Model Number 103M 49A

ACOUSTIC ICP® PRESSURE SENSOR

Revision: A ECN #: 55076

TOSIVITOR			
Performance	ENGLISH	SI	
Measurement Range(± 5 V output)	20 psi	196.7 dB	
Sensitivity(± 15 %)	250 mV/psi	36.26 mV/kPa	
Maximum Pressure	250 psi	1,724 kPa	
Resolution	0.04 mpsi	82.8 dB	[1]
Resonant Frequency	≥ 13 kHz	≥ 13 kHz	
Rise Time	≤ 25 µ sec	≤ 25 µ sec	
Low Frequency Response(- 5 %)	.15 Hz	.15 Hz	
Non-Linearity	≤ 2.0 % FS	≤ 2.0 % FS	[2]
Environmental			
Acceleration Sensitivity	0.0015 psi/g	0.0011 kPa/(m/s²)	[1]
Temperature Range(Operating)	-100 to 150 °F	-73 to 66 ℃	
Temperature Coefficient of Sensitivity	≤ 0.2 %/°F	≤ 0.36 %/°C	
Maximum Flash Temperature	1,000 °F	538 ℃	
Maximum Shock	1,000 g pk	9,807 m/s² pk	
Maximum Vibration	1,000 g pk	9,807 m/s² pk	
Electrical			
Output Polarity(Positive Pressure)	Positive	Positive	
Discharge Time Constant(at room temp)	≥ 3 to 50 sec	≥ 3 to 50 sec	
Excitation Voltage	20 to 30 VDC	20 to 30 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	≤ 100 Ohm	≤ 100 Ohm	
Output Bias Voltage	7 to 13 VDC	7 to 13 VDC	
Physical			
Sensing Element	Ceramic	Ceramic	
Housing Material	Stainless Steel	Stainless Steel	
Diaphragm	316L Stainless Steel	316L Stainless Steel	
Sealing	Ероху	Epoxy	
Electrical Connector	Integral Cable	Integral Cable	
Cable Termination	Pigtail Ends	Pigtail Ends	
Weight	0.115 oz	3.260 gm	
Cable Type	32 AWG stranded wires	32 AWG stranded wires	
Cable Length	36 in	91 cm	

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]Typical.

[2]Zero-based, least-squares, straight line method.

[3]See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

Model 061A04 Sleeve clamp 4-40 cap screw (2) Model 065A66 Adhesive Mounting Ring (3)

Model 070B09 Solder adaptor (1)

Model PCS-1 Calibration of dynamic pressure sensors at 100% full scale, max 15 kpsi range.

Entered: ND	Engineer: AJA	Sales: RWM	Approved: RPF	Spec Number:
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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.

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