

# Installation Instructions for the 26PC SMT Series Pressure Sensor (1 psi, 5 psi, 15 psi)

ISSUE 2

PK 80167

**▲WARNING****PERSONAL INJURY**

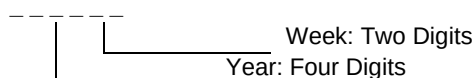
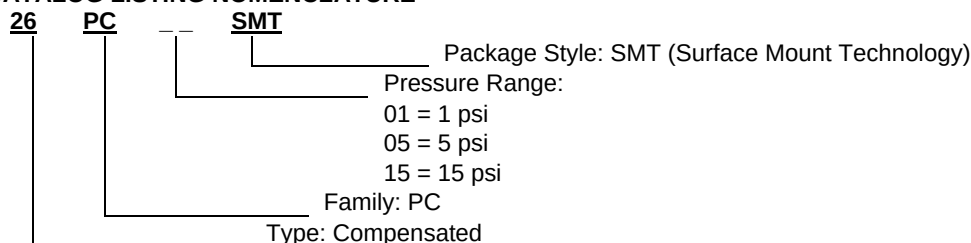
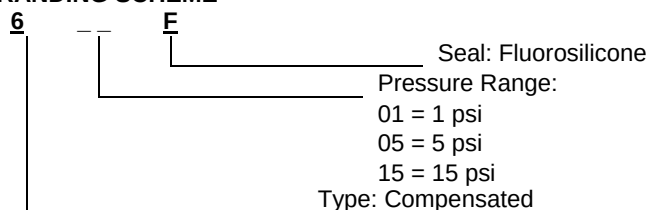
DO NOT USE these products as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury.

**Failure to comply with these instructions could result in death or serious injury.**

**GENERAL INFORMATION**

The 26PC SMT (Surface Mount Technology) pressure sensor contains a four-element piezoresistive bridge. When pressure is applied, the bridge resistance changes and the sensor provides an output signal proportional to the input pressure. The 26PC SMT provides a differential voltage proportional to the pressure differential between Port P2 and Port P1:

- As the difference in  $P = P2 - P1$  increases, differential voltage increases.
- As the difference in  $P = P2 - P1$  decreases, differential voltage decreases.

**DATE CODE****CATALOG LISTING NOMENCLATURE****BRANDING SCHEME****PERFORMANCE CHARACTERISTICS AT  
10.0 Vdc ±0.01 Vdc EXCITATION, 25 °C**

|                   | Min.  | Typ.  | Max.   | Units |
|-------------------|-------|-------|--------|-------|
| Excitation        | —     | 10    | 16     | Vdc   |
| Response Time     | —     | —     | 1.0    | ms    |
| Input Resistance  | 5.5 k | 7.5 k | 11.5 k | Ohm   |
| Output Resistance | 1.5 k | 2.5 k | 3.0 k  | Ohm   |

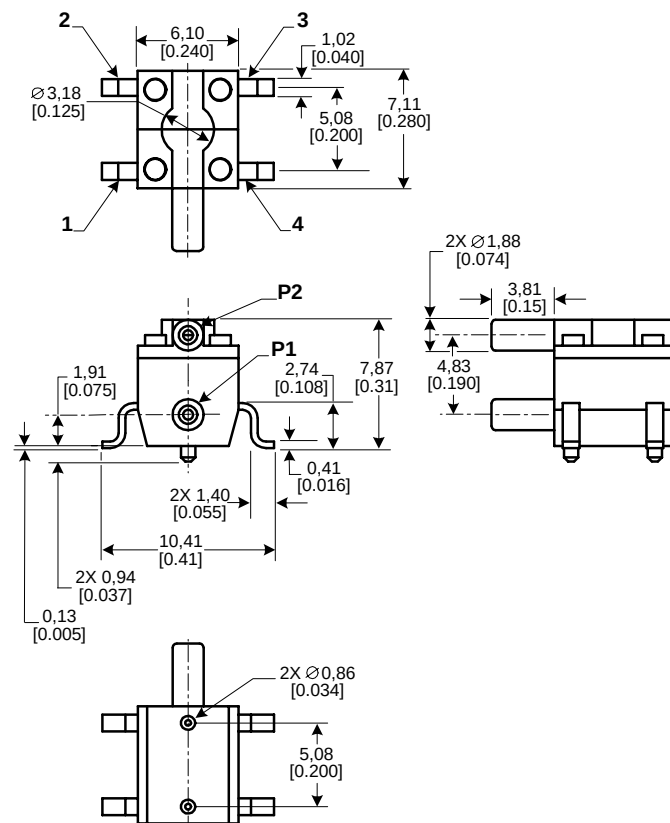
**SPECIFICATIONS**

| Characteristic          | Description                                                                                                           |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Operating Temperature   | -40 °C to 85 °C [-40 °F to 185 °F]                                                                                    |
| Storage Temperature     | -55 °C to 100 °C [-67 °F to 212 °F]                                                                                   |
| Compensated Temperature | 0 °C to 50 °C [32 °F to 122 °F]                                                                                       |
| Alignment Pins          | 0,86 mm [0.034 in] diameter pins extend through PCB                                                                   |
| Port Diameter           | 1,88 mm [0.074 in] diameter uses standard 0,59 mm [0.0625 in] ID tubing                                               |
| Port Orientation        | Parallel to PCB (low profile on board)                                                                                |
| SMT Solder              | <ul style="list-style-type: none"> <li>• Sn 96.5 Ag 3.5 No Clean Flux</li> <li>• Sn 63 Pb 37 No Clean Flux</li> </ul> |
| SMT Reflow Profile      | Max peak temperature of 260 °C [500 °F] for 10 seconds                                                                |
| Media Compatibility     | Both ports are limited to media that are compatible with polyphthalamide, fluorosilicone and silicon.                 |
| Shock                   | Qualification tested to 150 g                                                                                         |
| Vibration               | MIL-STD-202. Method 213 (150 g half sine 11 ms)                                                                       |
| Weight                  | 0.5 grams [0.0176 oz]                                                                                                 |

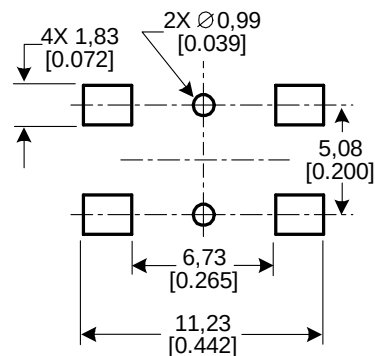
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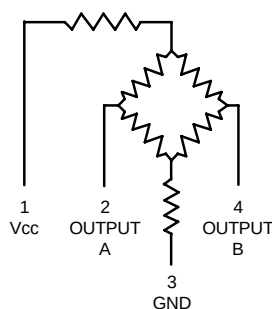
## MOUNTING DIMENSIONS mm[in] for reference only)



## SUGGESTED LAND PATTERN



## CIRCUIT DIAGRAM



## OUTPUT VOLTAGE

Output A increases as P2 pressure increases.

Output B decreases as P2 pressure increases.

## TECHNICAL NOTES

Technical Notes that provide further application information on the 26PC SMT are available on the Honeywell Web site at: <http://www.honeywell.com/sensing/prodinfo/pressure/20pc>

## WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is Buyer's sole remedy and is **in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.**

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

For application assistance, current specifications, or name of the nearest Authorized Distributor, contact a nearby sales office. Or call:

1-800-537-6945 USA  
1-800-737-3360 Canada  
1-815-235-6847 International

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## INTERNET

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