Model Number
3503A1060KG

ICP® is a registered trademark of PCB Group, Inc.

TRIAXIAL HIGH AMPLITUDE MEMS SHOCK ACCELEROMETER

Revision: A

ECN #: 40795

Performance	ENGLISH	<u>SI</u>	
Sensitivity(± 50 %)(at 10 VDC excitation)	0.003 mV/g	0.0003 mV/(m/s²)	[1]
Sensitivity	0.0003 mV/V/g	0.00003 mV/V/(m/s²)	
Measurement Range	± 60 Kg	± 588,400 m/s ² pk	
Frequency Range(± 1 dB)	0 to 10,000 Hz	0 to 10,000 Hz	
Resonant Frequency	≥ 120 kHz	≥ 120 kHz	
Damping Ratio	2 % Critical	2 % Critical	[5]
Non-Linearity	± 1 %	± 1 %	
Transverse Sensitivity	≤ 3 %	≤ 3 %	
Environmental			
Overload Limit(Shock)	± 80,000 g pk	± 784,532 m/s² pk	[4]
Overload Limit(Mechanical Stops)	≥ 80 Kg	≥ 782,534 m/s² pk	
Temperature Range(Storage)	-65 to 250 °F	-54 to 121 °C	
Temperature Range(Operating)	-65 to 250 °F	-54 to 121 °C	
Temperature Coefficient of Sensitivity	-0.11 %/°F	-0.20 %/°C	[5]
Zero g Offset Temperature Shift	± 10 mV	± 10 mV	[6]
Base Strain Sensitivity	0.3 g/με	2.94 (m/s²)/με	[5]
Electrical			
Excitation Voltage(Maximum)	15.0 VDC	15.0 VDC	
Current Consumption	<12 mA	<12 mA	
Input Resistance(± 700 Ohm)	2000 Ohm	2000 Ohm	[1]
Output Resistance(± 2000 Ohm)	6000 Ohm	6000 Ohm	[1]
Offset Voltage	-40 to +40 mVDC	-40 to +40 mVDC	[1]
Settling Time	0.01 sec	0.01 sec	[2]
Electrical Isolation(Case)	≥ 10 ⁸ Ohm	≥ 10 ⁸ Ohm	
Physical			
Sensing Element	Piezoresistive MEMS	Piezoresistive MEMS	
Sensing Geometry	Full Active	Full Active	
Housing Material	Titanium	Titanium	
Sealing	Epoxy	Epoxy	
Size (Height x Length x Width)	0.25 in x 0.47 in x 0.47 in	6.35 mm x 11.81 mm x 11.81 mm	
Weight(without cable)	0.1 oz	2.83 gm	[5]
Electrical Connector	Integral Cable	Integral Cable	
Electrical Connection Position	Side	Side	
Cable Type	026 8-conductor cable, shielded	026 8-conductor cable, shielded	
	PTFE	PTFE	
Cable Termination	Pigtail Ends	Pigtail Ends	
Cable Length	10 ft	3.05 m	
Mounting	Through Holes (2)	Through Holes (2)	
Mounting Torque	8 in-lb	8 in-lb	
All specifications are at room temperature In the interest of constant product improve		ge specifications without notice.	

OPTIONAL VERSIONS

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

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] Individually tested to ensure compliance with specified value.
- [4] Half-sine pulse duration, ≥ 20 µsec.
- [5] Typical.
- [6] -65 to +250 °F, ref. 75 °F (-54 to +121 °C, ref. 24 °C)
- [7] Sensitivity is proportional to excitation voltage, and at other excitation values, sensitivity can be predicted from the 10VDC calibrated value with a small (<~.5%) increase in uncertainty.

SUPPLIED ACCESSORIES:

Model 081A114 MOUNTING SCREW AND WASHER(4-40 x 3/8" SHCS) (2) Model ACS-62T CALIBRATION OF HIGH G PR ACCCELEROMETER (1)

Entered: AP	Engineer: JDK	Sales: MO	Approved: BAM	Spec Number:
Date: 2/21/2013	Date: 2/21/2013	Date: 2/21/2013	Date: 2/21/2013	53395



Phone: 716-684-0001 Fax: 716-684-0987 E-Mail: info@pcb.com