



**GHPP6115**

(10kPa~115kPa)

## Description

The GHPP6xxx series piezoresistive sensors use advanced design, extensive application of MEMS silicon pressure sensor that combines advanced micromachining techniques. They use the latest CMOS signal conditioning circuit to provide an accurate, high precision analog output signal that is proportional to applied pressure. The cost effective and high performance sensor is designed to meet the strict requirements of OEM customers.

The GHPP6115 is fully calibrated and temperature compensated with a total error band(TEB)of less than 1.5% $V_{FSS}$ over the compensated range. And the sensor is designed for operation from a single 5.0VDC supply.

The GHPP6115 is a SOP14 packaged pressure sensor and is available to measure absolute pressure in range from 10kPa to 115kPa.

## Features

- Operating Temperature: -40°C~125°C
- SOP14 Package
- Absolute Pressure

## Applications

- Manifold Absolute Pressure (MAP)
- Engine Control

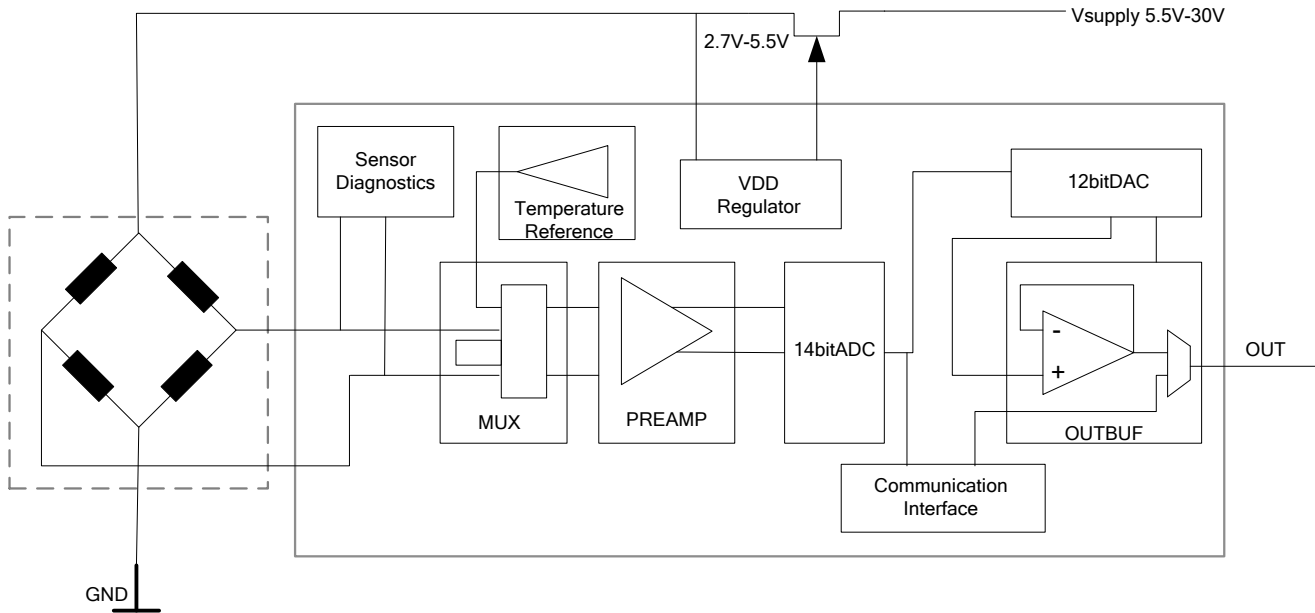
## Ordering Information

Type	Package	Pressure Port	Pressure Type	Marking
GHPP6115Ac14	SOP14	Tubeless	Absolute	GHPP6115Ac14

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**Block Diagram**

**Operating Characteristics**

Characteristics	Conditions	Min	Typ	Max	Unit	Notes
Supply Voltage	TA = 25 °C	4.75	5.0	5.25	V	
Output Current	TA = 25°C	1.5	2.0	2.5	mA	
Zero Output (@5.0V, 10kPa)	TA = 25°C	0.133	0.2	0.268	V	
Full Scan Output (@5.0V, 115kPa)	TA = 25°C	4.633	4.7	4.768	V	
Full Scale Span (@5.0V)	TA = 25°C	4.365	4.5	4.635	V	
TEB	0°C~85°C			±1.47	%V <sub>FSS</sub>	
Sensitivity			42.9		mV/kPa	
Compensated Temperature		-40		+125	°C	
Operating Temperature		-40		+125	°C	
Storage Temperature		-40		+125	°C	
Humidity	TA = 25°C	95			%RH	No Condensing
Proof Pressure	TA = 25°C	3X			FS	
Burst Pressure	TA = 25°C	5X			FS	
ESD	HBM	-2		+2	kV	EN 61000-4-2
Soldering Temperature	@265°C, 9 sec max					

