

# MODEL 808 ACCELEROMETER

## SPECIFICATIONS

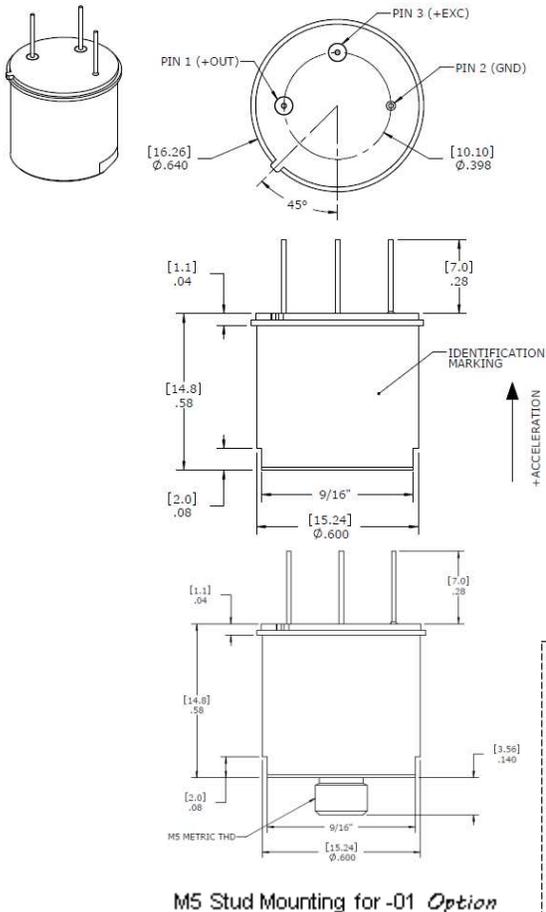
- ◆ TO-8 Series Accelerometer
- ◆ 2-Wire IEPE Interface
- ◆ Low-Cost, Embedded Applications
- ◆ Wide Bandwidth to 6kHz

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.



## DIMENSIONS

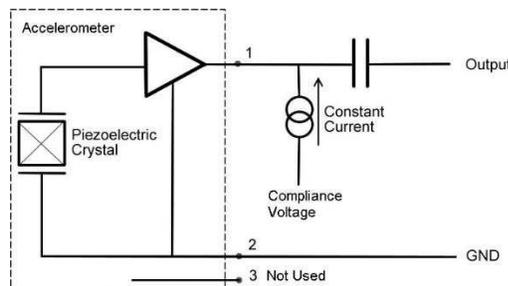


## FEATURES

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

## APPLICATIONS

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



## MODEL 808 ACCELEROMETER

### 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

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

##### 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

The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. Measurement Specialties, Inc. reserves the right to make changes without further notice to any product herein. Measurement Specialties, Inc. makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does Measurement Specialties, Inc. assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. Measurement Specialties, Inc. does not convey any license under its patent rights nor the rights of others.

## MODEL 808 ACCELEROMETER

---

### ORDERING INFORMATION

PART NUMBERING    Model Number+Range

808-GGGG-XX

  |      |\_\_\_\_\_ Optional Stud Dash Number  
  |\_\_\_\_\_ Range (0010 is 10g)

Dash Number  
-01

Stud Options  
M5 x 0.8

Example: 808-0010  
          Model 808, 10g