

## Installation Instructions for the HIH-4000 Humidity Sensor

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### CAUTION

#### IMPROPER HANDLING

- Do not remove the sensor from its original protective packaging until it is ready to be installed.
- Do not touch the sensor surface. Use latex finger cots. Handle the sensor by its package edges or leads.
- Do not allow objects to enter the cavity of the sensor element.

**Failure to comply with these instructions may result in product damage.**

### NOTICE

- Under condensing conditions where enough liquid water forms on the sensor to create a parasitic leakage path, the HIH-4000 Series Humidity Sensor produces an erroneous reading of 0 % humidity. If this erroneous reading is assumed to be correct by your control function, excess humidity is likely to be introduced into the system. Once the liquid water evaporates from the sensor and the environment returns to a non-condensing state, the device returns to normal functionality.
- Shade the sensor from direct light. Intense direct light can flood junctions in the CMOS (Complementary Metal Oxide Semiconductor) device and drive the output signal to the minimum. This does not harm the sensor or affect calibration. Proper operation resumes shortly after the direct light is removed. Ambient scattered light normally does not affect performance.

### RECOMMENDED PCB MOUNTING

Catalog Listing	Mill-Max Socket Number
HIH-4000-001 HIH-4000-003	310-93-132-41-001 or similar
HIH-4000-002 HIH-4000-004	851-93-032-10-001 or similar

### SOLDERING/ASSEMBLY

#### CAUTION

#### IMPROPER CLEANING

- Insert and solder the sensor after the PCB cleaning process.
- Clean sensor with isopropyl alcohol after soldering.

**Failure to comply with these instructions may result in product damage.**

Hand soldering is recommended; however, if wave soldering is required, use a no-clean flux. Limit the contact of the flux to the leads only.

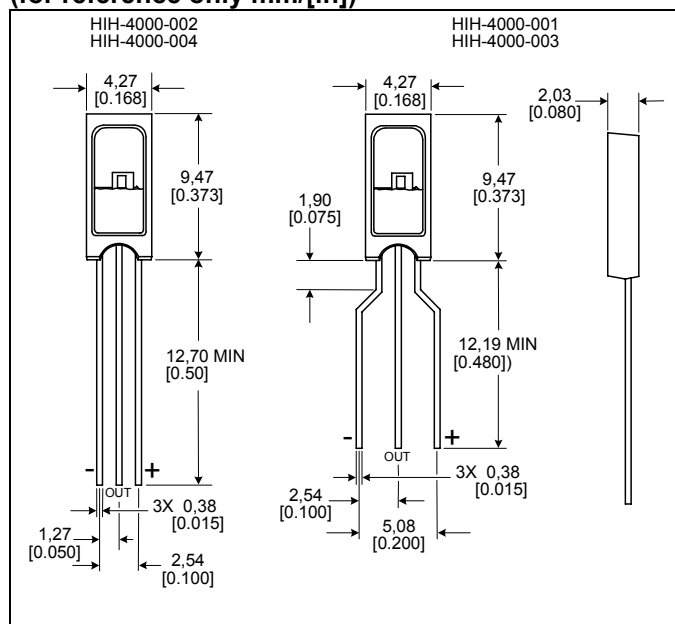
Recommended PC board wave soldering temperature is 250 °C to 260 °C [482 °F to 500 °F].

### MOISTURE SEALING THE LEADS

If, in the presence of intermittent moisture or other contaminants, there is the possibility of galvanic paths between the leads, moisture seal the leads.

### MOUNTING DIMENSIONS

(for reference only mm/[in])



## **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.**

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