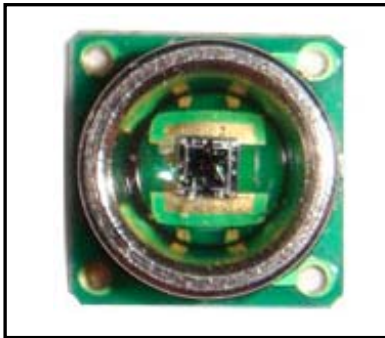


## HRPF0030 RELATIVE PRESSURE SENSOR (0-30kPa)



- 0 to 30kPa 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.

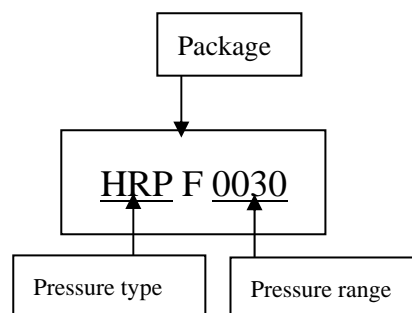
### FEATURES

- Uncompensated pressure sensor
- Temperature Range  $-30^{\circ}\text{C} \sim +135^{\circ}\text{C}$
- 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

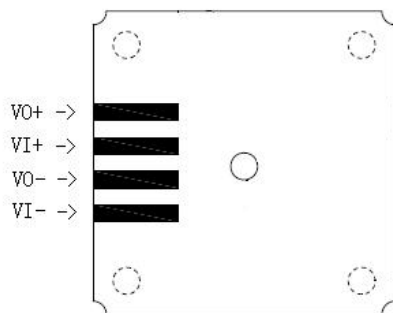
### Part number System



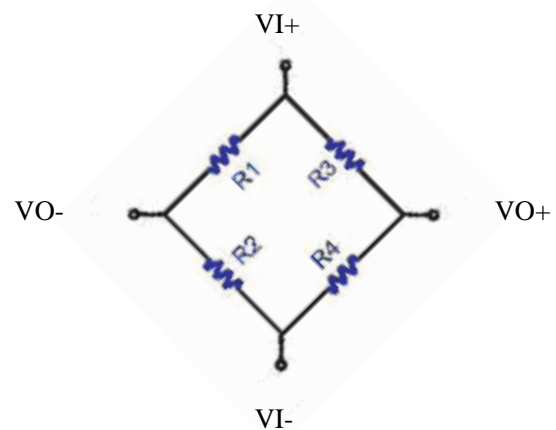
## Electrical Characteristics

| Item                            | Min  | Typical | Max. | Unit      |
|---------------------------------|------|---------|------|-----------|
| Pressure Range                  |      | 4PSI    |      |           |
| 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°C |
| Temperature coefficient of Zero | -4   | -6      | -8   | %FS/100°C |
| Nonlinearity                    | -0.2 |         | +0.2 | %F.S      |
| Bridge resistance               | 4.0  | 5       | 6.0  | K Ω       |
| Proof pressure                  |      |         | 2×   | Rated FS  |
| Operating temperature           | -40  |         | 125  | °C        |
| Storage temperature             | -40  |         | 125  | °C        |

## Pin Configuration (SMD Pressure sensor)

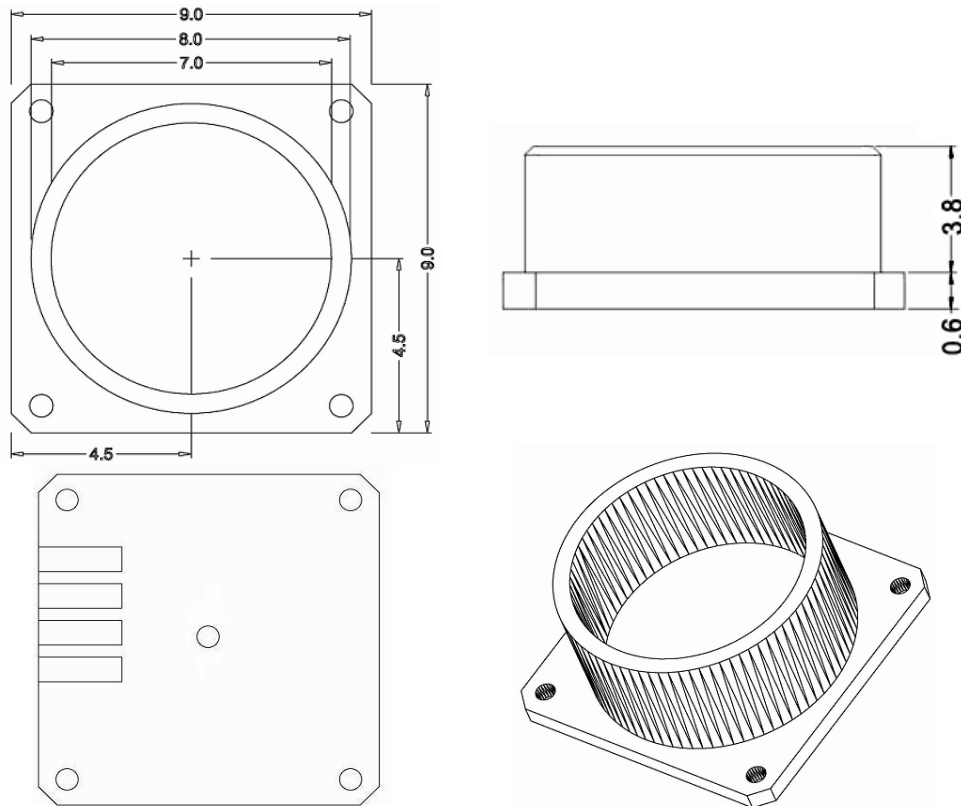


Bottom View



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

## FR4 Package Outlines (all measures in mm)



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