MEMS Pressure Sensor Datasheet

1. General Introduction

M0102 is an MEMS Process & Gauge type MEMS pressure sensor especially designed for applications requiring pressure measurement from -0.8 to 0.48 bar. The pressure sensor is based on the industry-recognized piezo-resistive technology featuring long-term stability and EMC robustness.

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2. Features

Operation range: -0.8~0.48 bar

Gauge type sensor

Constant current or constant voltage drive

MEMS process technology

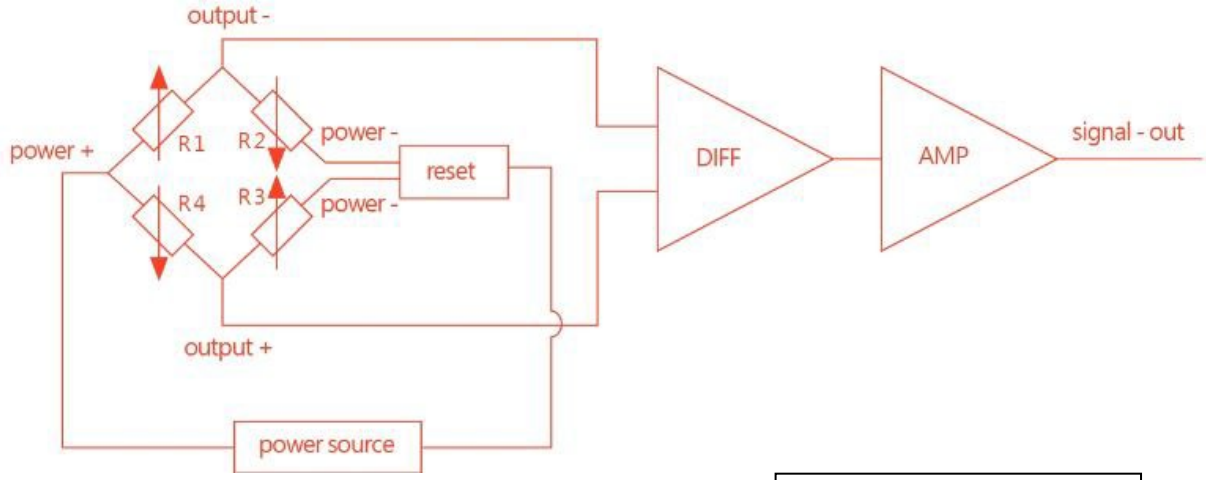
3. Applications

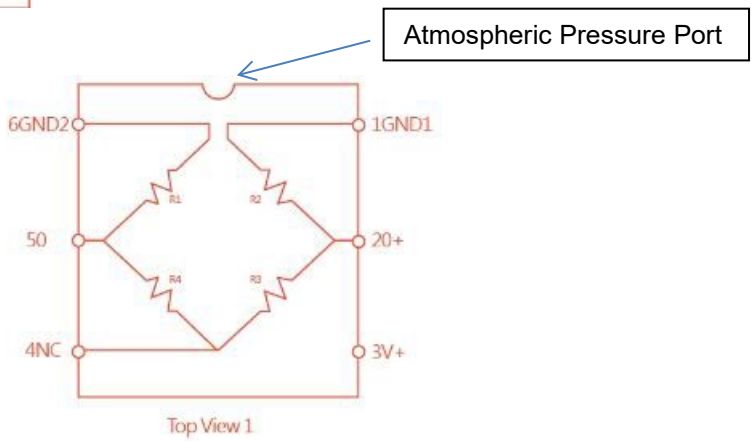
Blood pressure measurement
Industrial control
Pressure gauge

4. Specifications

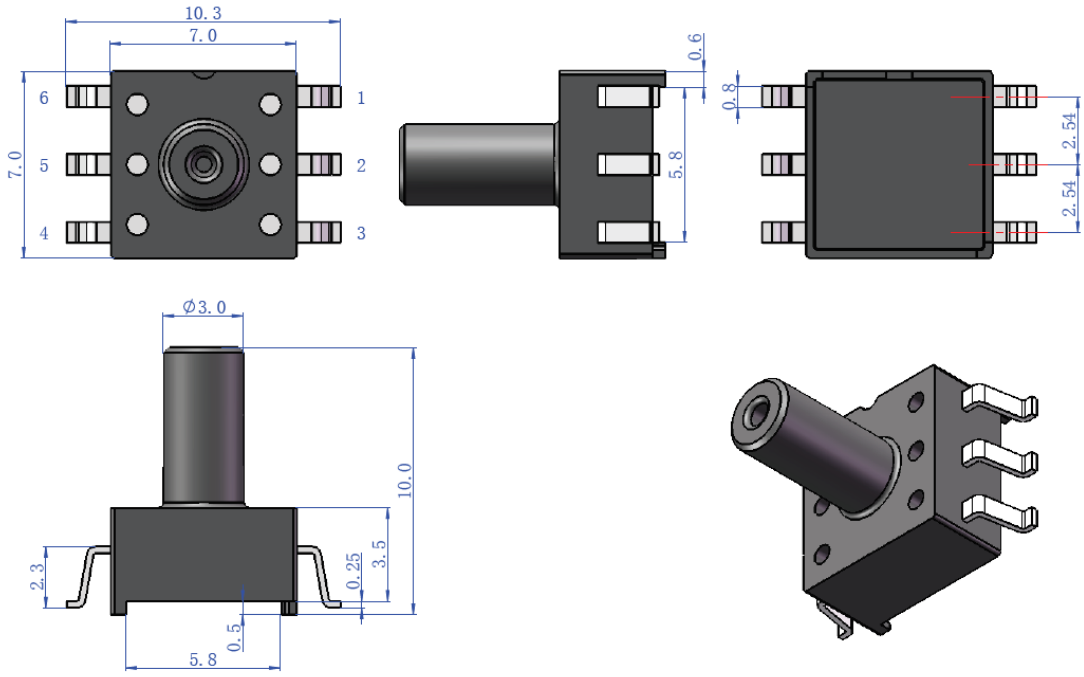
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Operation Voltage	Vin		—	5	10	V
Operation Current	I0		—	1	2	mA
Bridge Impedance			4.5	5	5.5	kΩ
Pressure Range			-0.8		0.48	bar
Full Scale Span	FS%	Vin=5V	60	80	90	mV
Offset		Vin=5V	-15	0	15	mV
Linearity			-0.3	±0.15	+0.3	%FS
TC Span		Constant voltage	-0.17	-0.22	-0.27	%FS/°C
		Constant current	-0.08	±0.02	+0.08	%FS/°C
TC Offset			-0.08	-0.05	+0.08	%FS/°C
Burst Pressure			—	—	3X	Rated FS
Temperature Range			-40	25	+85	°C
Storage Temperature			-40		+125	°C

5 · Schematic Diagram





6 · Pin Layout and Definition



Pin#	Name	Description
1	GND	Ground Pad 1
2	Vout+	Analog Output Voltage +
3	Vin	Power Supply in
4	NC	No Connection inside
5	Vout-	Analog Output Ooltage -
6	GND	Ground Pad 2

7． Packing Instructions

6.1 70pcs/pipe，1400pcs/box,16800pcs/case
6.2 Vibration-proof packaging
6.3 MOQ: 5K

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