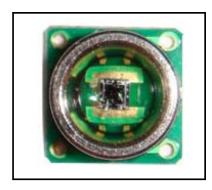


HRPF0100 RELATIVE PRESSURE SENSOR (0-100kPa)



- 0 to 100kPa gage pressure range
- MEMS technique relative pressure sensor
- · High sensitivity, high linearity
- Low cost SMD package
- RoHS-compatible & Pb-free

DESCRIPTION

The HRP series is a relative pressure sensor module, The design of the pressure sensor in the module is based on MEMS IC technology. The technology assures PN junction reverse current $< 10^{-10}$ A. The module has good linearity, sensitivity and high reliability.

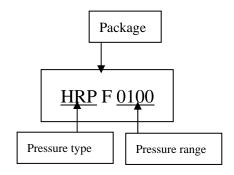
FEATURES

- Uncompensated pressure sensor
- Temperature Range -30°C ~ +135°C
- Small size
- Low Cost, High reliability

APPLICATION

- · breathing measurement
- pulse measurement
- · high speed analysis for small amounts of material
- · pressure switch
- environment control
- liquid level control
- Filter Blocked Sensor
- HVAC fan control
- leakage detection systems

Part number System

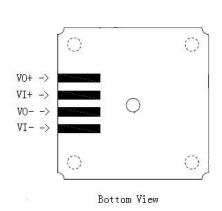


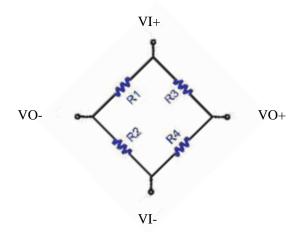


Electrical Characteristics

| | Min | Typical | Max. | Unit |
|---------------------------------|------|---------|-----------|--------------|
| Item | | | | |
| Pressure Range | | 15PSI | | |
| Supply voltage | 0 | 5.0 | 10.0 | Volts |
| currency | 0 | 1.5 | 3.0 | mA |
| Span | 70 | 100 | 130 | mV |
| Offset | -30 | 0 | 30 | mV |
| Temperature coefficient | -16 | -22 | -28 | %FS/100℃ |
| Temperature coefficient of Zero | -4 | -6 | -8 | %FS/100℃ |
| Nonlinearity | -0.2 | | +0.2 | %F.S |
| Bridge resistance | 4.0 | 5 | 6.0 | KΩ |
| Proof pressure | | | $2\times$ | Rated FS |
| Operating temperature | -40 | | 125 | $^{\circ}$ C |
| Storage temperature | -40 | | 125 | $^{\circ}$ |

Pin Configuration (SMD Pressure sensor)

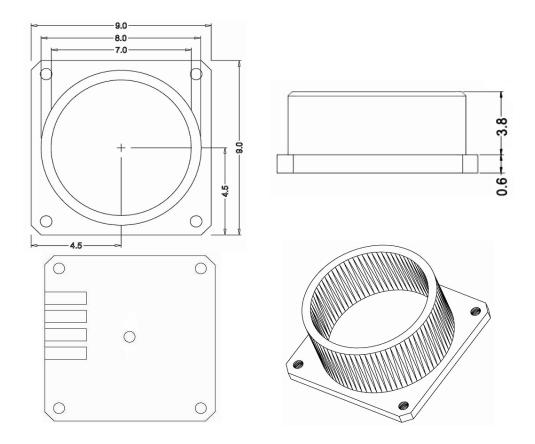




| Pin | Name | Comment | |
|-----|------|-----------------|--|
| 1 | VI- | GND | |
| 2 | VO- | Negative output | |
| 3 | VI+ | Supply votage | |
| 4 | VO+ | Positive output | |

HOPE RF

FR4 Package Outlines (all measures in mm)



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