


Model Number 3501A202KG		PIEZORESISTIVE ACCELEROMETER		Revision: B ECN #: 43436
Performance	ENGLISH	SI		OPTIONAL VERSIONS
Sensitivity(± 50 %)(at 10 VDC excitation)	0.2 mV/g	0.02 mV/(m/s ²)	[1]	Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.
Sensitivity	0.02 mV/V/g	0.002 mV/V/(m/s ²)	[6]	
Measurement Range	± 2000 g	± 19,610 m/s ² pk		
Frequency Range(± 1 dB)	0 to 10,000 Hz	0 to 10,000 Hz		
Resonant Frequency	>20 kHz	>20 kHz		
Damping Ratio	0.7 % Critical	0.7 % Critical	[4]	
Non-Linearity	± 1 %	± 1 %		
Transverse Sensitivity	≤ 3 %	≤ 3 %		
Environmental				
Overload Limit(Shock)	± 10,000 g pk	± 98,100 m/s ² pk	[3]	
Overload Limit(Mechanical Stops)	≥ 2200 g	≥ 21,582 m/s ² pk		
Temperature Range(Operating)	-65 to 250 °F	-54 to 121 °C		
Temperature Coefficient of Sensitivity	-0.11 %/°F	-0.20 %/°C	[4]	
Zero g Offset Temperature Shift	± 10 mV	± 10 mV	[5]	
Base Strain Sensitivity	0.1 g/με	0.98 (m/s ²)/με	[4]	
Electrical				
Excitation Voltage(Maximum)	15.0 VDC	15.0 VDC		
Current Consumption	<10 mA	<10 mA		
Input Resistance(± 750 Ohm)	2250 Ohm	2250 Ohm	[1]	
Output Resistance(± 750 Ohm)	2250 Ohm	2250 Ohm	[1]	
Offset Voltage	-40 to +40 mVDC	-40 to +40 mVDC	[1]	
Settling Time	0.01 sec	0.01 sec	[2]	
Physical				
Sensing Element	Piezoresistive MEMS	Piezoresistive MEMS		
Sensing Geometry	Full Active	Full Active		
Housing Material	Ceramic	Ceramic		
Sealing	Epoxy	Epoxy		
Size (Height x Length x Width)	0.085 in x 0.236 in x 0.138 in	2.16 mm x 6.00 mm x 3.50 mm		
Weight	0.005 oz	0.15 gm	[4]	
Electrical Connector	Solder Tabs	Solder Tabs		
Mounting	Surface Mount	Surface Mount		
<i>All specifications are at room temperature unless otherwise specified. In the interest of constant product improvement, we reserve the right to change specifications without notice.</i>				
NOTES: [1]Verified with test data provided on supplied calibration certificate. [2]Settling Time is the maximum time after power-up for the Offset Voltage to be within +/-2% of Measurement Range output of the final offset value. Mounting surface must be at thermal equilibrium. [3]Half-sine pulse duration, ≥ 20 μsec. [4]Typical. [5]-65 to +250 °F, ref. 75 °F (-54 to +121 °C, ref. 24 °C) [6]Sensitivity is proportional to excitation voltage, and at other excitation values, sensitivity can be predicted from the 10VDC calibrated value with a small (<-0.5%) increase in uncertainty.				
SUPPLIED ACCESSORIES: Model ACS-62 Shock Calibration of Piezoresistive High Amplitude Accelerometers				
Entered: AP	Engineer: LAB	Sales: RWM	Approved: NJF	Spec Number:
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