


Model Number 3641A122KG		PIEZORESISTIVE ACCELEROMETER		Revision: F ECN #: 43436	
Performance	ENGLISH	SI		OPTIONAL VERSIONS	
Sensitivity(± 50 %)(at 10 VDC excitation)	0.20 mV/g	0.020 mV/(m/s ²)	[2]	Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.	
Measurement Range	± 2000 g pk	± 19,620 m/s ² pk			
Frequency Range(± 10 %)	0 to 5000 Hz	0 to 5000 Hz			
Resonant Frequency	>20 kHz	>20 kHz			
Damping Ratio	0.05 critical	0.05 critical	[1]		
Non-Linearity	± 1 %	± 1 %	[7]		
Transverse Sensitivity	≤ 2 %	≤ 2 %			
Environmental					
Overload Limit(Shock)	± 10,000 g pk	± 98,100 m/s ² pk	[5][4]		
Overload Limit(Mechanical Stops)	≥ 2200 g pk	≥ 21,582 m/s ² pk			
Temperature Range(Operating)	0 to 150 °F	-18 to 66 °C			
Temperature Range(Storage)	-65 to 250 °F	-54 to 121 °C			
Temperature Coefficient of Sensitivity	-0.10 %/°F	-0.18 %/°C	[1]	NOTES: [1]Typical. [2]Verified with test data provided on supplied calibration certificate. [3]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. [4]Individually tested to ensure compliance with specified value. [5]Half-sine pulse duration, ≥ 200 µsec. [6]-65 to +250 °F, ref. 75 °F (-54 to +121 °C, ref. 24 °C) [7]% deviation per 1000g	
Zero g Offset Temperature Shift	± 20 mV	± 20 mV	[6]		
Base Strain Sensitivity	0.0008 g/µε	0.008 (m/s ²)/µε	[1]		
Electrical					
Excitation Voltage(Maximum)	15 VDC	15 VDC			
Current Consumption	<10 mA	<10 mA	[1]		
Input Resistance(± 750 Ohm)	2250 Ohm	2250 Ohm	[2]		
Output Resistance(± 750 Ohm)	2250 Ohm	2250 Ohm	[2]		
Offset Voltage	± 50 mVDC	± 50 mVDC	[2]		
Settling Time	0.01 sec	0.01 sec	[3]		
Electrical Isolation(Case)	≥ 10 ⁸ Ohm	≥ 10 ⁸ Ohm	[4]		
Physical				SUPPLIED ACCESSORIES: Model 039A30 Allen wrench, 0.050 hex (1) Model 080A191 Skt hd cap screw, QTY 2,0-80x3/16" with washer (1) Model ACS-29 Calibration of Piezoresistive Accelerometers	
Sensing Element	Piezoresistive MEMS	Piezoresistive MEMS			
Sensing Geometry	Full Active	Full Active			
Housing Material	Anodized Aluminum	Anodized Aluminum			
Sealing	Epoxy	Epoxy			
Size (Height x Length x Width)	0.200 in x 0.470 in x 0.400 in	5.08 mm x 11.94 mm x 10.16 mm			
Weight(without cable)	.035 oz	1 gm	[1]		
Electrical Connector	Integral Cable	Integral Cable			
Electrical Connection Position	Side	Side			
Cable Type	036 4-cond silicone jacket	036 4-cond silicone jacket			
Cable Termination	Pigtail Ends	Pigtail Ends			
Cable Length	30 ft	9.14 m			
Mounting	Through Holes (2)	Through Holes (2)			
<p><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. ICP® is a registered trademark of PCB Group, Inc.</i></p>					
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