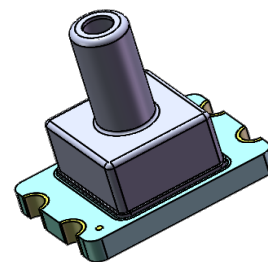


Product Features

- Small size: LGA-4 8*5.5*8mm
- Operating temperature: -40°C to 125°C
- Range : 40KPa
- Linearity: 0.3% (typical value)
- Low cost, high reliability

Application

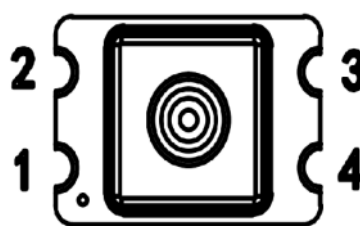
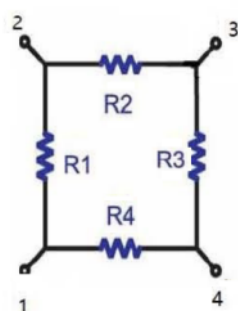
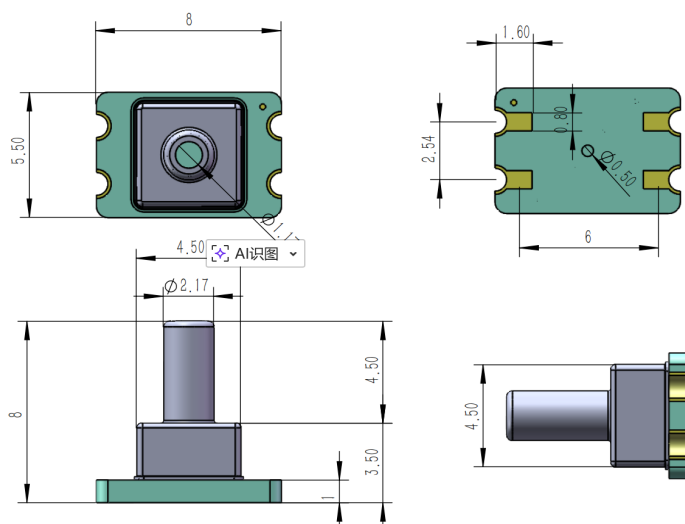
- Medical field
- Consumer Electronics
- Industrial Control
- Gauge Pressure
- SensorSystem areas



Product Description

The WF155A series gauge pressure sensor is an LGA4 packaged diffused silicon piezoresistive pressure sensor. This product is widely used in non-corrosive, non-conductive atmospheric pressure environments and exhibits good repeatability and long-term operational stability.

External dimensions and pin definitions (unit: mm)



Top view

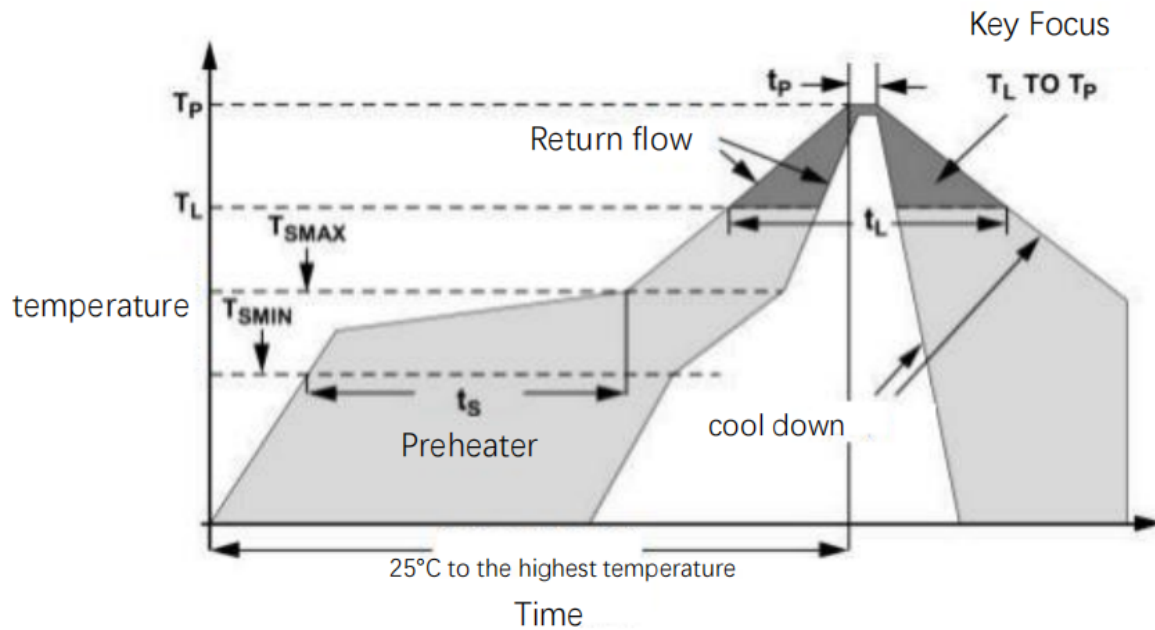
Pin No.	1	2	3	4
Definition (EN)	Vout-	VDD	Vout+	GND

Performance Parameters

(Chip operating environment: Drive voltage VS+=5Vdc; Ambient temperature Ta=30℃)

Parameter		Min	Typical	Max	Unit
Constant Voltage Supply		-	5	10	V
Constant Current Supply		-	1	2	mA
Pressure Range		5, 10, 20, 40, 100, 200, 300, 700, 1000			KPa
Bridge Resistance		4.5	5	5.5	kΩ
Zero Output Range		-15	0	+15	mV
Full Scale Output Range 20KPa		35	50	65	mV
Full Scale Output Range 40, 100, 200, 700KPa		60	80	100	mV
Full Scale Output Range 1000KPa		65	100	135	mV
Non-linearity		0.2	0.3	0.5	%FS
Zero Output Temp. Coefficient		-	-	0.5	%FS/°C
Full Scale OutputTemp. Coefficient TCS	Const. Voltage Supply	-0.17	-0.22	-0.27	%FS/°C
	Const. Current Supply	-0.05	0.025	0.05	%FS/°C
Resistance Temp. Coefficient		1500	2000	2500	ppm/°C
Stability		-	-	0.2	%FS/Y
Hysteresis		-	-	0.2	%FS/Y
Pressure Overload 20, 40, 100, 200KPa				3X	
Pressure Overload 700, 1000KPa					
Operating Temperature		-40	-	125	°C
Storage Temperature		-40	-	150	°C

Reflow Soldering Recommendations:



Stage	Guideline Value (Dimensionless)
Ramp-up Rate ($T_{S\text{MAX}}$ to T_P)	$\leq 3^\circ \text{ C/s}$
Preheat Minimum Temperature ($T_{S\text{MIN}}$)	150° C
Preheat Maximum Temperature ($T_{S\text{MAX}}$)	200° C
Preheat Time (T_s : $T_{S\text{MIN}}$ to $T_{S\text{MAX}}$)	60 - 180 s
Reflow Minimum Temperature (T_L)	217° C
Time Above T_L (t_L)	60 - 150 s
Peak Reflow Temperature (T_P)	260° C
Time at Peak Temperature (t_P)	20 - 40 s
Cooling Rate	$\leq 4^\circ \text{ C/s}$
Time from 25° C to Peak Temperature	Max. 8 min

包装信息

