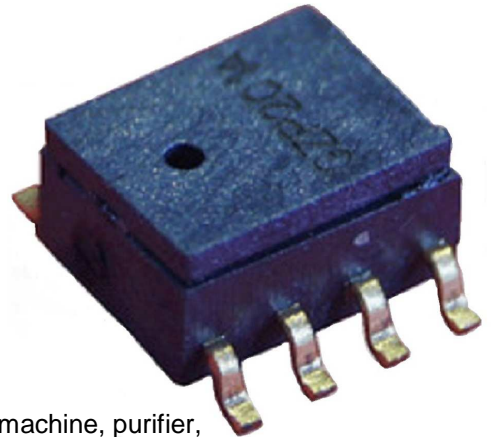


MAIN FEATURES:

- Ranges. 0~100kPa...1000kPa (0~15psi...150psi)
- MEMS technology
- Absolute
- For non-corrosive gas or dry air
- Easy to use and embed in OEM equipment
- Working Temp.: -10°C ~ +100°C



APPLICATIONS:

- For small household appliances field, such as electric cooker, milk machine, purifier, coffe machine, medical instruments and device.
- For automotive electronics field, such as tire pressure gauge, MAP sensor etc.
- For other fields, such as massage appliance, air spring and air bed, animals blooding pressure equipment, gastrointestinal medical device, etc.

INTRODUCTION:

GM-SO8 is a piezoresistive pressure sensor that was designed for extremely space sensitive application where the sensing element is to be integral to the OEM products. The core is a silicon piezoresistive pressure sensing die that is designed and fabricated by MEMS technology. The pressure sensing die is composed of a springy diaphragm and four resistors integrated in the diaphragm. When the springy diaphragm is pressured, Wheatstone bridge produces a linear voltage signal (mV) that is proportional to input pressure.

ELECTRIC PERFORMANCE:

- Power supply $\leq 10\text{VDC}$ or $\leq 2.0\text{mADC}$
- Input impedance: $4\text{k}\Omega\sim 6\text{k}\Omega$
- Output Impedance: $4\text{k}\Omega\sim 6\text{k}\Omega$
- Insultion resistor: $100\text{M}\Omega$, 100VDC
- Over pressure: 1.5X rated pressure

CONSTRUCTION:

- Sensing die: silicon
- Leading wire: gold wire
- Package housing: PPS (Phenylene sulphide)
- Net weight: 0.5g
- Pin: Golden plated copper

ENVIRONMENT CONDITION:

- Orientation: deviate 90° from any direction, zero change $\leq 0.05\%$ FS
- Shock: no change at 10gRMS , (20~2000)Hz condition
- Impact: 100g, 11ms
- Medium compatability:
 - o Pressure side: air or gas compatible with silicone, silicone glue, epoxy glue or PPS
 - o Reference side: dry air and non-corrosive gas compatible with PPS, silicone glue or epoxy, gold, aluminium and silver.

