

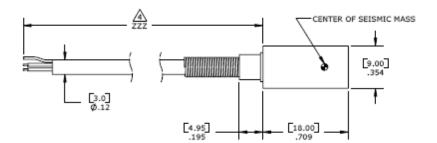
# Model 1207 Accelerometer

# DC Response Durable Cable Low Cost Reliable Performance

**The Model 1207** accelerometer is a small, compact uniaxial device designed for vehicle impact and road testing. Its mechanical overload stops provide high shock protection in rugged applications. Featuring ranges from 50g to 1000g and frequency response to 3000 Hz, this sensor is easily mounted in hard to get places on vehicles under test.



#### dimensions

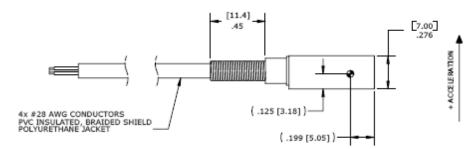


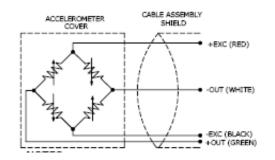
### **FEATURES**

- 2<sup>nd</sup> Generation MEMS Sensing Element
- 1000 g Full Scale Range
- 2-10 VDC Excitation
- 0 to 50 °C Temperature Compensation
- ±40 mV Zero Acceleration Output
- Rugged Strain Relief
- Connector Options
- Mechanical Overload Stops

# **APPLICATIONS**

- Crash Testing
- Impact testing
- Off-Road Testing
- Road Testing





# Model 1207 Accelerometer



## performance specifications

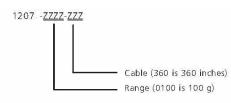
All values are typical at 24 °C, 100 Hz and 10VDC excitation unless otherwise stated. Measurement Specialties, Inc. reserves the right to update and change these specifications without notice.

PARAMETERS					
DYNAMIC				Units	Notes
Range	500	1000	2000		
Sensitivity	0.9	0.15	0.15	mV/g	
Frequency Response (Z - Axis)	0-3000	0- 3000	0-3000	Hz	±5%
Frequency Response (X & Y - Axis)	0-1500	0- 1500	0-1500	Hz	±5%
Resonance	17,000	22,0 00	26,000	Hz	Gas Damped
Non-Linearity	±1			% FSO	
Transverse Sensitivity	<3			%	
Zero Acceleration Output	<±50			mV	
Thermal Zero Shift, 0 - 50ºC(32 - 122ºF)	±0.05 (±0.03)				O/ºC (%FSO/ºF)
Thermal Sensitivity Shift, 0 - 50ºC(32 - 122ºF)	±0.1 (±0.06)			%/℃(%/ºF )	
ELECTRICAL				/	
Voltage Excitation	2 to 10			Vdc	
Input Impedance	3500 to 4800			S	
Output Impedance (Varies with current)	2700 to 4800			S	
Insulation Resistance	>100			MS	
Ground Isolation	Isolated				
Cable Output	12 x 30 AWG				72" Standard
·	Conductors				Length
PHYSICAL					
Case Material	Stainless Steel				
Weight	7			grams	Without Cable
Mounting	Screw				M2 X 0.4, 16 mm length
Mounting Torque ENVIRONMENTAL	3(0.3)				Lb-in(Nm)
Shock Limit	5000	7000	10000	g's	
Operating Temperature		-20 to +85 / -4 to +185			°C/°F
Humidly					Epoxy sealed
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PART NUMBERING Model Number+Range+Cable Length

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### ordering info



Example: 1207 -1000-360

Model 1207, 1000g Full Scale Range, 10Vdc excitation, 360 inches cable