Model 808M1 Accelerometer





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

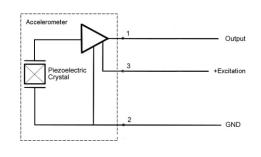
The Model 808M1 is a miniature adhesive mount voltage output accelerometer built on a 3-pin TO-8 header. It is available in ±4g and ±20g dynamic ranges and offers a flat frequency response to 5kHz. The accelerometer features a hermetic construction in a TO-8 header configuration. The model 808M1 incorporates 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

- ±4g and ±20g Range
- Wide bandwidth up to 5kHz
- TO-8 Configuration
- Hermetically Sealed
- -40°C to +100°C Operating Range
- Case Grounded Design
- 3.0-5.5 Excitation Voltage

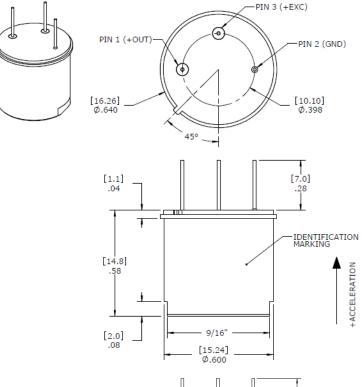
APPLICATIONS

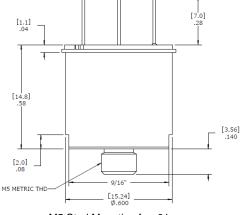
- Machine Monitoring
- Low-Cost OEM Installation
- Permanent Structural Study
- Embedded Sensing Solution
- Data Loggers





dimensions





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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	

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

 $\begin{array}{lll} \text{Bias Voltage (Vdc)} & \text{Exc Voltage / 2} \\ \text{Total Supply Current (mA)} & <0.80 \\ \text{Excitation Voltage (Vdc)}^{\,1} & 3.0 \text{ to } 5.5 \\ \text{Output Impedance (}\Omega\text{)} & <100 \\ \text{Insulation Resistance (}M\Omega\text{)} & >100 \\ \text{Full Scale Output Voltage (V)} & \pm2 \end{array}$

sulation Resistance (M Ω) >100 @50Vdc

Case grounded to mounting surface

ENVIRONMENTAL

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

PHYSICAL

Grounding

Sensing Element Piezo-Ceramic, Shear Mode

Case Material Stainless Steel

Weight (grams) 20

Mounting Adhesive or Circuit Board (M5 Stud Mounting for -01 Option)

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

Wiring color code: See schematic

ordering info

PART NUMBERING Model Number+Range

808M1-GGGG-XX

I I____ Optional Stud Dash Number
I___ Range (0020 is 20g)

Dash Number Stud Options -01 M5 x 0.8

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

联系方式



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