



GHPP6400
(20kPa~400kPa)

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 GHPP6400 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 GHPP6400 is a SOP14 packaged pressure sensor and is available to measure absolute pressure in range from 20kPa to 400kPa.

Features

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

Applications

• Compressed Natural Gas Pressure (CNG)
• Engine Control

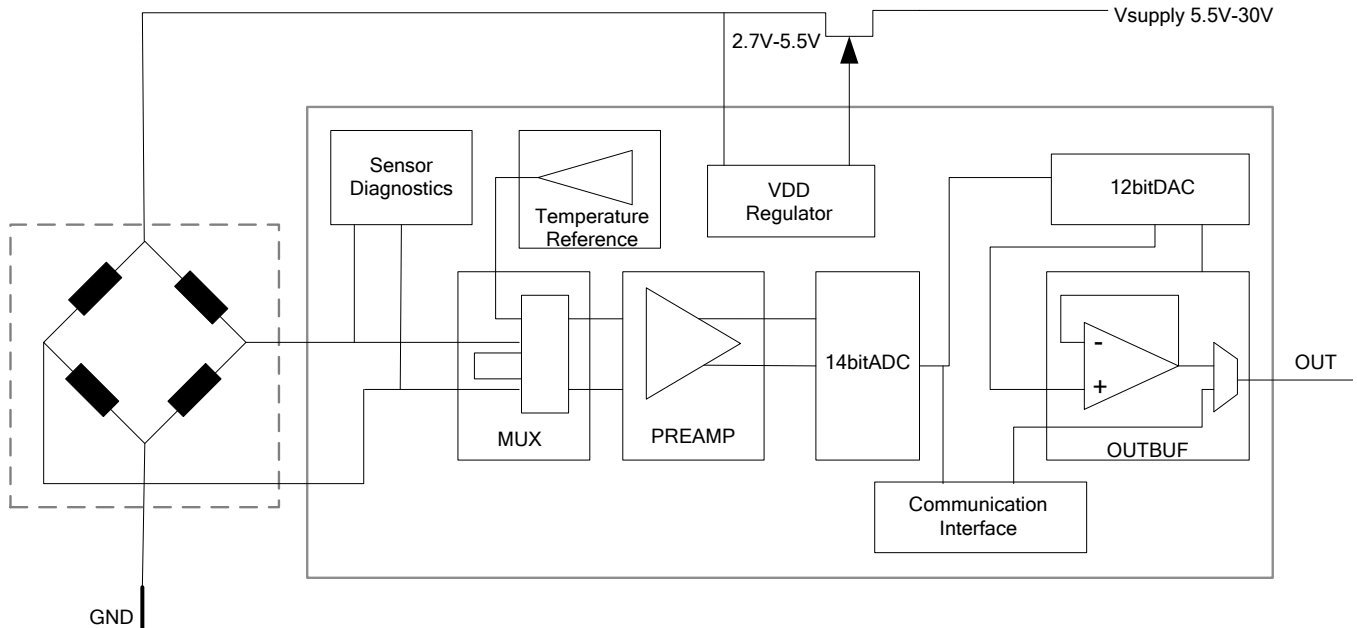
Ordering Information

Type	Package	Pressure Port	Pressure Type	Marking
GHPP6400A14	SOP14	Straight Pipe	Absolute	GHPP6400A14

ADD: NO.2 Shenma Road, Maqun Science Park, Nanjing, Jiangsu Province, China.

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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, 20kPa)	TA = 25°C	0.133	0.2	0.267	V	
Full Scale Output (@5.0V, 400kPa)	TA = 25°C	4.733	4.8	4.866	V	
Full Scale Span (@5.0V)	TA = 25°C	4.467	4.6	4.733	V	
TEB				±1.5	%VFSS	
Sensitivity			12.1		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					

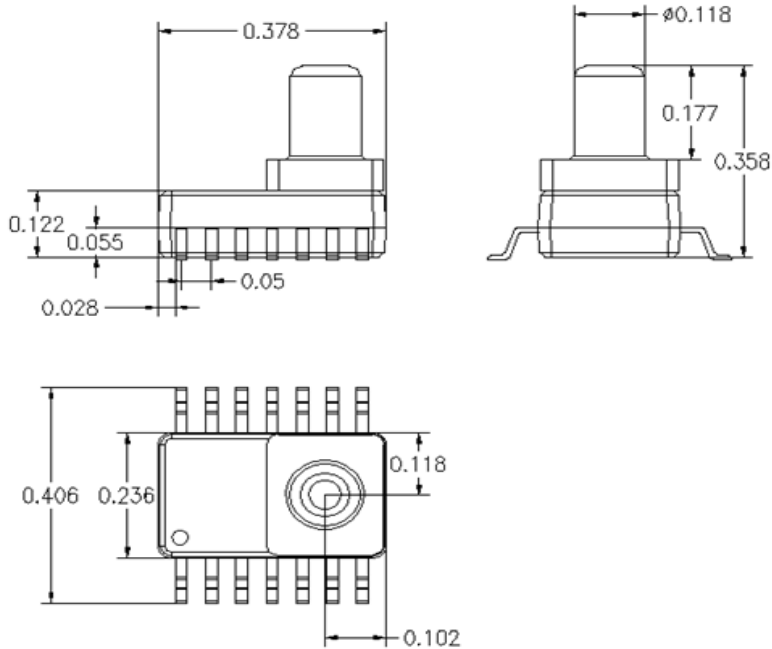
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Package Dimensions

