Senseair Miniature CO2 sensor module with NDIR technique User Manual

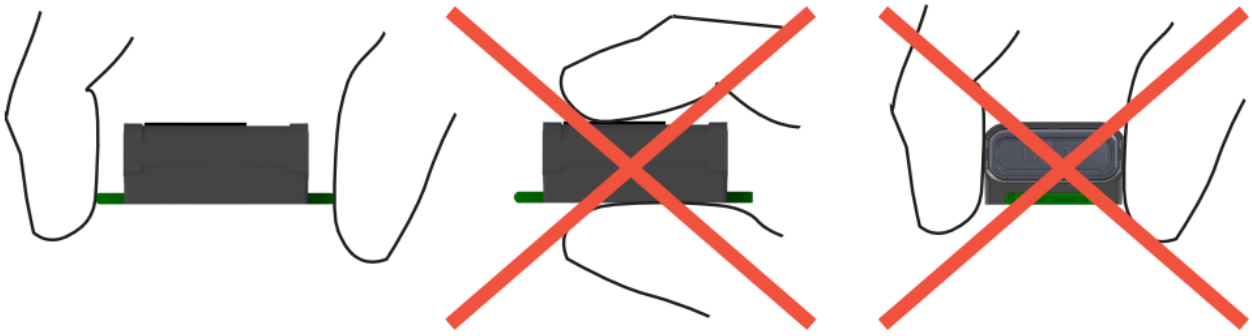
Contents

Senseair

Senseair Miniature CO2 sensor module with NDIR technique

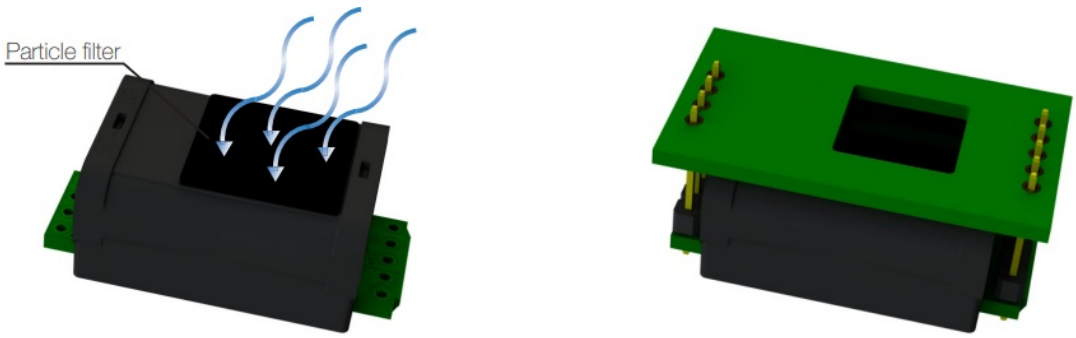
SAFETY INSTRUCTION

- **NOTE:**
  - ESD sensitive product.
  - Use ESD protection equipment.
- **NOTE:**
  - Handle sensor by holding PCB only.
  - Never touch sensor with bare hands! Use clean gloves
  - to avoid dust, grease or other contaminations.
  - Sensor shall not be subjected to any force.



- **NOTE:**

  To ensure airflow, and quick sensor response time to changes in environment: do not block particle filter!



Installation and soldering

- See IPC-J-STD-001 for acceptable soldering conditions in general.
- Selective soldering machine (drag soldering method): soldering temperature 295°C/563°F during three seconds.
- Hand soldering: soldering iron temperature 380°C/716°F during two seconds/pin.
- To eliminate the risk to damage the OBA (Optical Bench Assembly), soldering on the bottom side is recommended.

