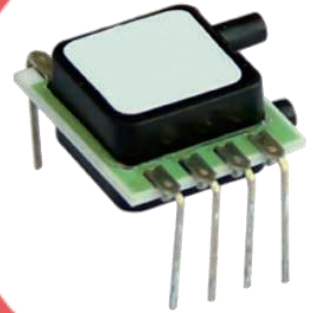


Piezoresistive pressure sensor

SSPS-TCA131



Product features

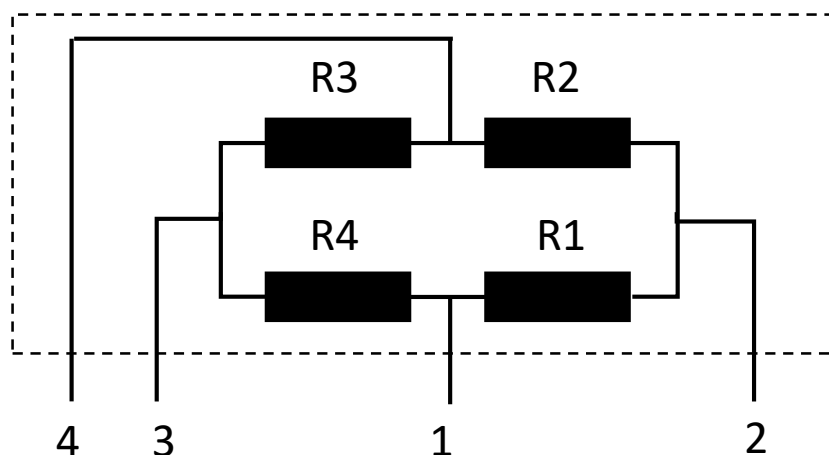
- One temperature compensation
- Signal output mV
- One-to zero and full-scale calibration one
- Can accept non-standard customization
- Can work at 5V
- Pressure range from inH₂O to 150 psi

SSPS-TCA131

Piezoresistive pressure sensor

Specifications for 25°C, 5 VDC.

| Parameters | MIN. | Typ. | MAX | Units |
|-------------------------------|----------------|------|------|-------|
| Supply voltage | | 5 | 12 | VDC |
| Pressure range | 0.02 | | 150 | psi |
| Offset | -0.5 | 0 | 0.5 | mV |
| input impedance | | 12 | | kΩ |
| output impedance | | 3 | | kΩ |
| Pressure accuracy | | ±0.1 | | %FS |
| Mode pressure | 10/inch 50/psi | | | psig |
| Compensated temperature range | 0 | | +70 | °C |
| Operating temperature | -25 | | +85 | °C |
| Storage temperature | -45 | | +125 | °C |



