

# Model 805 Accelerometer



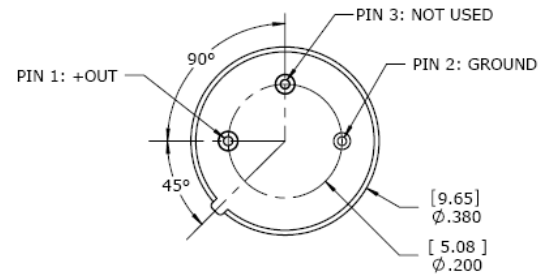
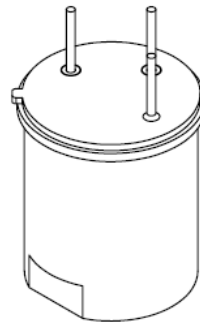
TO-5 Series Accelerometer  
2-Wire IEPE Interface  
Low-Cost, Embedded Applications  
Wide Bandwidth to 15kHz



**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.

## dimensions

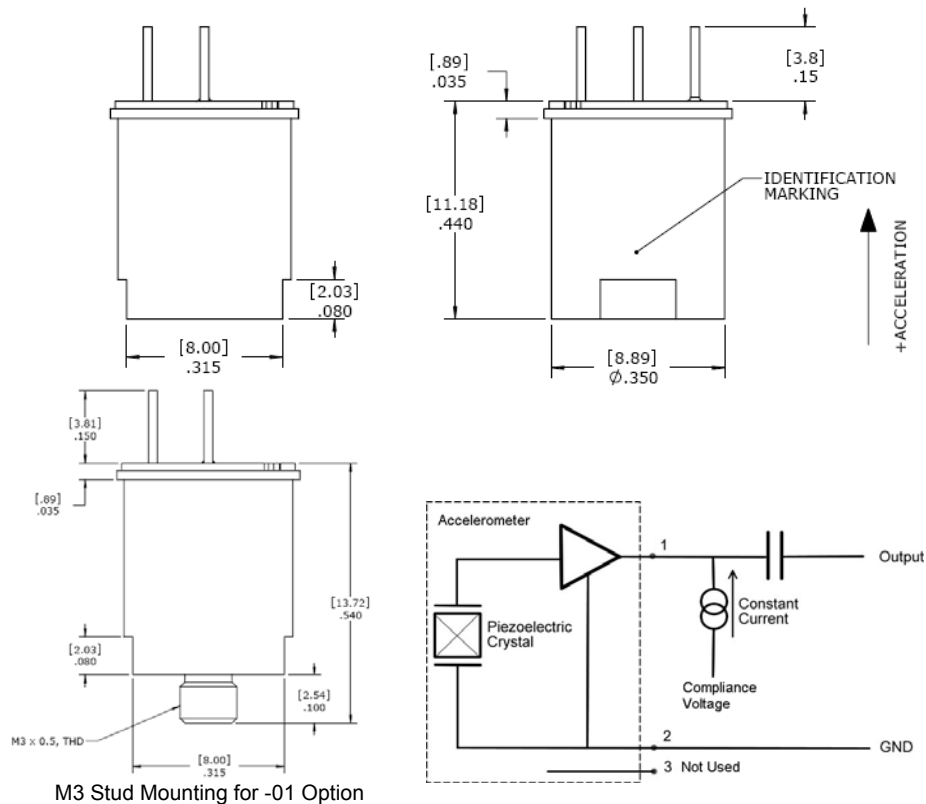


## FEATURES

- $\pm 50g$  and  $\pm 500g$  Range
- Wide bandwidth up to 15kHz
- TO-5 Configuration
- Hermetically Sealed
- $-54^{\circ}C$  to  $+100^{\circ}C$  Operating Range
- Case Grounded Design

## APPLICATIONS

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



# Model 805 Accelerometer

## performance specifications

All values are typical at +24°C, 100Hz 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

Range (g)	±50	±500
Sensitivity (mV/g)	100	10
Frequency Response (Hz)	1-8000	1-8000
Frequency Response (Hz)	0.4-10000	0.4-12000
Natural Frequency (Hz)	34000	34000
Non-Linearity (%FSO)	±1	±1
Transverse Sensitivity (%)	5	5
Shock Limit (g)	5000	5000

#### Notes

±10%  
±1dB  
±3dB

#### ELECTRICAL

Compliance Voltage (Vdc)	18 to 30	18 to 30
Excitation Current (mA)	2 to 10	2 to 10
Bias Voltage (Vdc)	8 to 12	8 to 12
Bias Voltage (Vdc)	6 to 13	6 to 13
Output Impedance (Ω)	<100	<100
Residual Noise (g RMS)	0.0003	0.0009
Grounding	Case grounded to mounting surface	

Room Temperature  
-54 to +100°C

Broadband 1Hz to 10kHz

#### ENVIRONMENTAL

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

**Calibration supplied:** CS-SENS-0100 NIST Traceable Amplitude Calibration at 100Hz

**Wiring color code:** See schematic

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## ordering info

PART NUMBERING Model Number+Range

805-GGGG-XX

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

Dash Number  
-01

Stud Options  
M3 x 0.5 6g

Example: 805-0050  
Model 805, 50g