



# **MODEL 805 ACCELEROMETER**

# SPECIFICATIONS

- TO-5 Series Accelerometer
- 2-Wire IEPE Interface
- Low-Cost, Embedded Applications
- Wide Bandwidth to 12kHz

The **Model 805** is a miniature adhesive mount IEPE accelerometer built on a 3-pin TO-5 header. It is available in  $\pm$ 50g to  $\pm$ 500g dynamic ranges and offers a flat frequency response to 12kHz. 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 model 805 accelerometer is offered in two configurations; one for adhesive mounting and one for stud mounting. An isolating cover option is also included for the standard model.

# FEATURES

- ±50g to ±500g Range
- Wide bandwidth up to 12kHz
- TO-5 Configuration
- Hermetically Sealed
- -40°C to +100°C Operating Range
- Case Grounded Design

# **APPLICATIONS**

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

# PERFORMANCE SPECIFICATIONS

All values are typical at  $+24^{\circ}$ C, 80Hz and 4mA excitation unless otherwise stated. TE Connectivity reserves the right to update and change these specifications without notice.

Parameters <b>DYNAMIC</b> Range (g) Sensitivity (mV/g) Frequency Response (Hz) Frequency Response (Hz) Natural Frequency (Hz) Non-Linearity (%FSO) Transverse Sensitivity (%) Shock Limit (g)	±50 100 1-8000 0.3-10000 34000 ±1 5 5000	±100 50 1-8000 0.3-10000 34000 ±1 5 5000	±500 10 1-8000 0.3-12000 34000 ±1 5 5000	Notes ±10% (see Note 1 for ±5% option) ±1dB ±3dB
Residual Noise (g RMS)	0.0004	0.0005	0.0009	Broadband 1Hz to 10kHz
<b>ELECTRICAL</b> Compliance Voltage (Vdc) Excitation Current (mA) Bias Voltage (Vdc) Bias Voltage (Vdc) Output Impedance ( $\Omega$ ) Full Scale Output Voltage (V) Grounding	18 to 30 2 to 10 8 to 12 6 to 13 <100 ±5 Case grounde	ed to mounting s	urface	Room Temperature -40 to +100°C
<b>ENVIRONMENTAL</b> Temperature Response (%) Operating Temperature (°C) Storage Temperature (°C)	±10 -40 to +100 -54 to +125			+120°C option, see Note 2
PHYSICAL Sensing Element Case Material Weight (grams) Mounting	Piezo-Ceramic Stainless Steel 5.0 Adhesive or Circuit Board (M3 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 +120°C operating temperature				
-			Amplitude Calibration at 80Hz	

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## DIMENSIONS

## Standard Model 805





Model 805 with M3 Mounting Stud Option



## SCHEMATIC



## **ORDERING INFORMATION**





**Isolating Cover Option** 

Model 805, 50g range 805-0100-01

Examples; 805-0050

805-0100-01 Model 805 with M3 mounting stud, 100g range

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