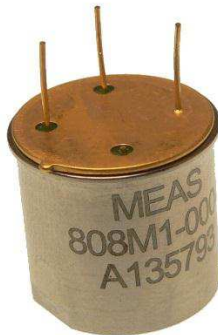


# MODEL 808M1 ACCELEROMETER

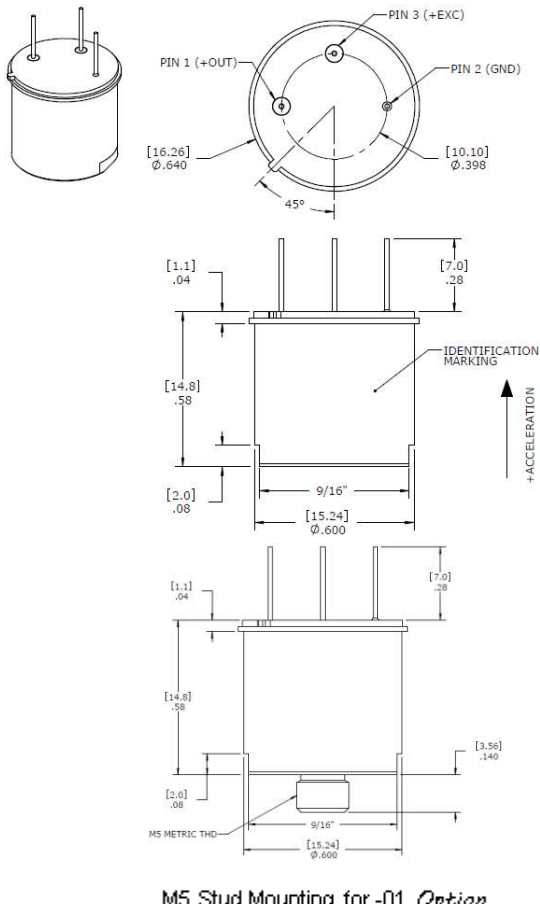


## SPECIFICATIONS

- ◆ 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.

## DIMENSIONS

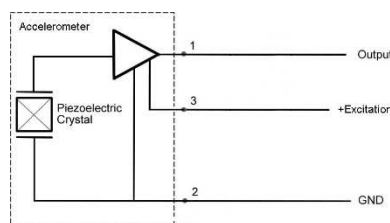


## FEATURES

- ◆  $\pm 4g$  and  $\pm 20g$  Range
- ◆ Wide bandwidth up to 5kHz
- ◆ TO-8 Configuration
- ◆ Hermetically Sealed
- ◆  $-40^{\circ}\text{C}$  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



**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**

			<b>Notes</b>
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) <sup>1</sup>	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)

<sup>1</sup> 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

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.

**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

**NORTH AMERICA**

Measurement Specialties, Inc.,  
a TE Connectivity Company  
Tel: 800-522-6752  
Email: [customercare.hmpt@te.com](mailto:customercare.hmpt@te.com)

**EUROPE**

MEAS France SAS  
a TE Connectivity Company  
Tel: 800-440-5100  
Email : [customercare.lcsb@te.com](mailto:customercare.lcsb@te.com)

**ASIA**

Measurement Specialties (China), Ltd.,  
a TE Connectivity Company  
Sales and Customer Service  
Tel: 0400-820-6015  
Email: [customercare.shzn@te.com](mailto:customercare.shzn@te.com)

**TE.com/sensorsolutions**

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2015 TE Connectivity Ltd. family of companies All Rights Reserved.