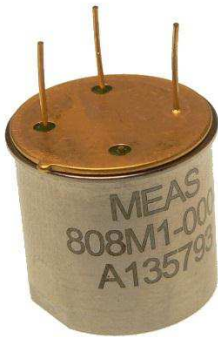
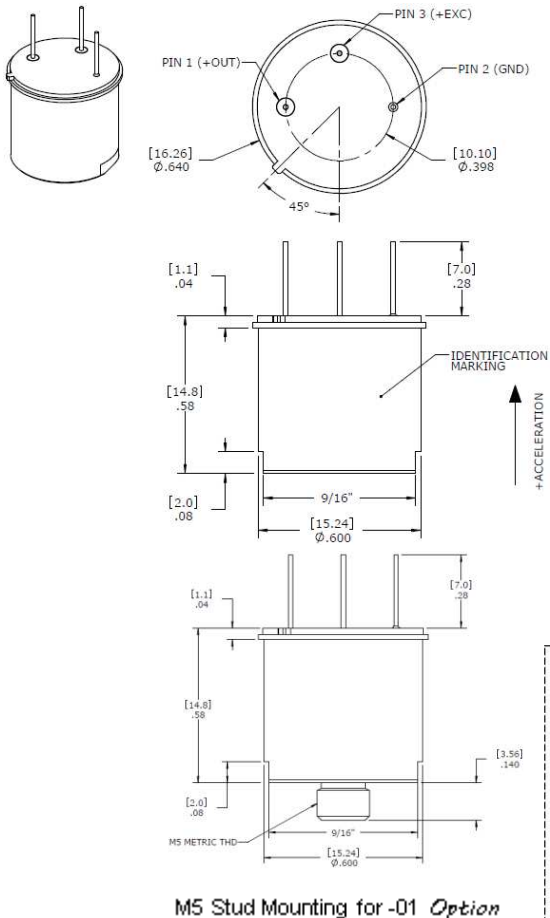


# MODEL 808 ACCELEROMETER



## DIMENSIONS



## SPECIFICATIONS

- TO-8 Series Accelerometer
- 2-Wire IEPE Interface
- Low-Cost, Embedded Applications
- Wide Bandwidth to 6kHz

The **Model 808** is a miniature adhesive mount IEPE accelerometer built on a 3-pin TO-8 header. It is available in  $\pm 10g$  and  $\pm 50g$  dynamic ranges and offers a flat frequency response to 6kHz. The accelerometer features a hermetic construction in a TO-8 header configuration.

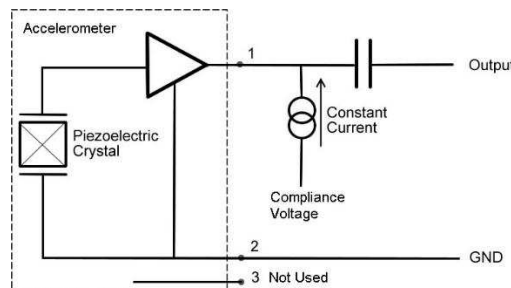
The **model 808** incorporates a stable piezoceramic crystal and an integrated charge converter amplifier in a 100% shielded housing suitable for many embedded OEM applications. The accelerometer is offered in two configurations; one for adhesive mounting and one for stud mounting.

## FEATURES

- $\pm 10g$  and  $\pm 50g$  Range
- Wide bandwidth up to 6kHz
- TO-8 Configuration
- Hermetically Sealed
- $-40^{\circ}C$  to  $+100^{\circ}C$  Operating Range
- Case Grounded Design

## APPLICATIONS

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



**PERFORMANCE SPECIFICATIONS**

All values are typical at +24°C, 80Hz and 4mA 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**

	±10	±50	
Range (g)	500	100	±10% (see Note 1 for ±5% option)
Sensitivity (mV/g)	1-3000	2-4000	±1dB
Frequency Response (Hz)	0.3-5000	0.3-6000	±3dB
Frequency Response (Hz)	18000	24000	
Natural Frequency (Hz)	±1	±1	
Non-Linearity (%FSO)	5	5	
Transverse Sensitivity (%)	5000	5000	
Shock Limit (g)	0.0008	0.001	Broadband 1Hz to 10kHz
Residual Noise (g RMS)			

**ELECTRICAL**

Compliance Voltage (Vdc)	18 to 30		
Excitation Current (mA)	2 to 10		
Bias Voltage (Vdc)	8 to 12		Room Temperature
Bias Voltage (Vdc)	6 to 13		-40 to +100°C
Output Impedance (Ω)	<100		
Full Scale Output Voltage (V)	±5		
Grounding	Case grounded to mounting surface		

**ENVIRONMENTAL**

Temperature Response (%)	±10		
Operating Temperature (°C)	-40 to +100		+125°C option, see Note 2
Storage Temperature (°C)	-54 to +125		

**PHYSICAL**

Sensing Element	Piezo-Ceramic, Shear Mode
Case Material	Stainless Steel
Weight (grams)	20 (for 10g range), 16 (for 50g range)
Mounting	Adhesive or Circuit Board (M5 Stud Mounting for -01 Option)

<sup>1</sup> Contact factory for model number to order with ±5% sensitivity tolerance

<sup>2</sup> Contact factory for model number to order with +125°C operating temperature

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

**Wiring color code:** See schematic

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