





MODEL 810M1 ACCELEROMETER

SPECIFICATIONS

- Piezoelectric Linear Accelerometer
- ±25g & ±100g Dynamic Ranges
- Wide Bandwidth to 6000Hz
- Circuit Board Mountable

The Model 810M1 is a low cost, board mountable accelerometer designed for general purpose vibration measurements. The accelerometer is available in $\pm 25g$ or $\pm 100g$ range and provides a flat frequency response up to >6kHz. Featuring stable piezo-ceramic crystals in shear mode, the accelerometer incorporates an amplified $\pm 1.25V$ output and is offered in two measurement direction options (X or Z axis).

FEATURES

- Two Measurement Directions
- 3.3 to 5.5Vdc Excitation Voltage
- Hermetically Sealed
- Piezo-Ceramic Shear Design
- -40° to +125°C Operating Range

APPLICATIONS

- Asset Monitoring
- Data Loggers
- Impact Monitoring
- Machine Health Monitoring
- System Wake-Up Switch

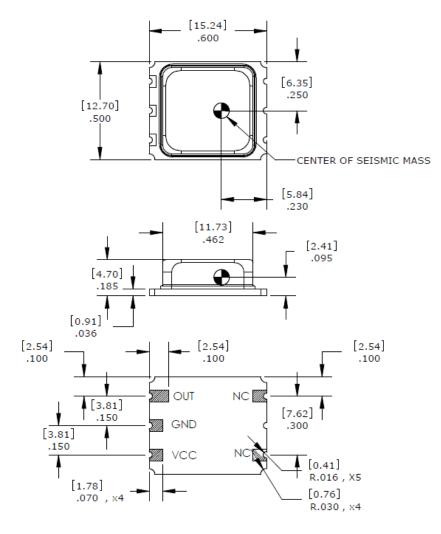
PERFORMANCE SPECIFICATIONS

All values are typical at +24°C, 80Hz and 3.3Vdc excitation unless otherwise stated. TE Connectivity reserves the right to update and change these specifications without notice.

Parameters DYNAMIC Range (g) Sensitivity (mV/g) Frequency Response (Hz) Resonant Frequency (Hz) Name Lingerith (PCED)	±25 50.0 2-6000 >30000	±100 12.5 2-6000 >30000	Notes ±30% ±1dB	
Non-Linearity (%FSO) Transverse Sensitivity (%) Shock Limit (g) Residual Noise (g RMS) Spectral Noise, 10Hz (µg√Hz) Spectral Noise, 10Hz (µg√Hz) Spectral Noise, 1kHz (µg√Hz)	±2 <8 2000 0.0026 160 40 16	±2 <8 2000 0.0032 160 40 16	2Hz to 10kHz	
ELECTRICAL Bias Voltage (Vdc) Full Scale Output Voltage (V) Total Supply Current (μ A) Excitation Voltage (Vdc) Output Impedance (Ω) Insulation Resistance (M Ω) Shielding Warm-up Time (msec)	Excitation Voltage / 2 ±1.25 22 3.3 to 5.5 <100 >100 100% 30		@100Vdc	
ENVIRONMENTAL Temperature Response (%) Operating Temperature (°C) Storage Temperature (°C) Humidity	-20/+30 from -40°C to +125°C -40 to +125 -40 to +125 Hermetically Sealed			
PHYSICAL Sensing Element Case Material Weight (grams) Mounting	Ceramic (shear mode) Ceramic Base, Nickel Silver Cover 3.0 Solder			
Calibration supplied: CS-SENS-0100 NIST Traceable Amplitude Calibration at 80Hz				

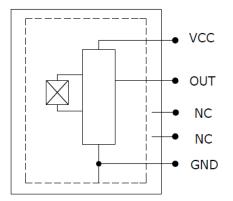
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DIMENSIONS



SCHEMATIC

ACCELEROMETER



ORDERING INFORMATION

810M1	GGGG	Х
Range 0025=25g 0100=100g		
Measurement Direction (see figures X=X-axis Z=Z-axis	below)	

Examples; 810M1-0025X Model 810M1, 25g range, X-axis measurement



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