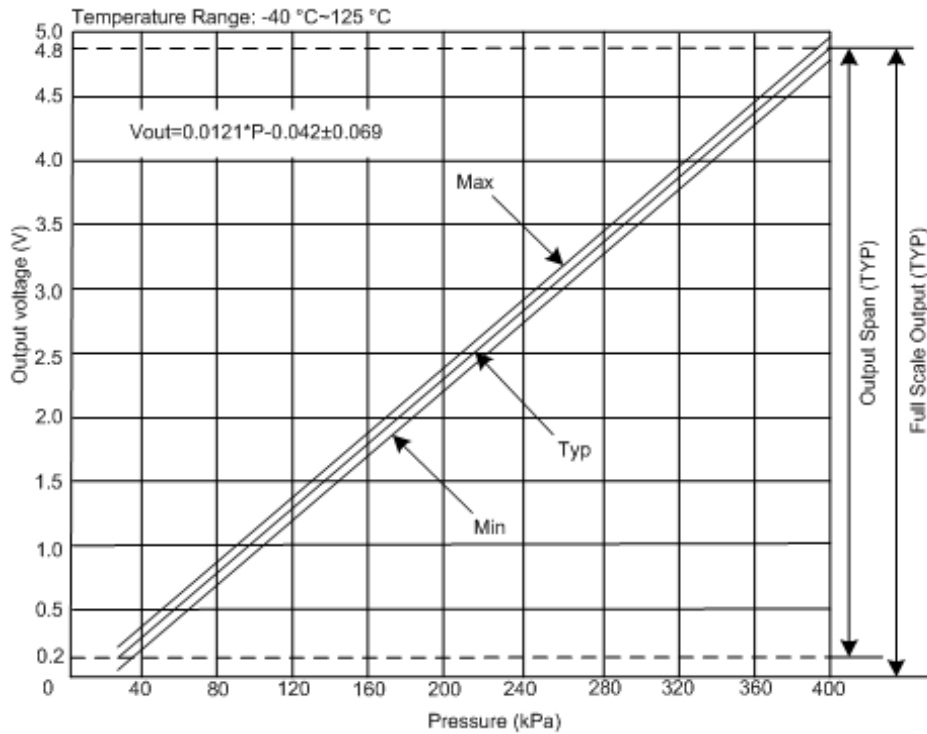
Package Dimensions of GHPP6400A14



Unit: Inch

Output Versus Pressure

Input-output Diagram of GHPP6400A14

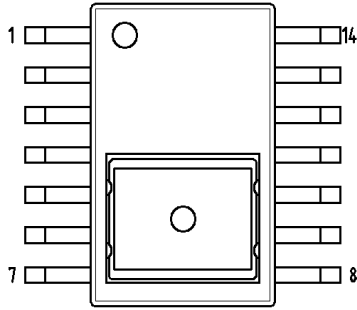


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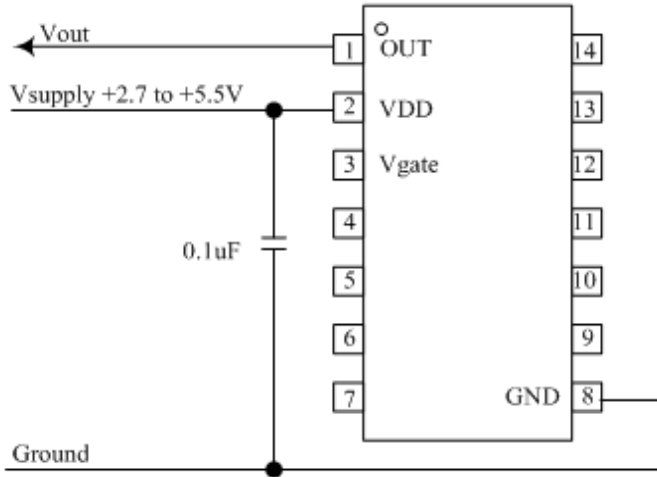
Pin Definition



