

Model 4623 Accelerometer

performance specifications

All values are typical at +24°C, 80Hz and 12Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice. Standard product parameters are described in PSC-1004 for Plug & Play DC Accelerometers.

Parameters

DYNAMIC

	±2	±5	±10	±25	±50	±100	Notes
Range (g)	1000	400	200	80	40	20	±10%
Sensitivity (mV/g)	0-150	0-150	0-200	0-400	0-600	0-1000	±5% ¹
Frequency Response (Hz)	0-400	0-400	0-550	0-800	0-100	0-1400	±1dB
Natural Frequency (Hz)	700	800	1000	1500	4000	6000	
Non-Linearity (%FSO)	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5	
Transverse Sensitivity (%)	<3	<3	<3	<3	<3	<3	<1 Typical
Damping Ratio	0.7	0.7	0.7	0.7	0.7	0.7	
Shock Limit (g)	5000	5000	5000	5000	5000	5000	
Residual Noise (µV RMS)	500	500	450	550	450	450	Passband
Spectral Noise (µg/√Hz)	35	38	75	219	316	516	Passband

ELECTRICAL

Zero Acceleration Output (mV)	±50						Differential
Excitation Voltage (Vdc)	7 to 30						
Excitation Current (mA)	<5						
Bias Voltage (Vdc)	2.5						
Output Resistance (Ω)	<100						
Insulation Resistance (MΩ)	>100						@100Vdc
Turn On Time (msec)	<100						
Ground Isolation	Isolated from Mounting Surface						

ENVIRONMENTAL

Thermal Zero Shift (%FSO/°C)	±0.004						Typical
Thermal Sensitivity Shift (%/°C)	±0.010						Typical
Operating Temperature (°C)	-55 to 125						
Storage Temperature (°C)	-55 to 125						
Humidity	Epoxy Encapsulated, IP65						

PHYSICAL

Case Material	Anodized Aluminum						
Cable	4x #26 AWG Conductors, PFA Insulated, Braided Shield, PFA Jacket						
Weight (grams)	14						
Mounting	2x #4 or M3 Screws						
Mounting Torque	6 lb-in (0.7 N-m)						

Calibration supplied: CS-FREQ-0100 NIST Traceable Amplitude Calibration from 20Hz to ±5% Frequency Response Limit¹

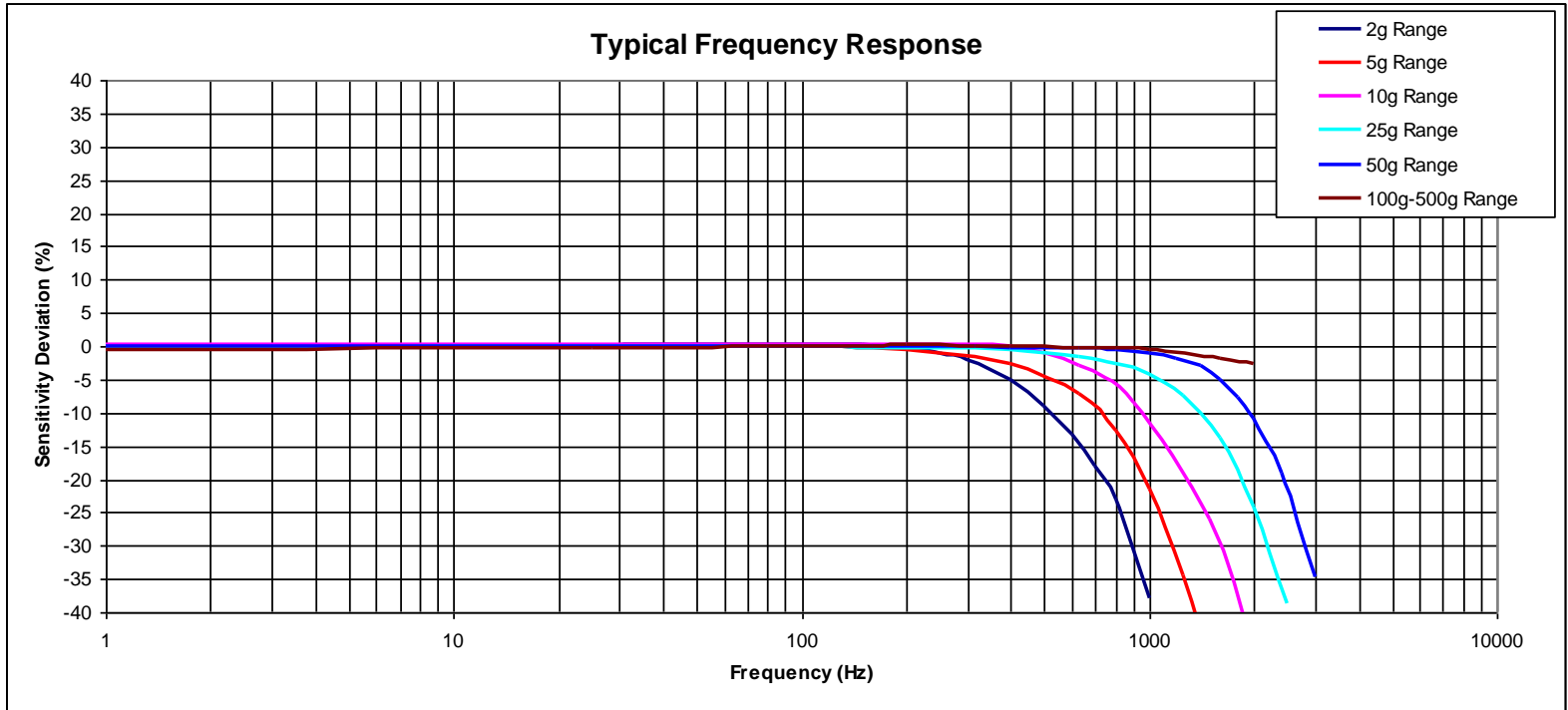
Supplied accessories: AC-A02944 2x #4-40 (3/4 length) Socket Head Cap Screw and Washer

Optional accessories: 121 3-Channel Precision Low Noise DC Amplifier

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.

Model 4623 Accelerometer

performance specifications



ordering info

PART NUMBERING Model Number+Range+Cable Length

4623-GGG-ZZZ-C

| |
 | | Cable (060 is 60 inches)
 | Range (025 is 25g)

Example: 4623-025-060-C
Model 4623, 25g, 060" (5ft) Cable