

MODEL 805 ACCELEROMETER

SPECIFICATIONS

- ◆ TO-5 Series Accelerometer
- ◆ 2-Wire IEPE Interface
- ◆ Low-Cost, Embedded Applications
- ◆ Wide Bandwidth to 15kHz

The **Model 805** is a miniature adhesive mount IEPE accelerometer built on a 3-pin TO-5 header. It is available in $\pm 50g$ and $\pm 500g$ dynamic ranges and offers a flat frequency response to 15kHz. The accelerometer features a hermetic construction in a TO-5 header configuration. The model 805 incorporates a stable piezo-ceramic 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

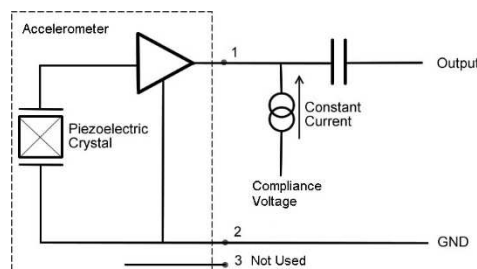
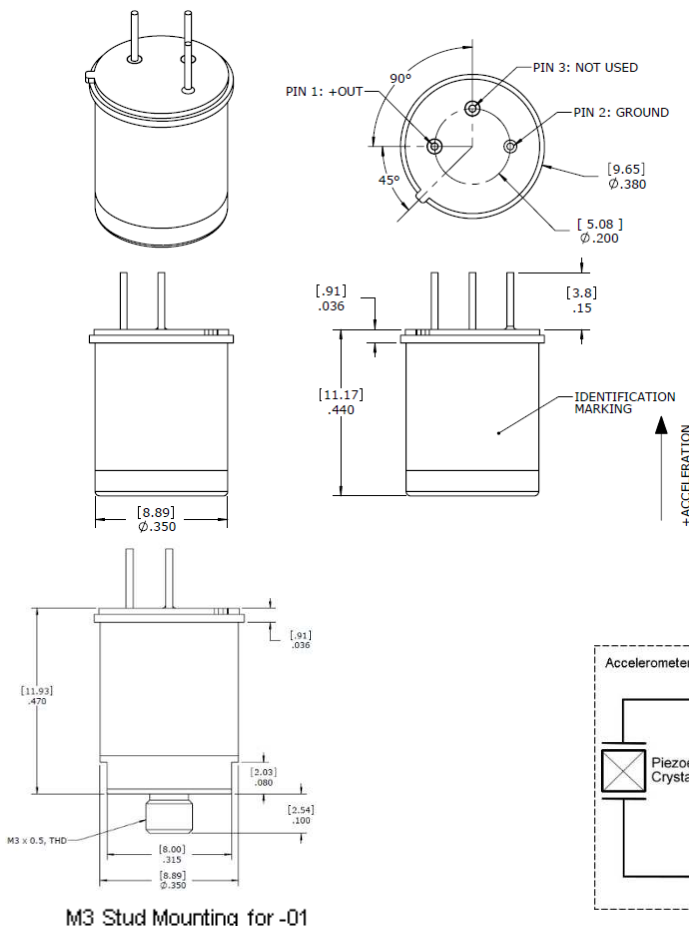
- ◆ $\pm 50g$ and $\pm 500g$ Range
- ◆ Wide bandwidth up to 15kHz
- ◆ TO-5 Configuration
- ◆ Hermetically Sealed
- ◆ $-40^{\circ}C$ to $+100^{\circ}C$ Operating Range
- ◆ Case Grounded Design

APPLICATIONS

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



DIMENSIONS



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.

Parameters

DYNAMIC

			Notes
Range (g)	±50	±500	
Sensitivity (mV/g)	100	10	±10% (see Note 1 for ±5% option)
Frequency Response (Hz)	1-8000	1-8000	±1dB
Frequency Response (Hz)	0.3-10000	0.3-12000	±3dB
Natural Frequency (Hz)	34000	34000	
Non-Linearity (%FSO)	±1	±1	
Transverse Sensitivity (%)	5	5	
Shock Limit (g)	5000	5000	
Residual Noise (g RMS)	0.0004	0.0009	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		+120°C option, see Note 2
Storage Temperature (°C)	-54 to +125		

PHYSICAL

Sensing Element	Piezo-Ceramic
Case Material	Stainless Steel
Weight (grams)	5.0
Mounting	Adhesive or Circuit Board (M3 Stud Mounting for -01 Option)

¹ Contact factory for model number to order with ±5% sensitivity tolerance

² Contact factory for model number to order with +120°C operating temperature

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

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ORDERING INFORMATION

PART NUMBERING Model Number+Range

805-GGGG-XX

I I Optional Stud Dash Number
I Range (0050 is 50g)

Dash Number
-01

Stud Options
M3 x 0.5 6g

Example: 805-0050
Model 805, 50g

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