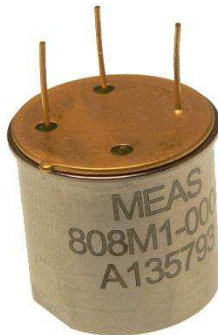
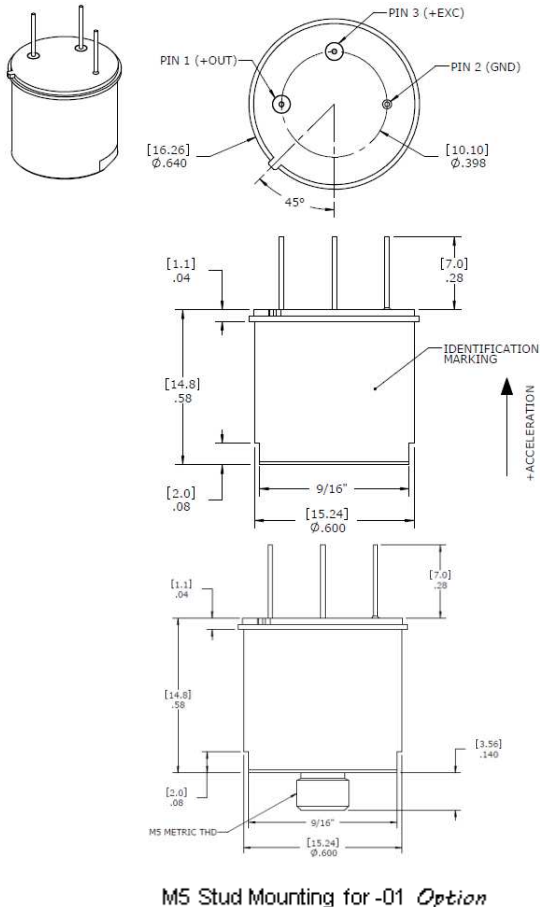


MODEL 808M1 ACCELEROMETER



DIMENSIONS



SPECIFICATIONS

- ◆ TO-8 Series Accelerometer
- ◆ 3-Wire Voltage Output
- ◆ Low-Cost, Embedded Applications
- ◆ <0.80mA Power Consumption

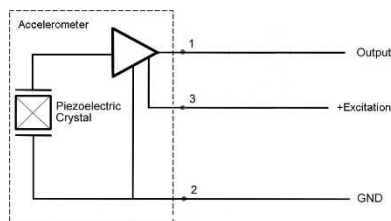
The **Model 808M1** is a miniature adhesive mount voltage output accelerometer built on a 3-pin TO-8 header. It is available in $\pm 4g$ and $\pm 20g$ dynamic ranges and offers a flat frequency response to 5kHz. The accelerometer features a hermetic construction in a TO-8 header configuration. The model 808M1 incorporates a stable piezo-ceramic crystal with low power electronics in a 100% shielded housing suitable for many embedded OEM applications. The accelerometer is offered in two configurations; one for adhesive mounting and one for stud mounting.

FEATURES

- ◆ $\pm 4g$ and $\pm 20g$ Range
- ◆ Wide bandwidth up to 5kHz
- ◆ TO-8 Configuration
- ◆ Hermetically Sealed
- ◆ -40°C to $+100^{\circ}\text{C}$ Operating Range
- ◆ Case Grounded Design
- ◆ 3.0-5.5 Excitation Voltage

APPLICATIONS

- ◆ Machine Monitoring
- ◆ Low-Cost OEM Installation
- ◆ Permanent Structural Study
- ◆ Embedded Sensing Solution
- ◆ Data Loggers



MODEL 808M1 ACCELEROMETER

PERFORMANCE SPECIFICATIONS

All values are typical at +24°C, 80Hz and 5Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice. Standard product parameters are described in PSC-1001 for Embedded AC Accelerometers.

Parameters

DYNAMIC

			Notes
Range (g)	±4	±20	
Sensitivity (mV/g)	500	100	±10%
Frequency Response (Hz)	1-3000	1-3000	±1dB
Frequency Response (Hz)	0.4-5000	0.4-5000	±3dB
Natural Frequency (Hz)	18000	18000	
Non-Linearity (%FSO)	±1	±1	
Transverse Sensitivity (%)	5	5	
Shock Limit (g)	5000	5000	
Residual Noise (g RMS)	0.0006	0.0008	Broadband 1Hz to 10kHz

ELECTRICAL

Bias Voltage (Vdc)	Exc Voltage / 2		
Total Supply Current (mA)	<0.80		
Excitation Voltage (Vdc) ¹	3.0 to 5.5		
Output Impedance (Ω)	<100		
Insulation Resistance (MΩ)	>100		@50Vdc
Full Scale Output Voltage (V)	±2		
Grounding	Case grounded to mounting surface		

ENVIRONMENTAL

Temperature Response (%)	±10
Operating Temperature (°C)	-40 to +100
Storage Temperature (°C)	-54 to +125

PHYSICAL

Sensing Element	Piezo-Ceramic, Shear Mode
Case Material	Stainless Steel
Weight (grams)	20
Mounting	Adhesive or Circuit Board (M5 Stud Mounting for -01 Option)

¹ The model 808M1 can be operated with 2.8V excitation but the full-scale range will be limited.

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

Wiring color code: See schematic

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MODEL 808M1 ACCELEROMETER

ORDERING INFORMATION

PART NUMBERING Model Number+Range

808M1-GGGG-XX

 | |_____ Optional Stud Dash Number
 |_____ Range (0020 is 20g)

Dash Number
-01

Stud Options
M5 x 0.8

Example: 808M1-0020
 Model 808M1, 20g