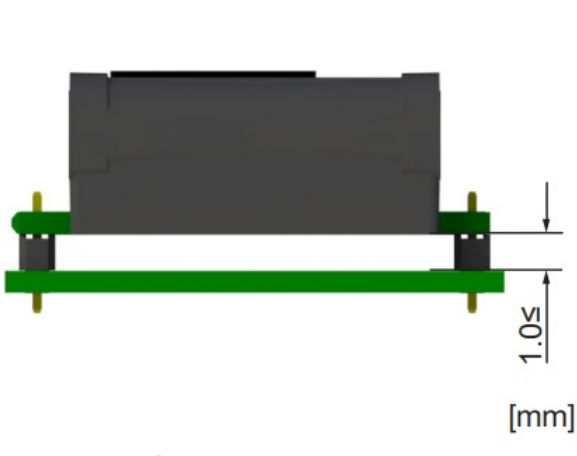
Mechanical properties

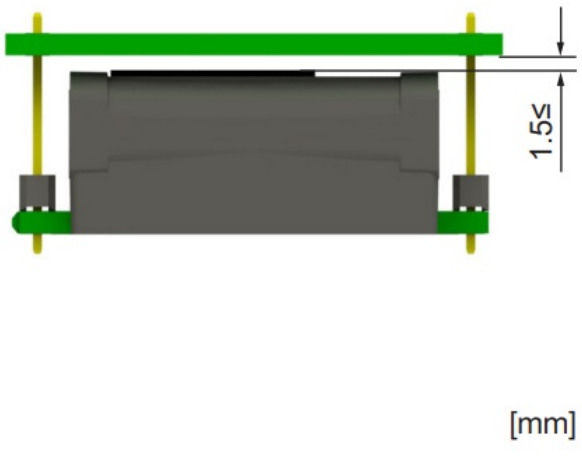
Please refer to mechanical drawing for detailed specification of dimensions and tolerances.

Layout considerations

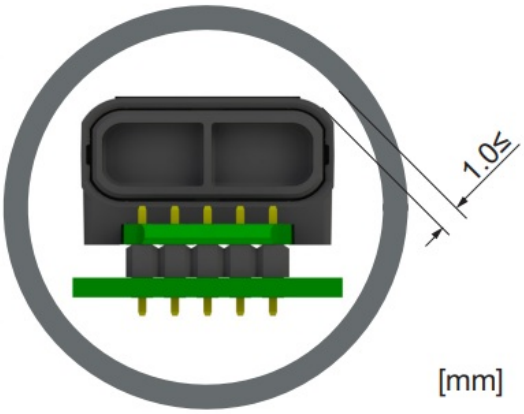
Use cut-outs or slits in main board to reduce mechanical stress to sensor due to board thermal expansion.

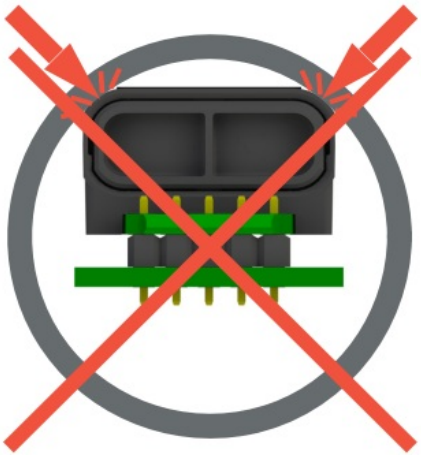
- **NOTE:**
  No gluing or potting on sensor
- **NOTE:**
  1.0 mm≤ minimum distance from sensor to cover/PCB.
- **NOTE:**
  1.5 mm≤ minimum distance from particle filter to cover/PCB.





- **NOTE:**
  1.0 mm≤ minimum distance from sensor to cover/PCB.





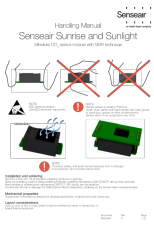
Storage

- Storage in sealed ESD bags.
- Storage temperature: According to specification.
- Requirements on storage environment: In normal IAQ environments corrosive environments are excluded.

Inspection – verification

Transport, handling and assembly may affect calibration. Accuracy is defined after minimum three (3) ABC (Automatic Baseline Correction) periods of continuous operation with ABC in normal IAQ applications. Different options exist and can be customised depending on the application. Please, contact Senseair for further information! Preferably, please inspect and perform zero calibration after any, or all, transports.

Documents / Resources

	Senseair Miniature CO2 sensor module with NDIR technique [pdf] User Manual Miniature CO2 sensor module with NDIR technique