Model 606M1 Accelerometer

Seat Pad Accelerometer
MEMS, Triaxial Sensors
DC Response
Accurate Temp Compensation
ISO 10326-1 Configuration

The Model 606M1 is a MEMS triaxial seat pad accelerometer with both static and dynamic responses designed specially for characterizing whole body vibration in accordance with ISO 2631-1 and ISO 8041. The DC response of the silicon MEMS sensors is the key to yield accurate velocity and displacement results from the raw acceleration data. The 606M1 incorporates integral temperature compensation that provides a stable output over a wide operating range. The on-board voltage regulation circuit works with power supply from 8 to 32Vdc.

FEATURES

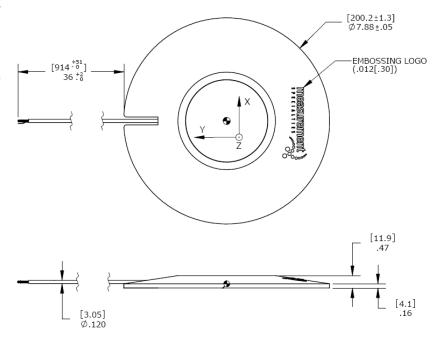
- Three Independent Circuits
- Low Current Consumption
- Ranges: ±25g
- Gas Damped, DC Response
- High Over-Range Protection
- Temperature Compensation
- Low Transverse Sensitivity

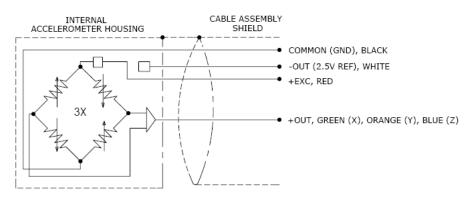
APPLICATIONS

- Whole Body Vibration Study
- Vibration/Shock Monitoring
- Helicopter Flight Testing
- Heavy Equipment Testing
- Biodynamic Study



dimensions





Model 606M1 Accelerometer

performance specifications

All values are typical at +24°C, 100Hz and 12Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change the specifications without notice. Standard product parameters are described in PSC-1004 for Plug & Play DC Accelerometers.

DYNAMIC		Notes
Range (g)	±25	
Sensitivity (mV/g)	80	. =0/
Frequency Response (Hz) Frequency Response (Hz)	0-800 0-1000	±5% ±1dB
Natural Frequency (Hz)	4000	±10D
Non-Linearity (%FSO)	±1.0	
Transverse Sensitivity (%)	<3	
Damping Ratio	0.7	
Shock Limit (g)	5000	
ELECTRICAL		
Zero Acceleration Output (mV)	±100	Differential
Excitation Voltage (Vdc)	8 to 36	
Excitation Current (mA)	<15	
Bias Voltage (Vdc)	2.5 <100	
Output Impedance (Ω) Insulation Resistance ($M\Omega$)	>100	@100Vdc
Turn On Time (msec)	<100	@100Vd0
Residual Noise (µV RMS)	800	Passband
Ground Isolation	Isolated from Mounting Surface	
ENVIRONMENTAL		
Thermal Zero Shift (%FSO)	±3	Typical
Thermal Sensitivity Shift (%)	±3.5	Typical
Operating Temperature (°C)	-20 to 85	
Compensated Temperature (°C)	-20 to 85	
Storage Temperature (°C)	-20 to 85	
PHYSICAL		
Case Material (Seat Pad)	Nitrile Rubber	

6x #28 AWG Conductors, PFA Insulated, Braided Shield, TPE Jacket

Cable Weight (grams)

Wiring color code: X-axis: +Excitation = Red; +Output = Green; -Output (-2.5V Ref) = White; Common (Ground) = Black

Y-axis: +Excitation = Red; +Output = Orange; -Output (-2.5V Ref) = White; Common (Ground) = Black +Excitation = Red; +Output = Blue; -Output (-2.5V Ref) = White; Common (Ground) = Black Z-axis:

Calibration supplied: CS-FREQ-0100 NIST Traceable Amplitude Calibration from 20Hz to $\pm 5\%$ Frequency Response Limit

101 Three Channel DC Signal Conditioner Amplifier Optional accessories:

PART NUMBERING Model Number

606M1



广东省深圳市南山区创业路怡海广场东座2407邮编:518000 电话: +86 755 2641 9890 传真: +86 755 2641 9680

电子邮箱:sales@bill-well.com