



**THE DATASHEET OF
834M1-2000**



MODEL 834M1 ACCELEROMETER



SPECIFICATIONS

- ◆ **Triaxial Piezoelectric Accelerometer**
- ◆ **<22 μ A Current Consumption**
- ◆ **Wide Bandwidth to 6kHz**
- ◆ **Circuit Board Mountable**

The **Model 834M1** is a low cost, board mountable triaxial accelerometer designed for high amplitude embedded shock applications. The accelerometer features a maximum current consumption of 22 micro-amps and incorporates full power and signal conditioning.

The **model 834M1** is available in $\pm 2000g$ to $\pm 6000g$ ranges and provides a flat frequency response up to greater than 6kHz. The standard model 834 offers the same envelope with a lower maximum current consumption of 4 micro-amps.

FEATURES

- ◆ $\pm 2000g$ to $\pm 6000g$ Dynamic Range
- ◆ Low Cost Triaxial
- ◆ Hermetically Sealed
- ◆ Piezo-ceramic Crystals
- ◆ -40° to $+125^{\circ}\text{C}$ Operating Range
- ◆ Single Axis Configurations Available

APPLICATIONS

- ◆ Asset Monitoring
- ◆ Impact Testing
- ◆ System Wake-Up Switch
- ◆ Embedded Applications
- ◆ Instrumentation

PERFORMANCE SPECIFICATIONS

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

Parameters			Notes
DYNAMIC			
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)	40	30	0.1Hz-10kHz
Spectral Noise (mg/√Hz)	3.2	4.0	@ 10Hz
Spectral Noise (mg/√Hz)	0.6	1.0	@ 100Hz
Spectral Noise (mg/√Hz)	0.2	0.5	@ 1000Hz
ELECTRICAL			
Bias Voltage (Vdc)	Exc Voltage / 2		
Total Supply Current (µA) ¹	<22		
Excitation Voltage (Vdc)	3.3 to 5.5		
Output Impedance (Ω)	<100		
Insulation Resistance (MΩ)	>50		@100Vdc
Shielding	100%		
Ground Isolation	Isolated from Mounting Surface		
ENVIRONMENTAL			
Temperature Response (%)	-20/+30 from -40°C to +125°C		
Operating Temperature (°C)	-40 to +125		
Storage Temperature (°C)	-40 to +125		
Humidity	Hermetically Solder Sealed		
PHYSICAL			
Sensing Element	Ceramic (shear mode)		
Case Material	Ceramic Base, Nickel Silver Cover		
Weight (grams)	2.6		

¹ A lower current consumption of 4 micro-amps is available on model 834.

² The model 834M1 is not to be reflow soldered at high temperature, manual soldering is recommended. See operating manual.

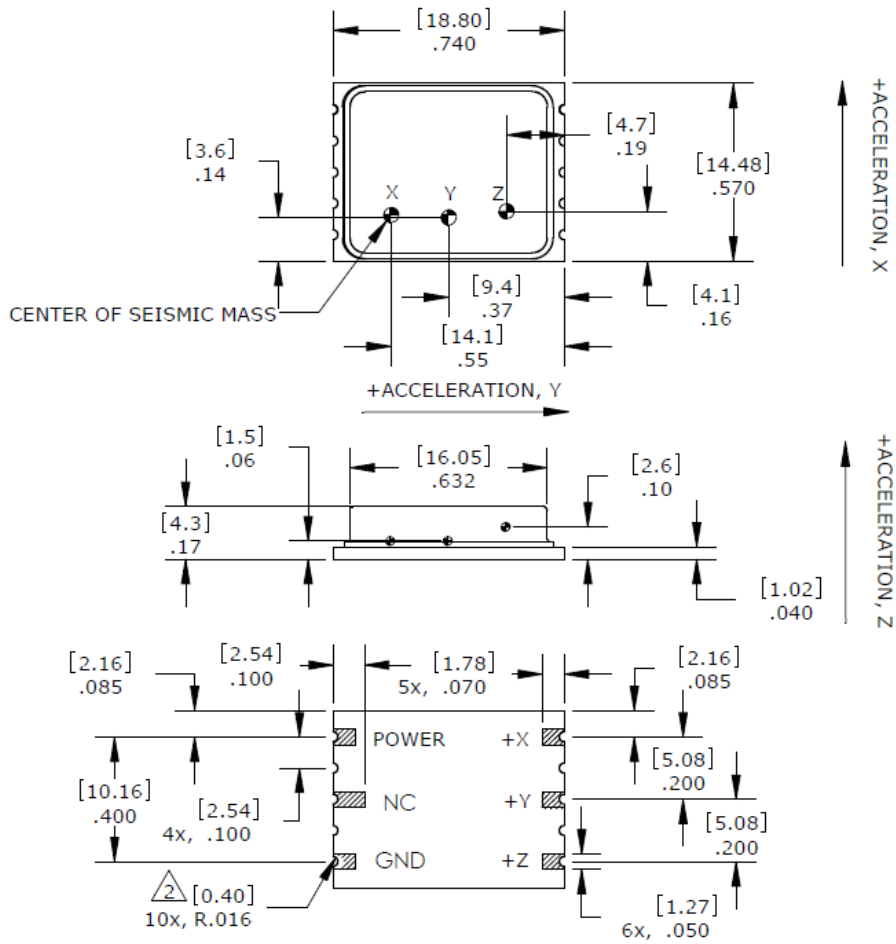
³ The model 834M1 can be operated with 2.8V excitation but the full-scale range will be limited. See operating manual for details.

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

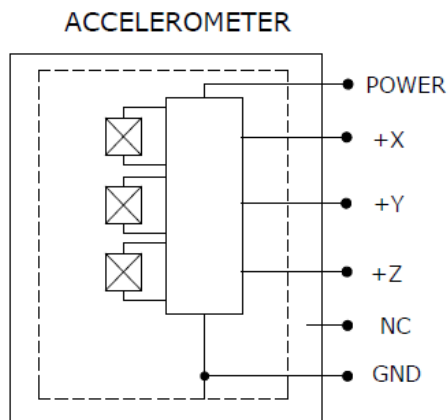
The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. TE Connectivity reserves the right to make changes without further notice to any product herein. TE Connectivity makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does TE Connectivity 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. TE Connectivity does not convey any license under its patent rights nor the rights of others.

MODEL 834M1 ACCELEROMETER

DIMENSIONS



SCHEMATIC



ORDERING INFORMATION

834M1

GGGG

Range

2000=2000g

6000=6000g

Example;
834M1-6000
Model 834M1, 6000g range

NORTH AMERICA

Measurement Specialties, Inc.,
a TE Connectivity Company
Tel: 800-522-6752
customercare.hmpt@te.com

EUROPE

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

ASIA

Measurement Specialties (China), Ltd.,
a TE Connectivity Company
Tel: 0400-820-6015
customercare.shzn@te.com

TE.com/sensorsolutions

MEAS France SAS and Measurement Specialties (China), Inc., are TE Connectivity companies.

TE Connectivity, TE, TE connectivity (logo) are trademarks. All other logos, products and/or company names referred to herein might 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.

© 2017 TE Connectivity Ltd. All Rights Reserved.

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 [View 834M1-2000 on WIN SOURCE](#)

 [TE Connectivity](#) Information

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management