

Model 4655 Accelerometer



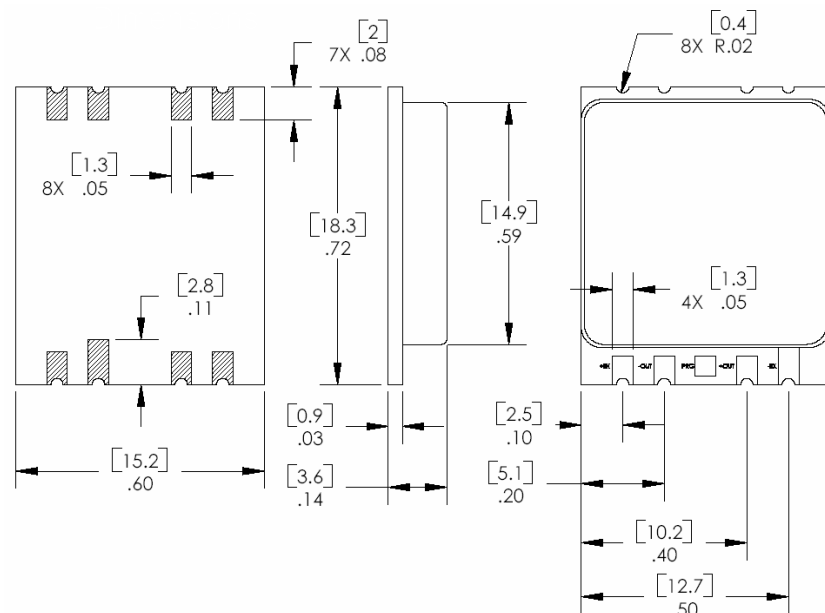
SMT Mount Accelerometer
Piezoresistive MEMS
Temperature Calibrated
Hermetically Sealed

Description

The model 4655 is a signal conditioned board mountable MEMS accelerometer. The accelerometer incorporates integral temperature compensation and a frequency response from DC to 1500Hz. The gas damped accelerometer incorporates integral over-range stops making it ideal for measurements of static and dynamic vibrations after shock impacts in applications such as weapons development, impact testing, and guidance systems. The model 4655 is packaged in a true hermetically sealed envelope with a ceramic board and a metal shielding for smt or adhesive mounting.



dimensions



FEATURES

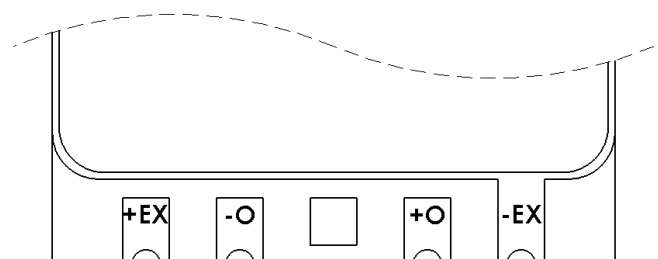
- Board Mountable Accelerometer
- 8-36Vdc Excitation
- Gas Damping
- Hermetically Sealed
- Ranges: $\pm 2g$ to $\pm 500g$
- DC Response
- High Over-Range Protection
- Temperature Compensation
- Signal Conditioned

APPLICATIONS

Impact Testing
Vibration/Shock Monitoring
Mil-aero Applications
Inertial Navigation
Low Frequency Applications
Weapons Development

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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 these specifications without notice.

Parameters

DYNAMIC

Range	±2	±5	±10	±20	Units	Notes
Sensitivity	1000	400	200	100	mV/g	
Frequency Response	0-200	0-250	0-400	0-600	Hz	±5%
Residual Noise	650	400	300	400	µV rms	

Range	±50	±100	±200	±500	Units	Notes
Sensitivity	40	20	10	4	mV/g	
Frequency Response	0-1000	0-1500	0-1500	0-1500	Hz	±5%
Residual Noise	500	500	500	500	µV rms	

Non-Linearity	±0.5	% FSO	
Transverse Sensitivity	±1	%	±3% Maximum
Zero Acceleration Output	±50	mV	
Thermal Zero Shift (-40 to +100°C)	±.010	% FSO/°C	
Thermal Sensitivity Shift (-40 to +100°C)	±.010	%/°C	

ELECTRICAL

Excitation Voltage	8-36	Vdc	
Excitation Current	5.0	mA	Typical
Bias Voltage	2.5	Vdc	
Output Impedance	100	Ω	Maximum
Insulation Resistance (@ 50Vdc)	100	MΩ	Minimum
Ground Isolation	Isolated		

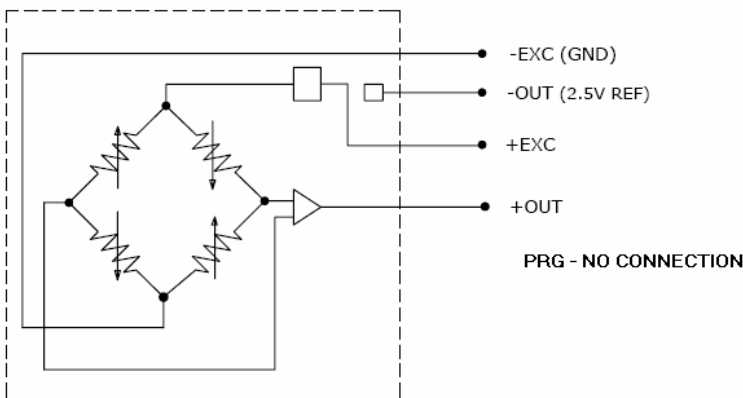
PHYSICAL

Circuit Board	Ceramic	
Weight	2.2	grams
Mounting	SMT or Epoxy	

ENVIRONMENTAL

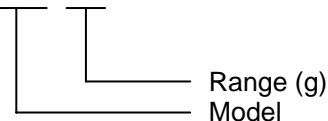
Shock Limit	10,000	g's
Operating Temperature	-54 to +121	°C
Humidity	Hermetically sealed	

electrical schematic



ordering information

4655-100



CONTATO

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