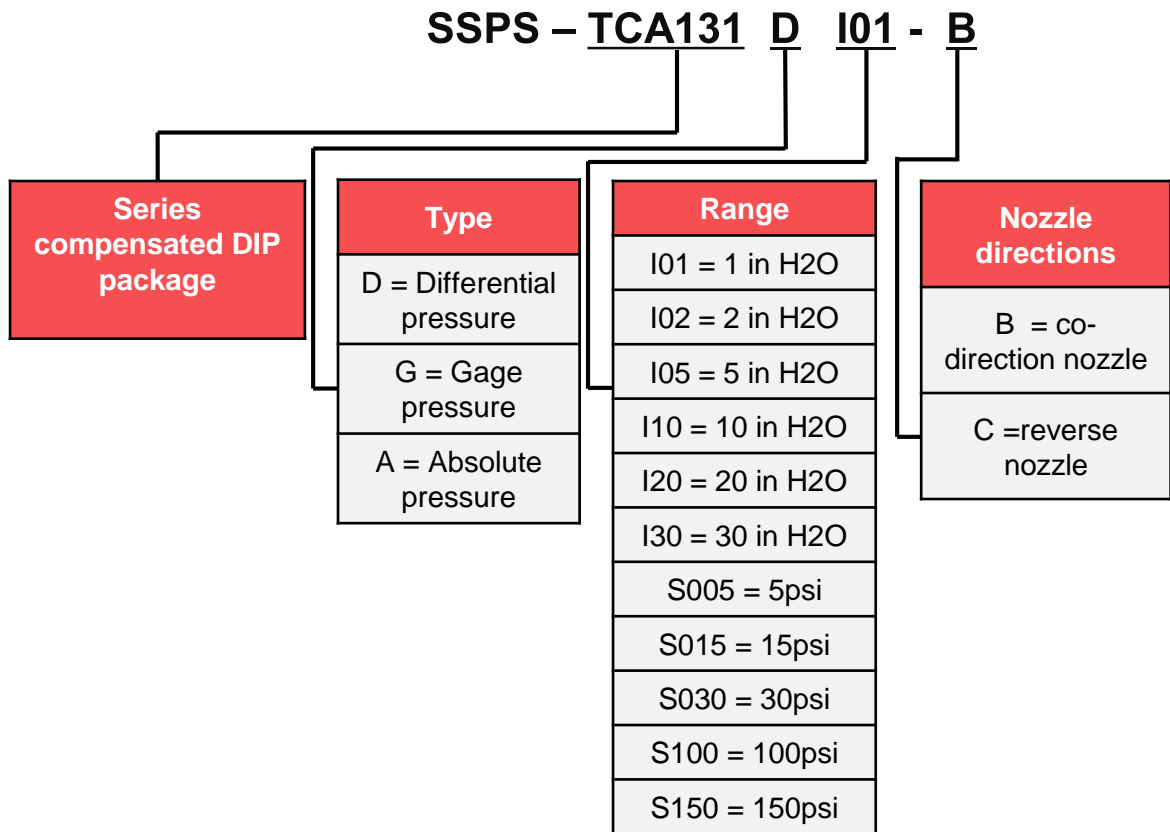
SSPS-TCA131

Piezoresistive pressure sensor

| PIN | Definition |
|-----|-----------------------|
| 1 | Negative power |
| 2 | Positive power output |
| 3 | Positive power |
| 4 | Negative power output |
| 5 | N/C |
| 6 | N/C |
| 7 | N/C |
| 8 | N/C |

- 1) The pin definition is the same for the entire series, but the zero point
- 2) The full-degree output and the range of the core circuit are different

Product model code table



SSPS-TCA131

Piezoresistive pressure sensor

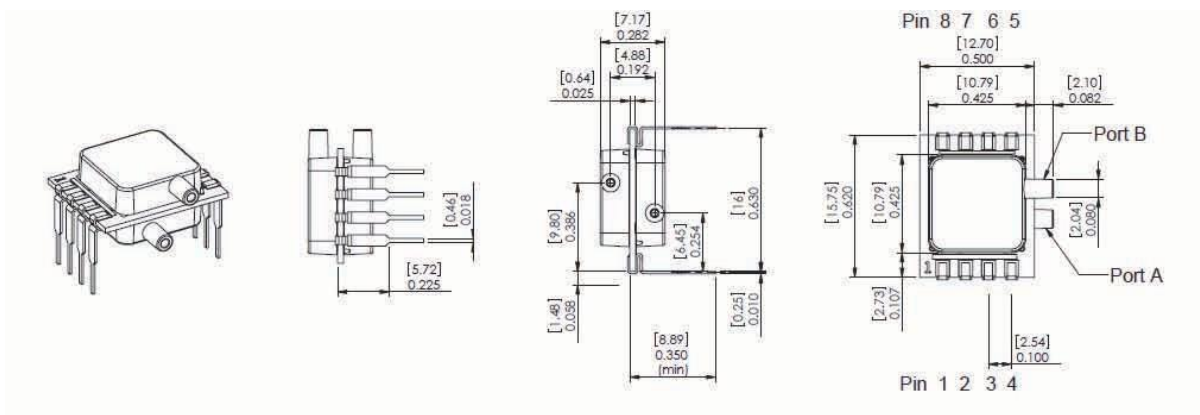
Table with FS value

| Parameters | Full scale output | | | Burst pressure (psi) |
|--------------------|-------------------|------|------|----------------------|
| | MIN | Typ | MAX | |
| SSPS-TCA131DI01.. | 6 | 7 | 8 | 3 |
| SSPS-TCA131DI02.. | 9 | 10 | 11 | 3 |
| SSPS-TCA131DI05.. | 14 | 15 | 16 | 6 |
| SSPS-TCA131DI10.. | 19 | 20 | 21 | 6 |
| SSPS-TCA131DI20.. | 19 | 20 | 21 | 6 |
| SSPS-TCA131DI30.. | 19 | 20 | 21 | 6 |
| SSPS-TCA131DS005.. | 24.5 | 25 | 25.5 | 10 |
| SSPS-TCA131DS015.. | 37.0 | 37.5 | 38.0 | 60 |
| SSPS-TCA131DS030.. | 37.0 | 37.5 | 38.0 | 90 |
| SSPS-TCA131DS100.. | 41.0 | 41.5 | 42.0 | 200 |
| SSPS-TCA131DS150.. | 37.0 | 37.5 | 38.0 | 200 |

SSPS-TCA131

Piezoresistive pressure sensor

Mechanical dimension



Precisions:

- 1) All sizes are inches (mm)
- 2) Reflow soldering up to 250 °C, 2~4 seconds
- 3) Unless otherwise stated, all parameters are measured at 25 °C and 5VDC power supply, and the pressure is applied to the positive pressure port B