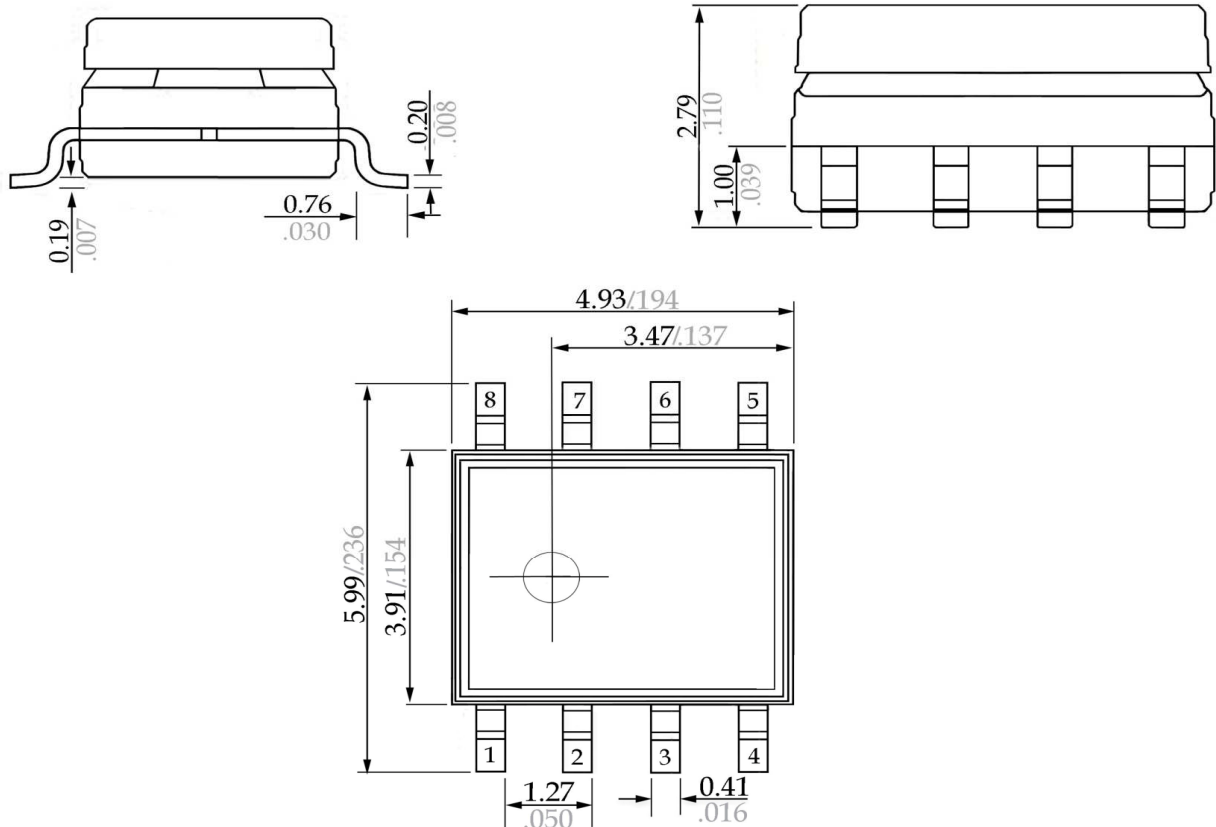
BASIC CONDITION:

- Medium: Gas (clean, air and non-corrosive gases)
- Medium Temp.: (25±1)°C / (77±1.8)°F
- Environment Temp.: (25±1)°C / (77±1.8)°F
- Shock: 0.1g (1m/s²) max.
- Humidity: (50%±10%) RH
- Power supply: 5±0.005)VDC

SPECIFICATIONS:

	Min.	Typ.	Max.	Unit
Range	100-350-700-1000-1600			kPa
	15-52.5-105-150-241			PSI
	1-3.5-7-10-1600			bar
Ambient Temp.	-10/-14		+100/212	°C/°F
Storage Temp.	-40/-40		+125/257	C/°F
Bridge Resistance	4	5	6	kΩ
Zero Output	-30		+30	mV
FS Output	50	100	150	mV
Temp. Coeff-resistance	2400	2800	3200	ppm/°C
Temp. Coeff-Zero	-0.2		0.2	%FS/°C
Temp. Coeff-span	-0.25	-0.21	-0.17	%FS/°C
Non-Linearity	-0.3		0.3	%FS
Hysteresis	-0.3		0.3	%FS
Repeatability	-0.3		0.3	%FS
Annual drift	-1.0		1.0	mSec.
Note: Unless otherwise specified, measurements were taken on base of above testing condition.				

OUTLINE DIMENSIONS:



Global Measurement Srl
 Via Olona 183/N, 21013 GALLARATE (VA)
 Tel: 0331/786999 Fax: 0331/213964
info@global-measurement.it www.global-measurement.it

PIN CONNECTION:

PIN	1	2	3	4	5	6	7	8
Definition B1	N/C	Vo-	N/C	GND	N/C	Vo+	N/C	Vs+

Symbol	Vs+	GND	Vo+	Vo-
Definition	Power+	Power-	Output+	Output-

HOW TO ORDER:

XGZP8	Piezo-resistive Pressure Sensor			
	Code	Range		
	101	0~100kPa		
	351	0~350kPa		
	701	0~700kPa		
	102	0~1000kPa		
	162	0~1600kPa		
		Code		
		S	SOP	
			Code	Pressure Type
			A	Absolute
XGZP8	201	S	A	the whole spec.