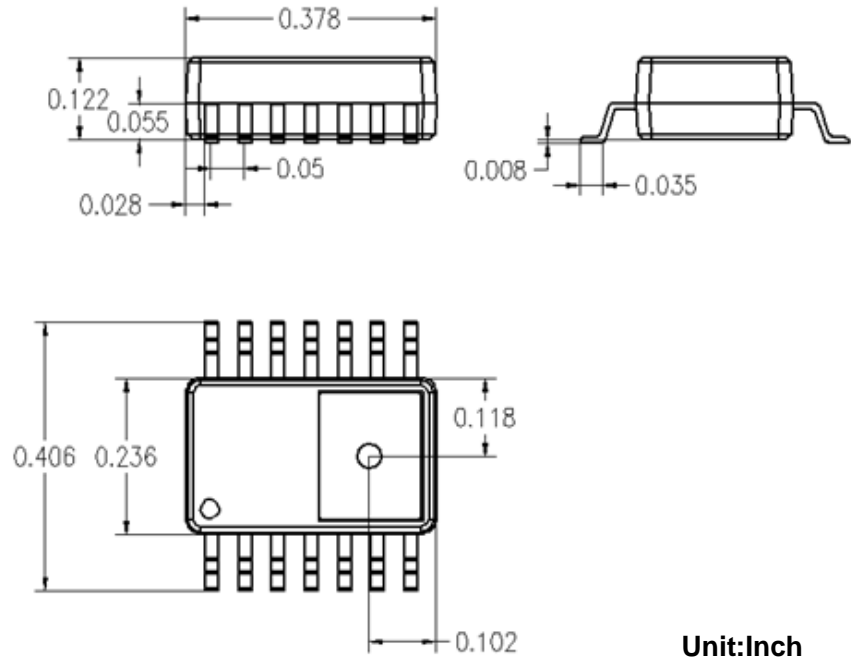
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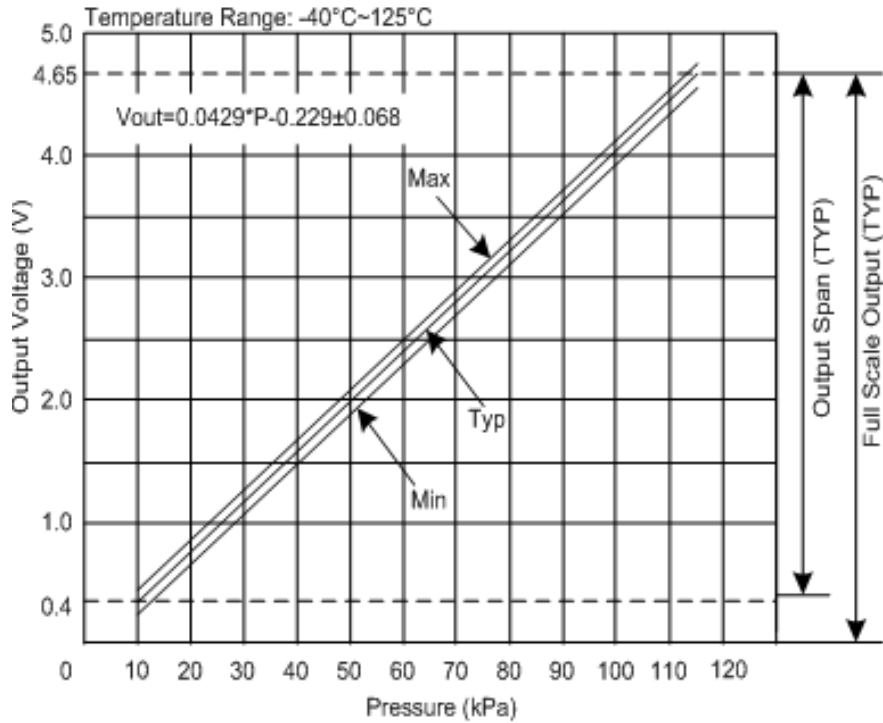
**Package Dimensions**

**Package Dimensions of GHPP6115Ac14**



**Output Versus Pressure**

**Input-output Diagram of GHPP6115Ac14**

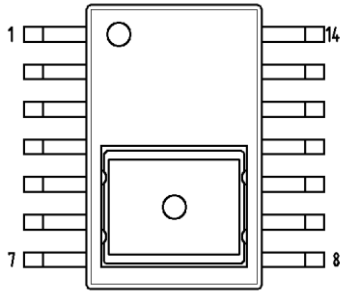


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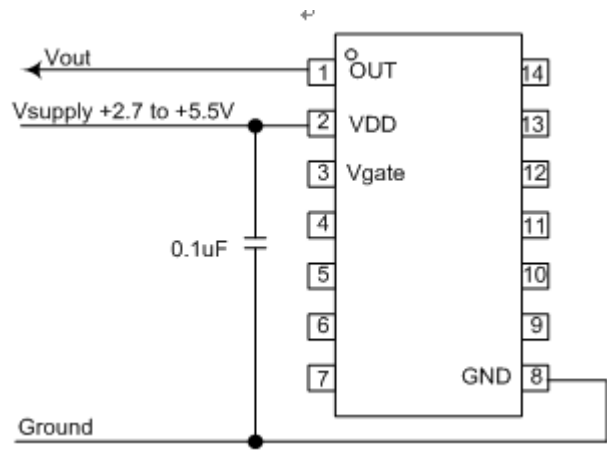
**Pin Definition**



