

GMPB01 Silicon Pressure Sensor

General Introduction

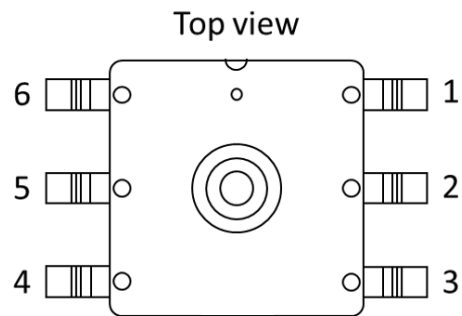
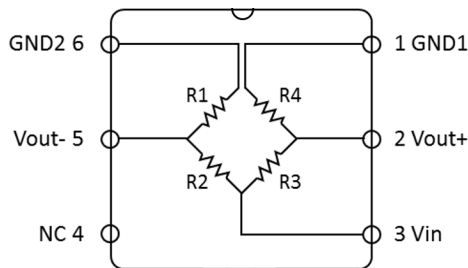
GMPB01 is a gauge type silicon pressure sensor especially designed for applications requiring highly-precision pressure measurement from 0 to 40kPa. The pressure sensor is based on the industry-recognized piezo-resistive technology featuring long-term stability and EMC robustness. Both DIP or SOP type of packages are available.

Features

- Operation range: 0~40kPa
- Gauge type sensor
- SOP6 or DIP6 package
- Low cost

Applications

- Medical instrumentation
- Industrial sensor
- Pressure gauge
- Home appliance



GMPB01-0S



GMPB01-0P



GMPB01-0B

Pin Descriptions

Pin#	Name	Description
1	GND1	Ground pin 1
2	Vout+	Signal out +
3	Vin	Power supply in
4	NC	No connection
5	Vout-	Signal out -
6	GND2	Ground pin 2

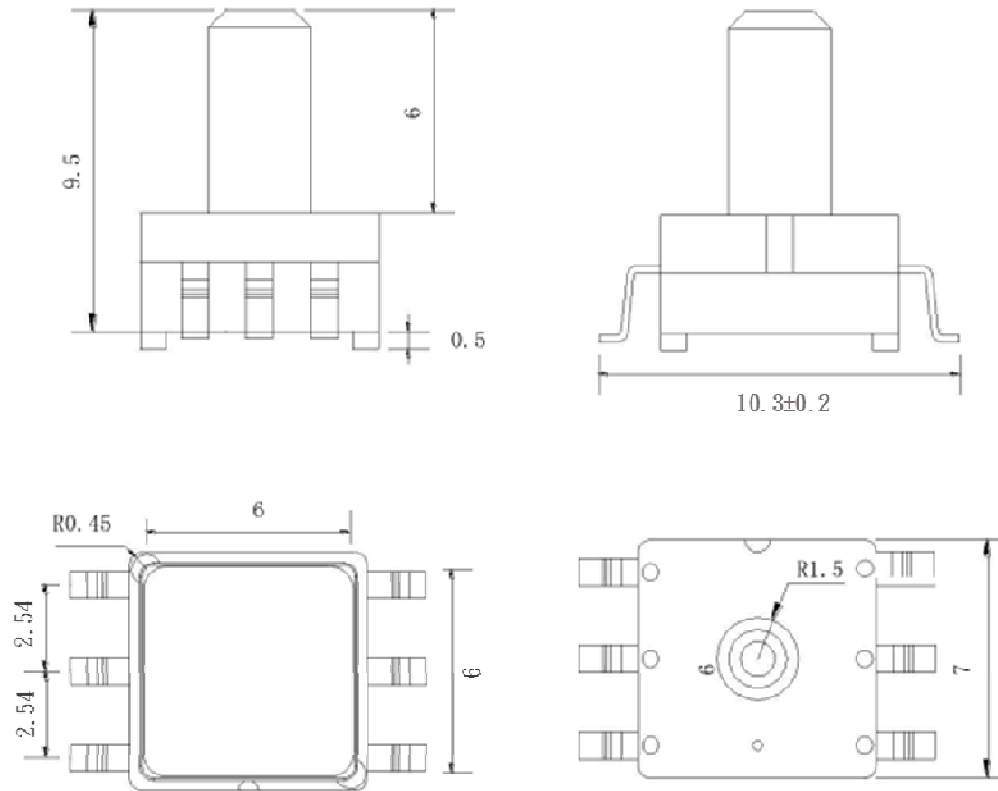
Specifications

Parameter	Condition	Min.	Typ.	Max.	Unit
Excitation voltage		—	5	10	V
Bridge impedance		4.6	5.6	6.6	k Ω
Span		0	—	40	kPa
Full scale span	Vin=5V	60	50	80	mV
Offset	Vin=5V	-15	0	15	mV
TC resistance		1500	2000	2500	ppm/°C
TC span	Constant voltage	-0.27	-0.22	-0.17	%V _{FS} /°C
	Constant current	-0.05	—	0.05	%V _{FS} /°C
TC offset		-0.08	—	0.08	%V _{FS}
Linearity	Best fit straight line		±0.5		%V _{FS}
Hysteresis			±0.5		%V _{FS}
Proof pressure				2X	FS
Burst pressure				3X	FS
Operating temperature		-40		+125	°C
Storage temperature		-55		+150	°C

