



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



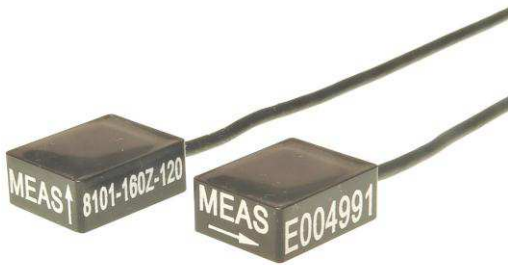
Contact us

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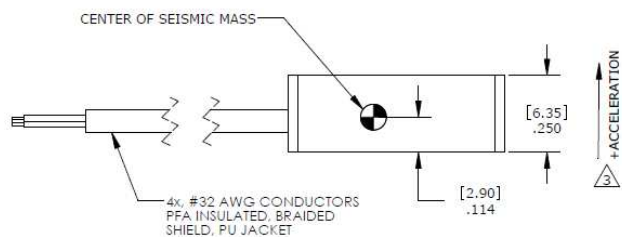
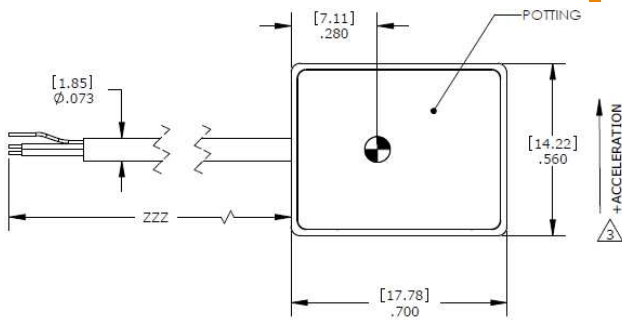
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
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

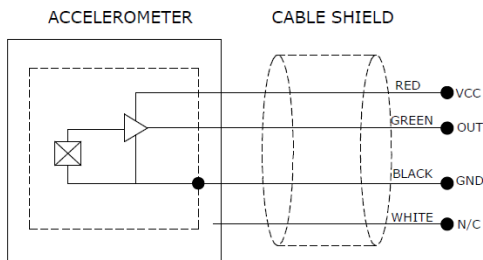




DIMENSIONS



 Direction of measurement must be specified at time of order. See Ordering Info on page 3.



MODEL 8101 ACCELEROMETER

SPECIFICATIONS

- Piezoelectric Linear Accelerometer
- $\pm 40g$ & $\pm 160g$ Dynamic Ranges
- Wide Bandwidth to 6000Hz
- Great Value, Low Cost

The **Model 8101** is a low cost, plug & play accelerometer designed for general purpose vibration measurements. The accelerometer is available in $\pm 40g$ or $\pm 160g$ range and provides a flat frequency response up to >6kHz. Featuring stable piezo-ceramic crystals in shear mode, the accelerometer incorporates full power and signal conditioning and is offered in two measurement direction options (X or Z axis).

FEATURES

- Two Measurement Directions
- 7 to 36Vdc Excitation Voltage
- Potted Construction
- Piezo-Ceramic Shear Design
- -40° to $+85^\circ\text{C}$ Operating Range
- Integral Cable for Plug & Play

APPLICATIONS

- Asset Monitoring
- Data Loggers
- Impact Monitoring
- Machine Health Monitoring
- System Wake-Up Switch
- Product R&D

