



**Sensonetics, Inc**

## **SEN-700 Series Extremely High Temperature Pressure Transducers**



State-of-the-art Silicon-on-Sapphire pressure transducers have a proven track record in the aerospace, flight test, plastics and down-hole markets. Piezoresistive strain gages are epitaxially grown onto a single-crystal radiation-hardened structure with virtually undetectable hysteresis and non-repeatability. Sapphire is a perfect electrical insulator that does not require diode isolation junctions found on diffused semiconductor pressure transducers. Sapphire is chemically inert allowing compatibility with virtually all media.

Sensonetics' model 700 pressure transducers offer a significant improvement in performance over bonded foil strain gage and diffused semiconductor technologies at competitive prices. These transducers are perfect for high volume OEM applications on hydraulic test stands, injection molding machines, paper machines, sterilizers, liquid level, gas pipelines and other applications where rugged high accuracy pressure measurements are required.

Available with a variety of pressure ports and electrical connectors, the 700 series transducers have custom packaging for high volume OEM applications. Fully compensated temperature ranges, above those available from foil strain gage technologies, up to 500°F can be ordered today.

If accuracy, stability and price are important to you, consider Sensonetics 700 Series Silicon-on-Sapphire Pressure Transducers for your pressure measurement needs.

**EHT SPECIFICATIONS**

**PRESSURE RANGES (PSI)** 15, 25, 30, 50, 100, 200, 500, 1,000, 2,000, 3,000, 5,000, 10,000.

**PROOF PRESSURE** 150% FSO

**BURST PRESSURE** 300% FSO

**LINEARITY** +/-0.30 (BFSL)

**REPEATABILITY** 0.1% FSO

***TEMPERATURE RANGE/EFFECTS***

**COMPENSATED RANGE** 80 to 700°F

**OPERATING RANGE** 80 to 700° F

**STORAGE RANGE** 0 to 150°F

**EFFECT ON ZERO** +/- .02%/FS/° F

**EFFECTS ON SPAN** +/- .02%/FS/° F

***ELECTRICAL PARAMETERS***

**FULL SCALE OUTPUT** 2-3 mV, 0-5 VDC, 0-10 VDC, 4-20mA

**EXCITATION/POWER** 6-12 VDC for mV output units

12-36VDC for amplified units

**INSULATION RESISTANCE** 100 Meg Ohms @ 50 VDC

***MECHANICAL PARAMETERS***

**CASE MATERIAL** 300 series welded SS, hermetically sealed

**WETTED MATERIAL** 300 series SS and sapphire

**CONNECTOR** 6 or 8 pin Bendix, others available

**PRESSURE FITTINGS** 1/4"NPTM, 1/4"NPTF, MS33656-E4, 9/16" Snotrik

## ORDERING GUIDE

Model/Output	Pressure Range	Configuration	Pressure port	Connector
		A- Absolute	1/4" NPTM	C1 - 6 pin
SEN701 (2-3mV)	See Above (Press)	G- Gage	1/4" NPTF	C2 = 8 pin
SEN702 (2-3mV)	See Above (Press/Temp)	S- Sealed Gage	Snotrik	CD = Flying Leads
SEN711 (0-5VDC)	See Above (Press)		MS33656-E4	
SEN712 (0-5VDC)	See Above (Press/Temp)			
SEN721 (4-20mA)	See Above (Press)			
SEN722 (4-20mA)	See Above (Press/Temp)			
SEN731 (0-10VDC)	See Above (Press)			
SEN732 (0-10VDC)	See Above (Press/Temp)			

EXAMPLE: SEN701-100G-250-1-C1