

Model Number
176A07

CHARGE OUTPUT PRESSURE SENSOR

Revision: C
ECN #: 55057

Performance

	ENGLISH	SI	
Sensitivity(+/- 20 %)	7 pC/psi	101.5 pC/bar	
Measurement Range	725 psi	50 bar	
Maximum Pressure(Total)	4,000 psi	275.8 bar	
Resonant Frequency	≥ 100 kHz	≥ 100 kHz	
Transverse Resonance	> 15 kHz	> 15 kHz	
Frequency Response(± 5.0 %)	20,000 Hz	20,000 Hz	[1]
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[2]

Environmental

Acceleration Sensitivity	0.01 psi/g	0.0069 bar/g	[3]
Acceleration Sensitivity	0.004 psi/g	0.00028 bar/g	[4]
Temperature Range(Continuous)	-94 to 1,200 °F	-70 to 650 °C	
Temperature Range(Receptacle)	-76 to 900 °F	-60 to 483 °C	
Temperature Response	See Graph	See Graph	[4]
Radiation Exposure Limit(Integrated Neutron Flux)	1E10 N/cm ²	1E10 N/cm ²	
Radiation Exposure Limit(Integrated Gamma Flux)	1E8 rad	1E8 rad	

Electrical

Output Polarity(Positive Pressure)	Positive	Positive	
Capacitance(with cable)	250 pF	250 pF	[4]
Resistance(Pin-Pin)(Room Temp)	≥ 10 ¹² Ohm	≥ 10 ¹² Ohm	
Resistance(Pin-Case)(Room Temp)	≥ 10 ¹² Ohm	≥ 10 ¹² Ohm	
Resistance(Pin-Pin)(1200°F/650°C)	≥ 50 kohm	≥ 50 kohm	
Resistance(Pin-Case)(1200°F/650°C)	≥ 50 kohm	≥ 50 kohm	
Insulation Resistance	See Graph	See Graph	
Insulation Resistance	See Graph	See Graph	
Insulation Resistance	See Graph	See Graph	
Insulation Resistance	See Graph	See Graph	

Physical

Sensing Element	UHT-12™	UHT-12™	
Sensing Geometry	Compression	Compression	
Housing Material	Nickel Alloy	Nickel Alloy	
Sealing	Welded Hermetic	Welded Hermetic	
Cable Type	Hardline	Hardline	
Cable Length	3.0 ft	0.91 m	
Weight(with cable)	2.0 oz	57 gm	[4]

OPTIONAL VERSIONS

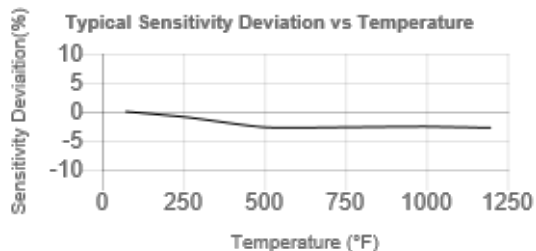
Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

NOTES:

- [1]Upper frequency response is calculated from Resonant Frequency.
- [2]Zero-based, least-squares line method.
- [3]Maximum.
- [4]Typical.
- [5]See PCB Declaration of Conformance PS058 for details.

SUPPLIED ACCESSORIES:

Model 060A25 Clamp Nut (1)
Model 40890-04 Silver Plate, SS, Seal (3)
Model PCS-1 Calibration of dynamic pressure sensors at 100% full scale, max 15 kpsi range.



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.

Entered: ND	Engineer: AJA	Sales: MV	Approved: RPF	Spec Number:
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