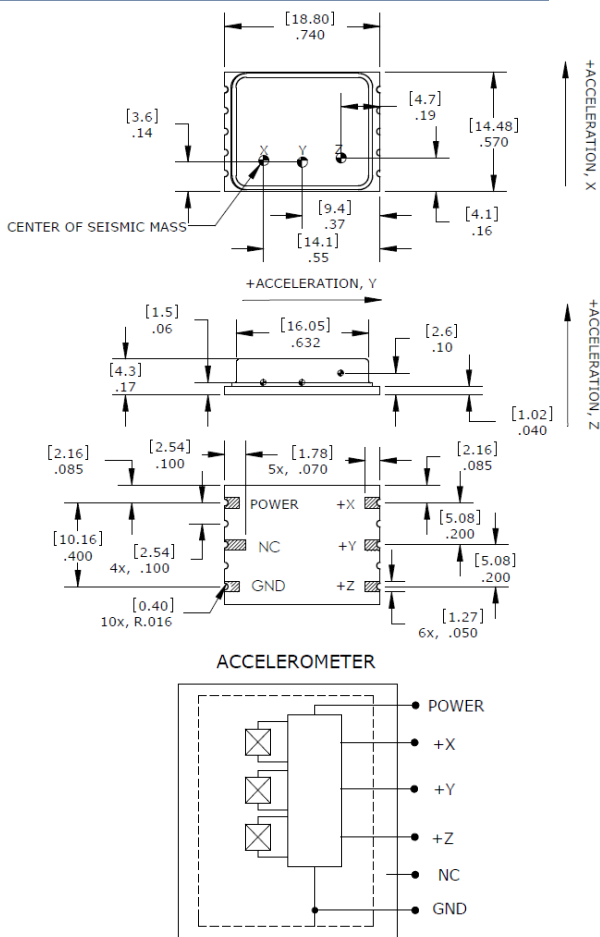


## MODEL 834HT ACCELEROMETER



### DIMENSIONS



### SPECIFICATIONS

- Triaxial Piezoelectric Accelerometer
- -40°C to +150°C Temp Range
- Full Signal and Power Conditioning
- Circuit Board Mountable

The **Model 834HT** is a high temperature, board mountable triaxial accelerometer. Featuring stable piezo-ceramic crystals, the accelerometer incorporates full power and signal conditioning with a maximum current consumption of 4 micro-amps.

The **model 834HT** is available in  $\pm 2000g$  to  $\pm 6000g$  ranges and provides a flat frequency response up to 6kHz.

### FEATURES

- $\pm 2000g$  to  $\pm 6000g$  Dynamic Range
- Triaxial Output
- Hermetically Sealed
- Piezo-ceramic Crystals
- -40° to +150°C Operating Range
- Stable Temperature Response
- Wide Bandwidth to 6000Hz

### APPLICATIONS

- Asset Monitoring
- Data Loggers
- Impact Monitoring
- Machine Health Monitoring
- High Temperature Installations

## PERFORMANCE SPECIFICATIONS

All values are typical at +24°C, 80Hz and 3.3Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

### Parameters

#### DYNAMIC

			Notes
Range (g)	±2000	±6000	
Sensitivity (mV/g)	0.62	0.20	±30%
Frequency Response (Hz)	2-6000	2-6000	±2dB
Natural Frequency (Hz)	>30000	>30000	
Non-Linearity (%FSO)	±2	±2	
Transverse Sensitivity (%)	<8	<8	
Shock Limit (g)	10000	10000	
Broadband Noise (µV)	150	150	1Hz-10kHz
Spectral Noise (mg/√Hz)	6.5	6.0	@ 10Hz
Spectral Noise (mg/√Hz)	1.3	2.0	@ 100Hz
Spectral Noise (mg/√Hz)	0.8	1.5	@ 1000Hz

#### ELECTRICAL

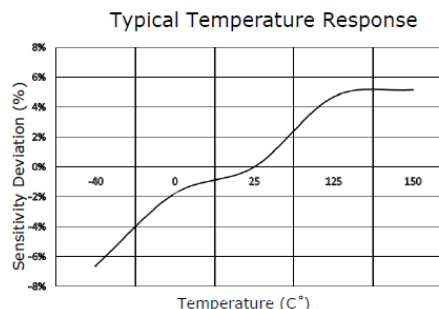
Bias Voltage (Vdc)	Exc Voltage / 2	
Total Supply Current (µA)	<40	
Excitation Voltage (Vdc) <sup>2</sup>	3.3 to 5.5	
Output Impedance (Ω)	<100	
Insulation Resistance (MΩ)	>50	@100Vdc
Warm-Up Time (msec)	30	
Shielding	100%	
Ground Isolation	Isolated from Mounting Surface	

#### ENVIRONMENTAL

Temperature Response (%)	See Typical Temperature Response Curve
Operating Temperature (°C)	-40 to +150
Storage Temperature (°C)	-40 to +150
Humidity	Hermetically Solder Sealed

#### PHYSICAL

Sensing Element	Ceramic (shear mode)
Case Material	Ceramic Base, Nickel Silver Cover
Weight (grams)	3.0



<sup>1</sup> The model 834HT is not to be reflow soldered, manual soldering is recommended. See application note.

<sup>2</sup> The model 834HT 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

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

834HT-GGGG

      |  
      | \_\_\_\_\_ Range (2000 is 2000g)

Example: 834HT-2000  
          Model 834HT, 2000g

#### NORTH AMERICA

Measurement Specialties, Inc.,  
a TE Connectivity Company  
Tel: +1-800-522-6752  
[customercare.hmpt@te.com](mailto:customercare.hmpt@te.com)

#### EUROPE

MEAS France SAS  
a TE Connectivity Company  
Tel: +31 73 624 6999  
[customercare.lcsb@te.com](mailto:customercare.lcsb@te.com)

#### ASIA

Measurement Specialties (China), Ltd.,  
a TE Connectivity Company  
Tel: +86-400-820-6015  
[customercare.shzn@te.com](mailto:customercare.shzn@te.com)

#### [te.com/sensorsolutions](http://te.com/sensorsolutions)

TE Connectivity, TE, and the TE connectivity (logo) are trademarks of the TE Connectivity Ltd. family of companies. Other logos, products and/or company names referred to herein may 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.

© 2018 TE Connectivity Ltd. family of companies All Rights Reserved.