

Accelerometers and Calibrators **SW Serial Accelerometers**

BSWA SW series accelerometers are vibration sensors designed for the automotive, railway and aerospace NVH application with small size and light weight. It is suitable for multi-channel NVH, modal analysis, and OTPA testing.

SW series accelerometers are traditional accelerometer based on piezoelectric ceramics technology, using imported ceramic sensing element, titanium shell and Microdot connector. Performance and appearance can be comparable with leading competitors' products.

BSWA has a strict quality control system and each accelerometer has to pass environmental experiments with military standard before it leaves the factory, which leads to meet the needs of defense field or routine testing. Accelerometer cables are the the most easily damaged parts and BSWA has enhanced the connectors and cables to improve the life of products.






Features

- ICCP Power Supply Single Axis and Tri-Axis Accelerometers
- Small Size and Light Weight
- Imported Ceramic Sensing Element
- Optional Various Sensitivity

Application

- Vibration Testing
- Automotive, Railway, and Aerospace NVH
- Modal Analysis
- OTPA Testing

SPECIFICATIONS

SW Series Accelerometers						
Photos						
Model	SW13232	SW14232	SW11533	SW13533	SW14533	
Direction of Measurement	Single Axis		triaxial			
Sensitivity (±5%)	50mV/g	100mV/g	10mV/g	50mV/g	100mV/g	
Measurement Range	±100g peak	±50g peak	±500g peak	±100g peak	±50g peak	
Frequency Response	±5%	1.0Hz ~ 12kHz	1.0Hz ~ 10kHz	1.0 Hz ~ 10 kHz x Axis: 1.0 Hz ~ 7 kHz	1.0 Hz ~ 8 kHz x Axis: 1.0 Hz ~ 6 kHz	1.0 Hz ~ 8 kHz x Axis: 1.0 Hz ~ 5 kHz
	±10%	0.5Hz ~ 14kHz	0.5Hz ~ 12kHz	0.5 Hz ~ 12 kHz x Axis 0.5 Hz ~ 8 kHz	0.5 Hz ~ 10 kHz x Axis 0.5 Hz ~ 8 kHz	0.5 Hz ~ 9 kHz x Axis 0.5 Hz ~ 6 kHz
Resonant Frequency	40kHz	38kHz	70 kHz	45 kHz	38 kHz	
Broadband Resolution	0.0002g rms	0.0001g rms	0.001g rms	0.0002g rms	0.0001g rms	
Non-Linearity	1%					
Transverse Sensitivity	≤5%					
Maximum Shock Level	±800g peak	±400g peak	±2000g peak	±800g peak	±400g peak	
Overload Limit (Shock)	±2000g peak	±1000g peak	±5000g peak	±2000g peak	±1000g peak	
Operating Temperature	-50°C ~ 120°C					
Base Strain Sensitivity	0.0008g/με					
Excitation Voltage	18VDC ~ 30VDC		18VDC ~ 30VDC			
Constant Current Excitation	2mA ~ 20mA		2mA ~ 20mA			
Output Impedance	≤100Ω		≤100Ω			
Output Bias Voltage	9VDC ~ 11VDC		9VDC ~ 11VDC			
Spectral Noise	10Hz	24μg/√Hz	12μg/√Hz	120μg/√Hz	24μg/√Hz	12μg/√Hz
	100Hz	8μg/√Hz	4μg/√Hz	40μg/√Hz	8μg/√Hz	4μg/√Hz
	1kHz	6μg/√Hz	3μg/√Hz	30μg/√Hz	6μg/√Hz	3μg/√Hz