

**Model Number**  
116A05

# CHARGE OUTPUT PRESSURE SENSOR

Revision: NR  
ECN #: 55557

**Performance**

	ENGLISH	SI	
Sensitivity(+/- 15 %)	7 pC/psi	101.5 pC/bar	
Measurement Range	100 psi	6.9 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**

Maximum Shock(Axially)	2,000 g pk	19,620 m/s <sup>2</sup> pk	[3]
Acceleration Sensitivity	0.01 psi/g	0.007 kPa/(m/s <sup>2</sup> )	[4]
Acceleration Sensitivity	0.004 psi/g	0.0028 kPa/(m/s <sup>2</sup> )	[5]
Temperature Range(Operating)	-320 to 800 °F	-196 to 427 °C	
Temperature Response	See Graph	See Graph	[5]
Maximum Flash Temperature	3,000 °F	1,650 °C	

**Electrical**

Output Polarity(Positive Pressure)	Negative	Negative	
Capacitance	27 pF	27 pF	[5]
Case Isolation(800°F/430°C)	≥ 50 kohm	≥ 50 kohm	
Insulation Resistance(Room Temp)	≥ 10 <sup>12</sup> Ohm	≥ 10 <sup>12</sup> Ohm	
Case Isolation(Room Temp)	≥ 10 <sup>12</sup> Ohm	≥ 10 <sup>12</sup> Ohm	
Insulation Resistance(800°F/430°C)	≥ 50 kohm	≥ 50 kohm	

**Physical**

Sensing Element	UHT-12™	UHT-12™	
Sensing Geometry	Compression	Compression	
Housing Material	Nickel Alloy	Nickel Alloy	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack	
Weight	0.61 oz	17.2 gm	[5]

**OPTIONAL VERSIONS**

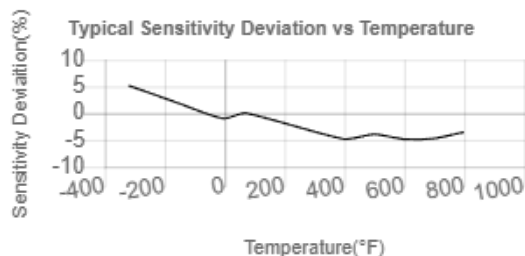
Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

**NOTES:**

- [1]Upper frequency response is calculated from Resonant Frequency.
- [2]Zero-based, least-squares line method.
- [3]Half-sine pulse duration, 1 msec
- [4]Maximum.
- [5]Typical.
- [6]See PCB Declaration of Conformance PS158 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 up to 100% 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: AK	Sales: RWM	Approved: RPF	Spec Number:
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