MODEL 834HT ACCELEROMETER

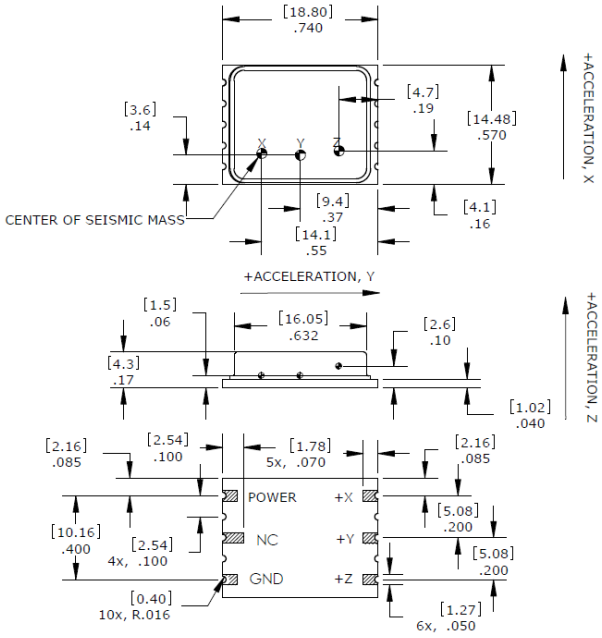
SPECIFICATIONS

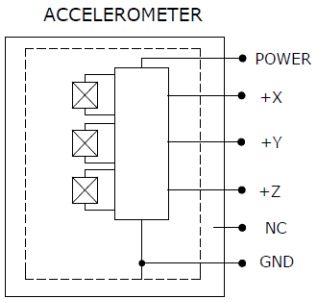
- **Triaxial Piezoelectric Accelerometer**
- **-40°C to +150°C Temp Range**
- **Full Signal and Power Conditioning**
- **Circuit Board Mountable**

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 ±2000g to ±6000g ranges and provides a flat frequency response up to 6kHz.

DIMENSIONS





FEATURES

- ±2000g to ±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

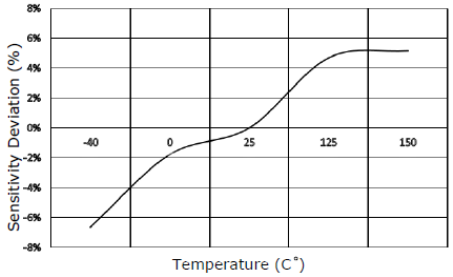
PERFORMANCE SPECIFICATIONS

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) [2]	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	

Typical Temperature Response



[1] The model 834HT is not to be reflow soldered, manual soldering is recommended. See application note.
[2] 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

ORDERING INFORMATION

PART NUMBERING Model Number+Range

834HT-GGGG
I
I_____ Range (2000 is 2000g)

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