Model Number 109D12

ICP® PRESSURE SENSOR

Revision: A ECN #: 55114

109012			
Performance	ENGLISH	SI	
Measurement Range(for ± 7V output)	100,000 psi	690,000 kPa	
Sensitivity(± 15 %)	0.07 mV/psi	0.010 mV/kPa	
Maximum Pressure	125,000 psi	862,000 kPa	
Resolution	2.0 psi	13.8 kPa	[1]
Resonant Frequency	≥ 400 kHz	≥ 400 kHz	
Rise Time	≤ 2.0 µ sec	≤ 2.0 µ sec	
Non-Linearity	≤ 2.0 % FS	≤ 2.0 % FS	[2]
Environmental			
Acceleration Sensitivity	.02 psi/g	0.014 kPa/(m/s²)	[1]
Temperature Range(Operating)	-100 to +275 °F	-73 to +135 ℃	
Temperature Coefficient of Sensitivity	≤ 0.07 %/°F	≤ 0.126 %/°C	
Maximum Flash Temperature	3,000 °F	1,650 ℃	
Maximum Vibration	2,000 g pk	19,600 m/s² pk	
Maximum Shock	50,000 g pk	490,000 m/s² pk	
Electrical			
Output Polarity(Positive Pressure)	Positive	Positive	
Discharge Time Constant(at room temp)	> 1,000 sec	> 1,000 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	8 to 14 VDC	8 to 14 VDC	
Physical			
Sensing Geometry	Compression	Compression	
Sensing Element	Quartz	Quartz	
Housing Material	C-300	C-300	
Diaphragm	C-300	C-300	
Sealing	Ероху	Ероху	
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack	
Weight	0.6 oz	17 gm	

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.

H - Hermetic Seal Housing Material Maximum Shock Sealing

17-4 Stainless Steel 20,000 g pk Welded Hermetic

17-4 Stainless Steel 196,133 Welded Hermetic

M - Metric Mount

W - Water Resistant Cable

NOTES:

[1]Typical.

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

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

SUPPLIED ACCESSORIES:

Model 065A06 Seal ring 0.318" OD x 0.250" ID x 0.010" thk 316L SS material (3) Model PCS-2 Calibration of dynamic pressure sensors to full scale measurement range up to 100k

Entered: ND	Engineer: RPF	Sales: MV	Approved: RPF	Spec Number:
Date: 08/27/2024	Date: 08/27/2024	Date: 08/27/2024	Date: 08/27/2024	77296



AN AMPHENOL COMPANY

3425 Walden Avenue, Depew, NY 14043

CE UK UK

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^{\circledR} is a registered trademark of PCB Piezotronics, Inc.