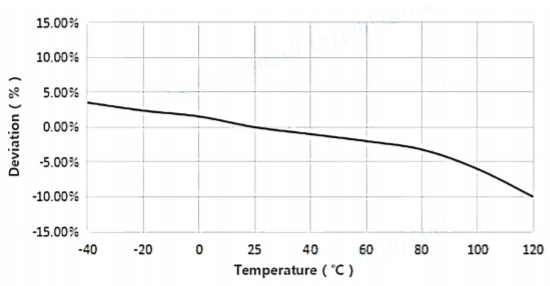
- Drop test
- Burst impact test

**Fig\_1** Dimensions of BXXAGX

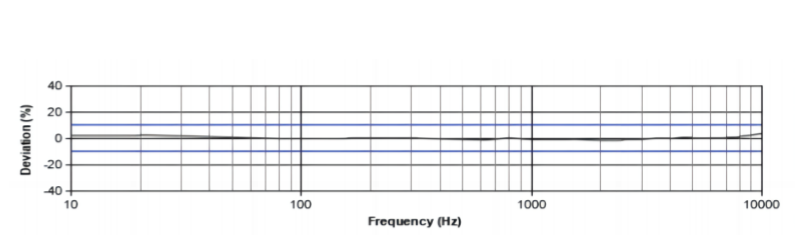


B00AGX

**Fig\_2** Typical Temperature Response



**Fig\_3** Typical Frequency Response



## Specifications-B00AGX

MODEL NUMBER	UNIT	B00AG5	B00AG3	B00AG4	B00AG1	B00AG2
<b>PERFORMANCE</b>						
Sensitivity <sup>1</sup>	mV/g	0.17	0.25	0.5	1	2
	mV/(m/s <sup>2</sup> )	0.017	0.025	0.05	0.1	0.2
Measurement Range	g	±30000	±20000	±10000	±5000	±2500
Broadband Resolution <sup>2</sup>	g rms	0.05	0.04	0.02	0.01	0.005
Non-Linearity <sup>3</sup>	%	per10000g 3%			1	
Frequency Range	± 5%	Hz	-	-	-	-
	±10%	Hz	10-11k	10-11k	10-11k	5-11k
Resonance Frequency <sup>2</sup>	Hz	≥70k	≥70k	≥70k	≥60k	≥60k
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	≥1×10 <sup>8</sup>				
Spectral Noise <sup>2</sup>	μg/√Hz	8820	6000	3000	1500	750
		2350	1600	800	400	200
		1180	800	400	200	100
<b>ENVIRONMENTAL</b>						
Sinusoidal Vibration Limit <sup>4</sup>	g	-	-	-	6000	4000
Shock Limit <sup>4</sup>	g	35000	24000	12000	10000	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	-	Titanium Alloy				
Size	mm	HEX 11×24.9				
	in	HEX 0.433×0.980				
Electrical Connector	-	M5 Top (Opt. 10-32)				
Mounting Thread	-	M5/M6×0.75 Jointed thread (Opt. 10-32)				
Weight <sup>2</sup>	g	7.7	7.7	7.7	7.7	7.7
	oz	0.272	0.272	0.272	0.272	0.272
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

### B00AGX

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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