PERFORMANCE SPECIFICATIONS

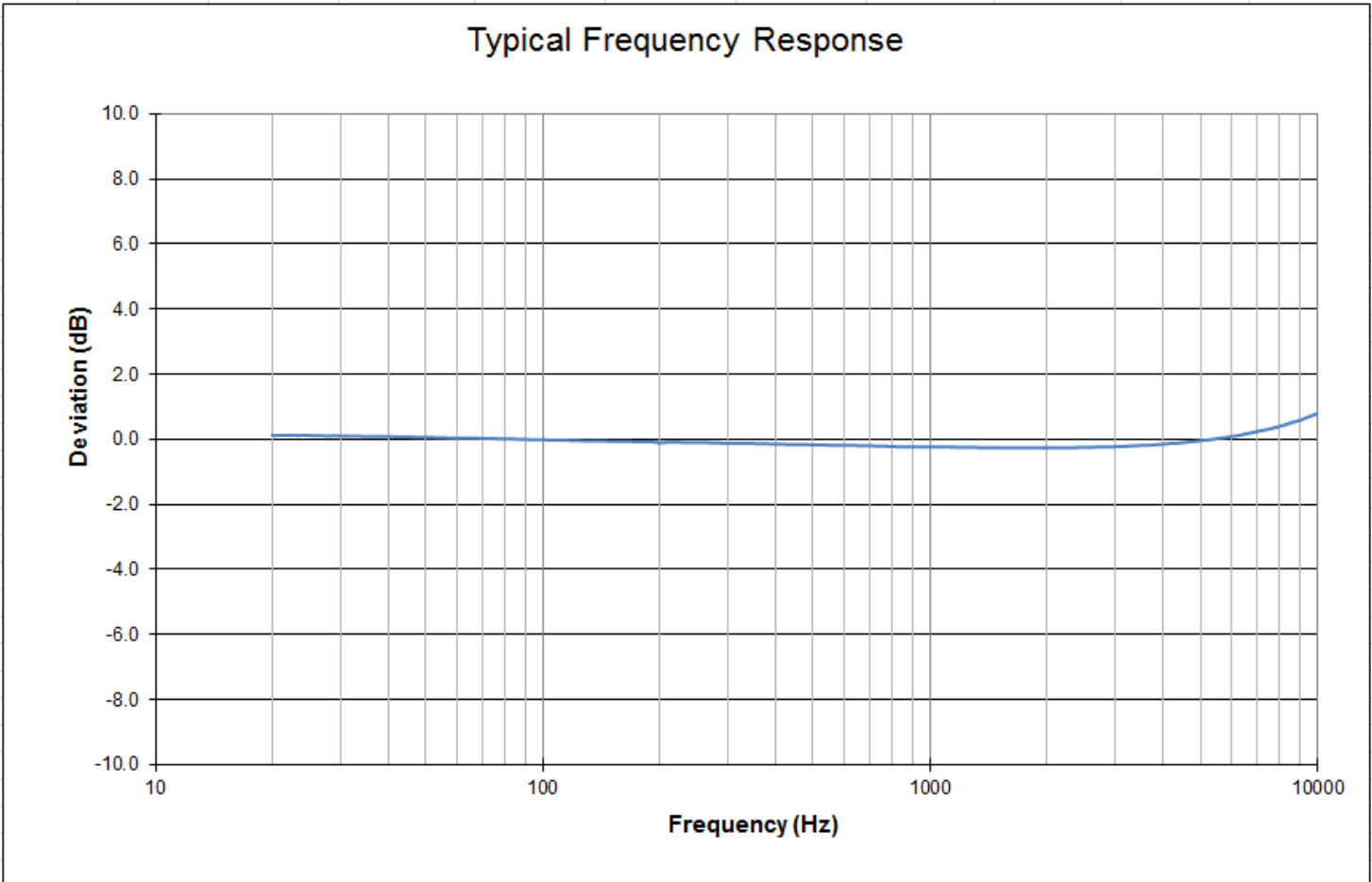
All values are typical at +24°C, 80Hz and 7Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

Parameters			Notes
DYNAMIC			
Range (g)	±40	±160	
Sensitivity (mV/g)	50.0	12.5	±30%
Frequency Response (Hz)	2-6000	2-6000	±1dB
Resonant Frequency (Hz)	>30000	>30000	
Non-Linearity (%FSO)	±2	±2	
Transverse Sensitivity (%)	<8	<8	
Shock Limit (g)	2000	2000	
Residual Noise (g RMS)	0.008	0.008	2Hz to 10kHz
Spectral Noise, 10Hz (µg√Hz)	160	160	
Spectral Noise, 100Hz (µg√Hz)	40	40	
Spectral Noise, 1kHz (µg√Hz)	16	16	
ELECTRICAL			
Bias Voltage (Vdc)	2.5		
Full Scale Output Voltage (V)	±2		
Total Supply Current (µA)	800		
Excitation Voltage (Vdc)	7 to 36		
Output Impedance (Ω)	<100		
Insulation Resistance (MΩ)	>100		@100Vdc
Shielding	100%		
Ground Isolation	Isolated from Mounting Surface		
Warm-up Time (msec)	30		
ENVIRONMENTAL			
Temperature Response (%)	-20/+20 from -40°C to +85°C		
Operating Temperature (°C)	-40 to +85		
Storage Temperature (°C)	-40 to +85		
Humidity (Active Element & Electronics)	Hermetically Sealed		
Humidity (Case)	Epoxy Sealed, IP65		
PHYSICAL			
Case Material	Anodized Aluminum		
Cable	4x #32 AWG Conductors PFA Insulated, Braided Shield, PU Jacket		
Weight (grams)	3.6		Cable not included
Mounting	Epoxy or Double-sided tape		

Calibration supplied: CS-SENS-0100 NIST Traceable Amplitude Calibration at 80Hz

Optional accessories: CS-FREQ-0100 NIST Traceable Amplitude Calibration from 20Hz to ±1dB Frequency Response Limit

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ORDERING INFORMATION

PART NUMBERING Model Number+Measurement Direction+Range+Cable Length

8101-GGGGX-ZZZ

 | | |_____ Cable (120 is 120inches)
 | |_____ Measurement Direction (X is X-axis, Z is Z-axis)
 |_____ Range (0040 is 40g)

Example: 8101-0040X-120
 Model 8101, X-axis Measurement, 40g, 120inches (10ft) Cable

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