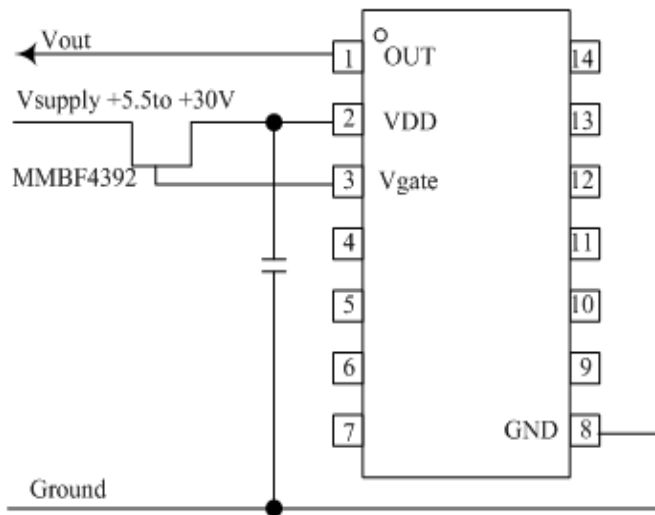
Pin	Definition	Description
1	OUT	Output
2	VDD	Supply+
3	Vgate	External FET
8	GND	Ground

Typical Application Circuit

Ratio-metric Output Circuit



Absolute Voltage Output Circuit

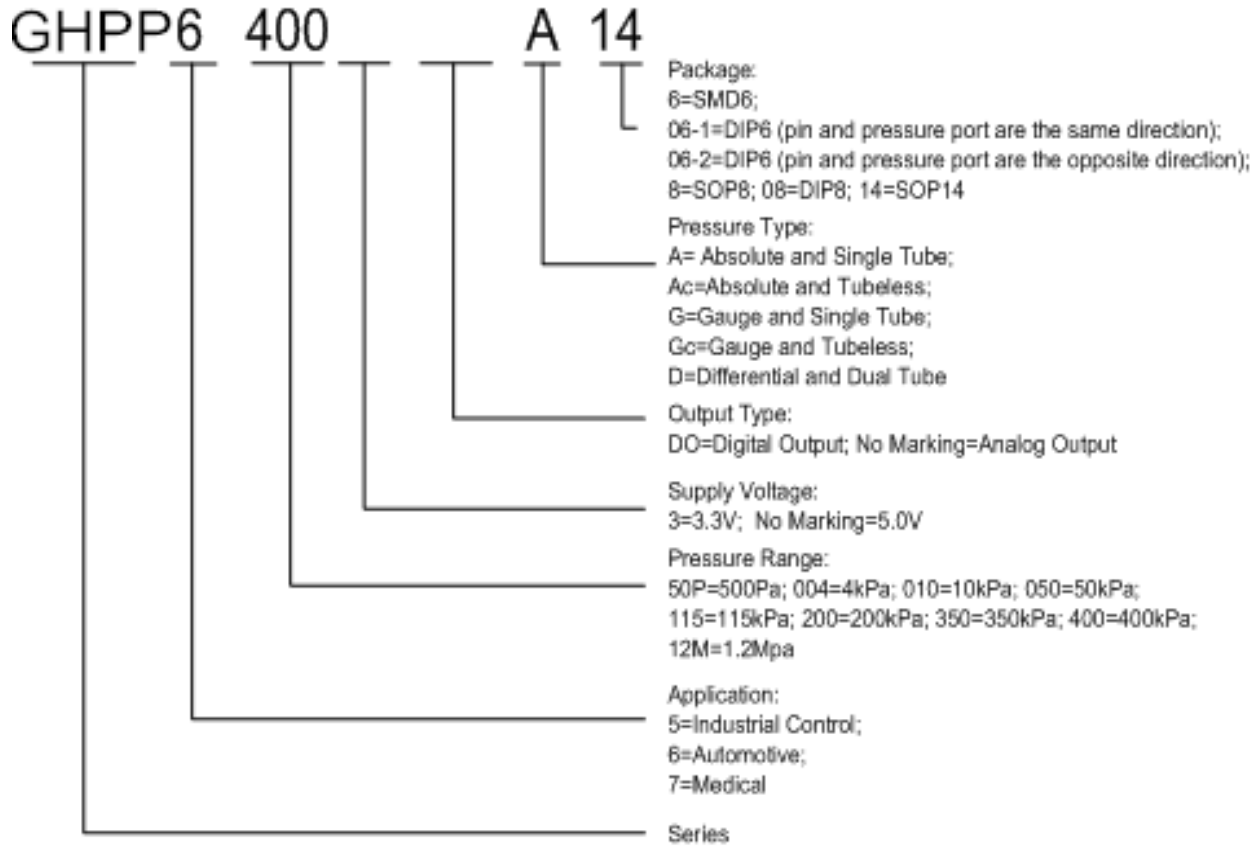


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User Guide



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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