



# PZP111 SMD-type Absolute Pressure Sensors

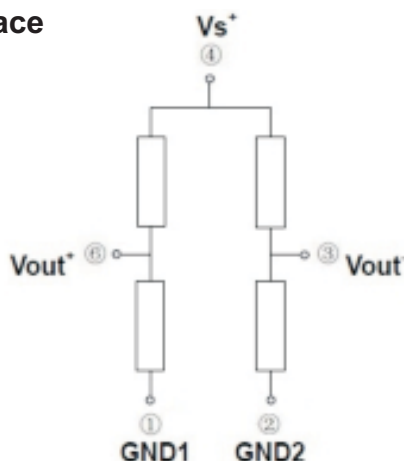
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## Introduction

PZP111 is a SMD-type absolute pressure sensor. It is designed for cost sensitive application and intended for measuring non-corrosive and non-conductive media. It is based on a micro-machined silicon piezoresistive chip which is integrated on a 5.0 × 5.0mm of PPA board. The chip is effectively protected against humidity by neutral soft silicone adhesive. Its open-loop circuit design makes subsequent circuit processing more convenient. Its output signal is highly ratiometric (or proportional) to the pressure loaded with non-linearity of 0.3%FS ( typical ).



## Electrical Interface



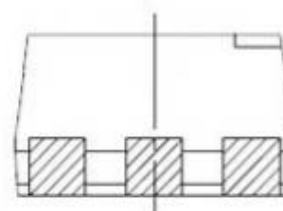
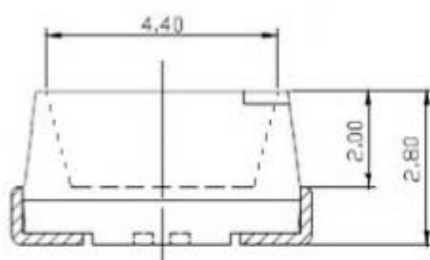
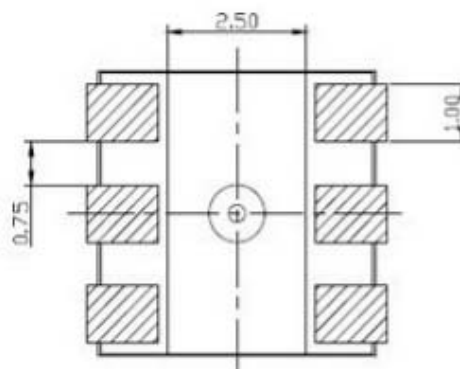
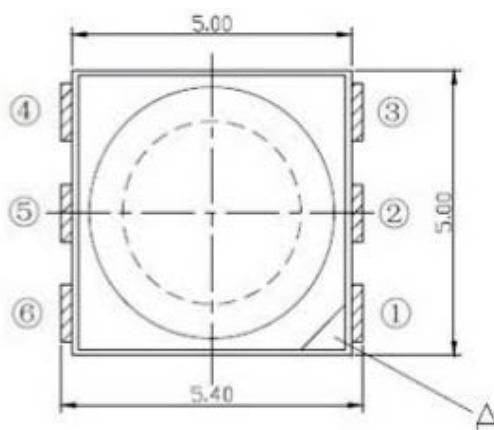
## Features

- Pressure range : 0~1bar, 0~2bar, ... , 0~20bar
- Pressure types: absolute
- Non-linearity: 0.3%FS ( typical )
- No temperature compensated
- Excited by either current or voltage
- Operating temperature range: -40°C ~ +125°C
- Low cost, high reliability and long-term stability

## Applications

- Industrial process control
- Engine control
- Barometer, altimeter, tire pressure gauge
- Weather forecast system

## Dimensions



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Note: all dimensions are in mm.



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## Specifications

Parameter	Units	Data (*)			Notes
		Min	Typical	Max	
Pressure type & ranges	bar	–	Absolute(A): 0~1, ~2, ~5, ~7, ~10, ~20	–	[1]
Overload pressure	%FS	–	–	300	[2]
Excitation ( Voltage )	V	2	5	15	
Excitation ( Currency )	mA	0.5	1	3	
Full scale output	@1bar	mV	50	70	90
	@2bar	mV	100	130	160
	@5bar	mV	45	60	75
	@7bar	mV	70	100	130
	@10bar	mV	90	120	150
	@20bar	mV	100	130	160
Zero offset	mV	-20	0	+20	
Non-linearity	%FS	0.1	0.3	0.5	
Bridge resistance	KΩ	4.5	5	5.5	
Operating temperature range	°C	-40	–	+125	
Storage temperature range	°C	-40	–	+150	
Temperature coefficient of zero	uV/°C	-80	–	80	
Temperature coefficient	ppm/°C	-1500	-2000	-2400	
Hysteresis	%FS	–	–	0.2	
Repeatability	%FS	–	–	0.2	

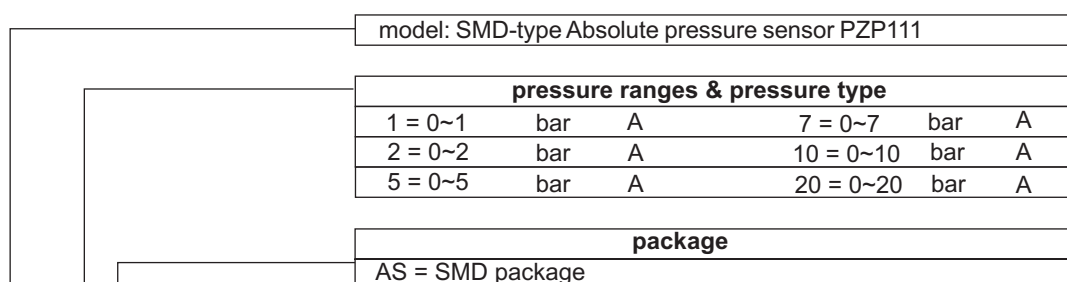
Notes:

(\*). Testing Conditions: ambient temperatur = 25°C, excitation voltage = 5Vdc, humidity = 30% .

[1]. For customized pressure ranges, please consult Proza.

[2]. "FS" refers to full scale pressure or rated pressure.

## Ordering Guide



ordering code: PZP111-10-AS-(\*)

(\*): Customized specifications

## Order Notes

For any critical working environment or pressure media, please inform PROZA before order.

## Proza Electronic Technology

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