



Model PSC627 Plastic Package Gauge Pressure Sensor for Low to Medium Pressure Industry and General Purpose Applications

PSC627 was developed for low cost printed circuit board mounted pressure measurements. The design incorporates state of the art digital temperature correction of a micro-machined silicon pressure die for high end accuracy and stability. The design offers a very cost effective solution.

The wetted parts are PPS Silicon, Pyrex and RTV. Plastic housing: 6 pin DIP PCB mounting. Well suited for compressed air applications.

Available output types: Analog or Digital output.



- Gauge Pressures
- ASIC Temperature Compensated
- 2.5 % Total Error Band
- Process Port: Male Needle
- Housing: Plastic (PPS)
- Electrical Connection: Leads (6 Pins)

Sample Applications:

- Compressed Air
- Moisture Air

PSC627 Ordering Model NO.: PSC627X-Y	
X	Y
A=Analog	Pressure Range
	1 = 1 Psi (G)
	2 = 5 Psi (G)
D=Digital	3 = 15 Psi (G)
	4 = 50 Psi (G)
	5 = 100 Psi (G)
	6 = 150 Psi (G)
	7 = 200 Psi (G)

Electrical data	PSC627A (Ratiometric)	PSC627D
Supply Voltage	4.0 ~ 5.5 VDC	3.0 ~ 5.0 VDC
Output	0.5 ~ 4.5 VDC	

Digital output type:	
Output	I ² C(0x28 Fixed and Locked)
Update Rate	1.5ms
Clock Frequency	4MHZ
Temperature Calculation	Temp output[C]=(High_Temp[7:0]x8+Temp_Low[7:5])/2 ¹¹ x200-50

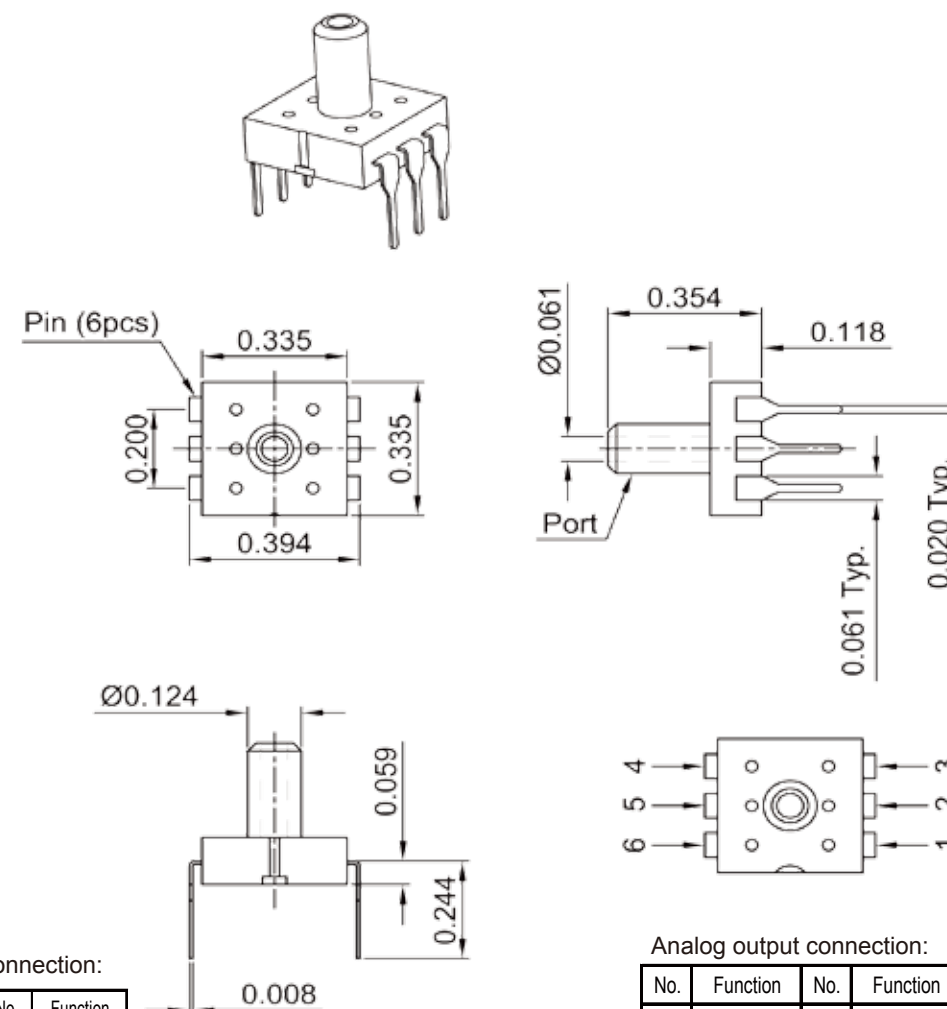


Model PSC627 Pressure Sensor with Digital Output for Low to Medium Pressure Industry and General Purpose Applications

Performance (specified @ 25 °C)	
Accuracy (Best fit straight line)	± 0.5% FS
Error (TEB)	± 2.5% FS
Stability (typical)	< ±0.25% full scale per year
Compensated Temperature Range	-30°C ~ 50°C
Operating Temperature Range	-40°C ~ 105°C
Storage Temperature Range	-40°C ~ 125°C
Burst Pressure	1 ~ 100psig : 3 X Full Scale 150psig & 200psig : 325psig
Proof Pressure	1.5 X Full Scale
Fatigue Life	1 Million Full Scale Pressure Cycles At 0.5 Hertz



Structure reference (Unit: Inch[mm])



Digital output connection:

No.	Function	No.	Function
1	GND	4	SCL
2	INT/SS	5	SDA
3	VDD	6	TEST*

* Pin 6 not recommend to connect to any electrical circuit.

Analog output connection:

No.	Function	No.	Function
1	GND	4	VDD
2	*TEST PIN	5	SO
3	GND	6	VDD

* Pin 2 not recommend to connect to any electrical circuit.