

Model Number
176A04

CHARGE OUTPUT PRESSURE SENSOR

Revision: E
ECN #: 54257

Performance	ENGLISH	SI	
Sensitivity(± 20 %)	15.5 pC/psi	225 pC/bar	
Measurement Range	300 psi	20.7 bar	
Maximum Pressure(Total)	1,450 psi	100 bar	
Resonant Frequency	≥ 50 kHz	≥ 50 kHz	
Transverse Resonance	10 kHz	10 kHz	[1]
Frequency Response	10 kHz	10 kHz	[2][3]
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[4]
Environmental			
Acceleration Sensitivity	≤ 0.01 psi/g	≤ .00069 bar/g	
Temperature Range(Continuous)	-65 to 662 °F	-54 to 350 °C	
Temperature Range(Intermittent)	-320 to 752 °F	-196 to 400 °C	
Temperature Response	See Graph	See Graph	[1]
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	Differential	Differential	
Capacitance	45 pF	45 pF	[5]
Resistance(Pin-Pin)(Room Temp)	≥ 10 ⁹ Ohm	≥ 10 ⁹ Ohm	
Resistance(Pin-Case)(Room Temp)	≥ 10 ⁹ Ohm	≥ 10 ⁹ Ohm	
Resistance(Pin-Pin)(572°F/300°C)	≥ 10 ⁷ Ohm	≥ 10 ⁷ Ohm	
Resistance(Pin-Case)(572°F/300°C)	≥ 10 ⁷ Ohm	≥ 10 ⁷ Ohm	
Physical			
Sensing Element	UHT-12™	UHT-12™	
Sensing Geometry	Compression	Compression	
Housing Material	Nickel Alloy	Nickel Alloy	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	2-Pin	2-Pin	
Weight	3.9 oz	122 g	

OPTIONAL VERSIONS

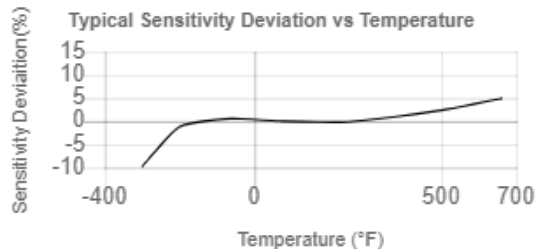
Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

NOTES:

- [1]Typical.
- [2]Upper frequency response is calculated from Resonant Frequency.
- [3]Low frequency response is determined by external signal conditioning electronics.
- [4]Zero-based, least-squares, straight line method.
- [5]Nominal.

SUPPLIED ACCESSORIES:

Model 100-15954-30 Metric Mounting screws (M5 x 0.8mm x 18mm long) (3)



Entered: ND	Engineer: RPF	Sales: DPC	Approved: RPF	Spec Number:
Date: 10/12/2023	Date: 10/12/2023	Date: 10/12/2023	Date: 10/12/2023	59473

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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