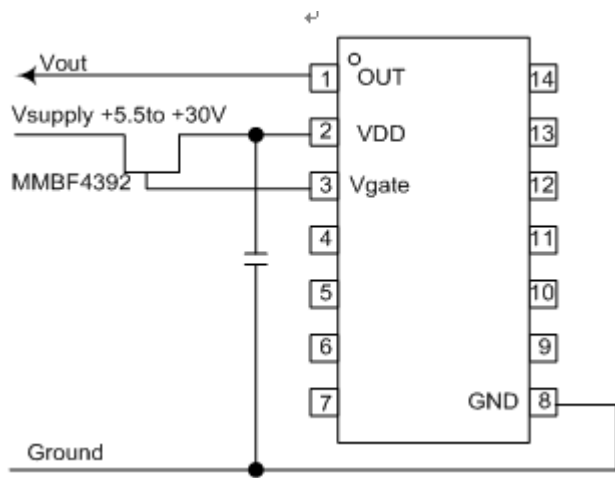
Pin	Definition	Description
1	OUT	Output
2	VDD	Supply+
3	Vgate	External FET
8	GND	Ground

**Typical Application Circuit**

**Ratio-metric Output Circuit**



**Absolute Voltage Output Circuit**

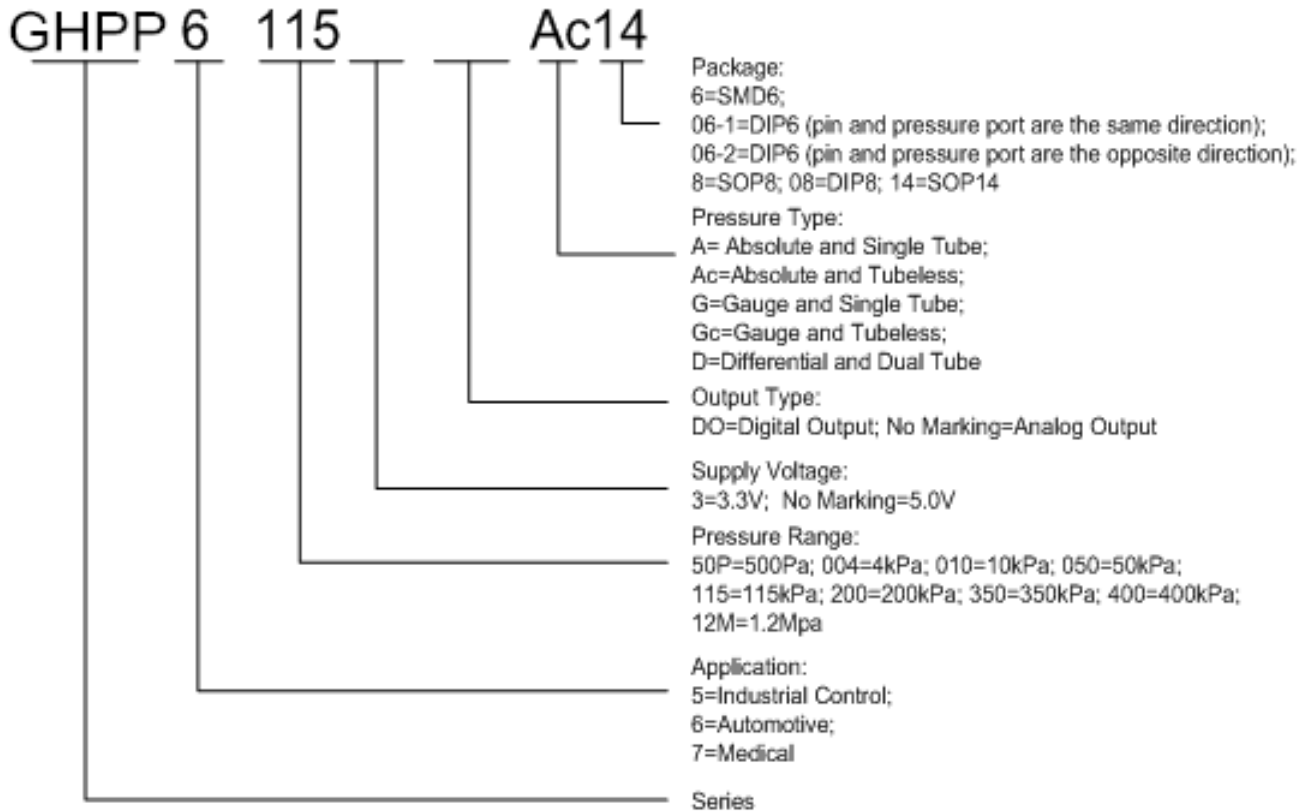


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### User Guide



### Notes:

All specifications are subject to change. Contact Gaohua for specifications and engineering drawings that are critical to your application. Drawings contained in this document are for reference only.

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