Package

GMPB01-0S (SOP6 Tube)

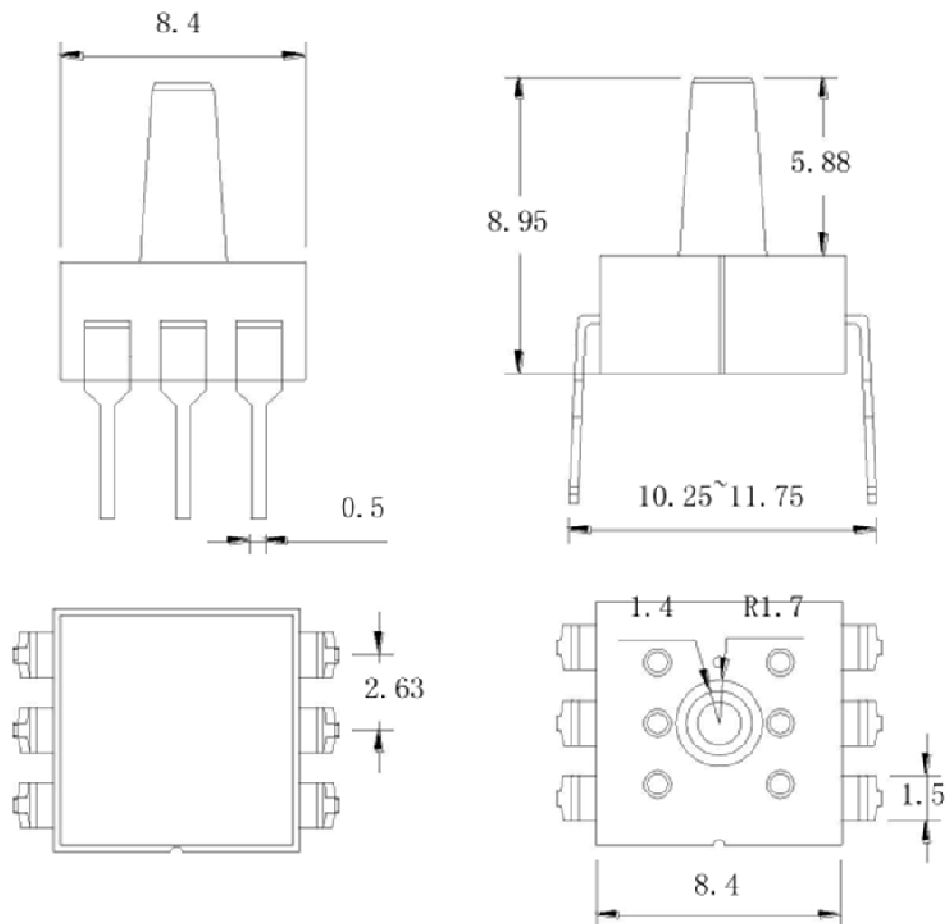
Unit: mm



Package

GMPB01-0P (DIP Top Tube)

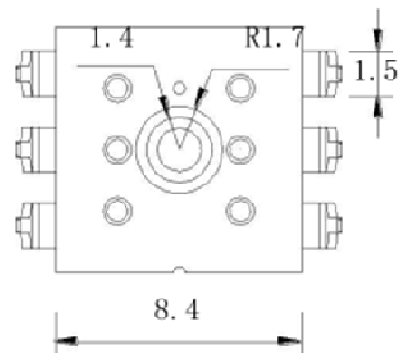
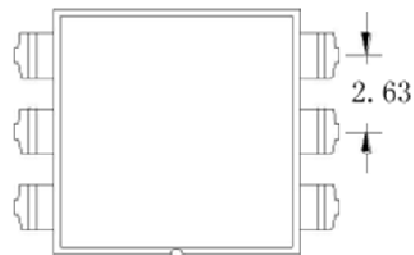
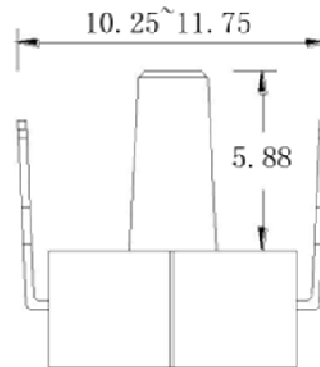
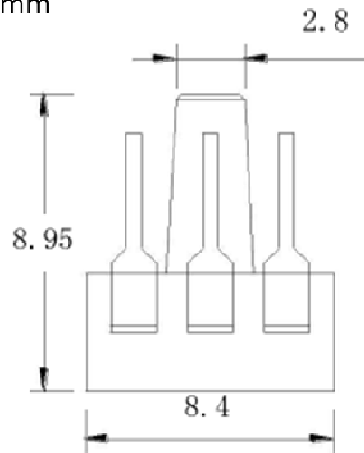
Unit: mm



Package

GMPB01-0B (DIP Bottom Tube)

Unit: mm



Document History and Modification

Revision No.	Description	Date
V0.1	Preliminary first release	2018/5/29
V0.32	High sensitivity version	2018/11
V0.33	Normal sensitivity version	2018/11
V0.34	Modified the span and offset specification	2019/10/7