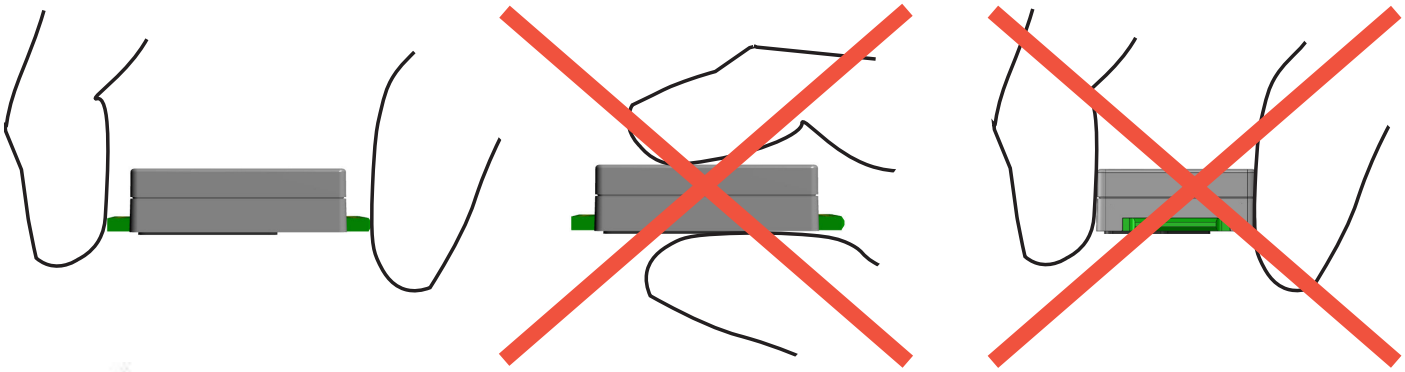
Senseair
an Asahi Kasei company

Handling Manual

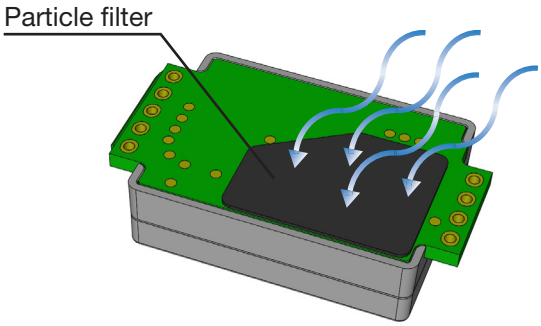
Senseair S8

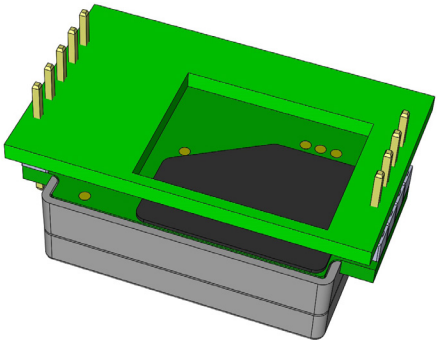
Miniature CO_2 sensor module with NDIR technique



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.
OBA 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!

NOTE:
No gluing or moulding on OBA.

Installation and soldering

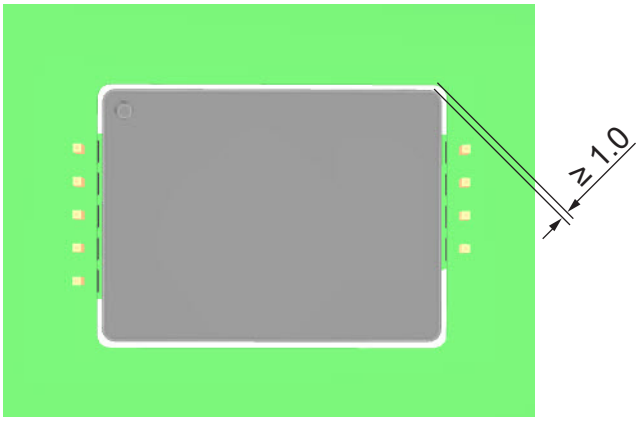
See IPC-J-STD-001 for acceptable soldering conditions in general.
Selective soldering machine (drag soldering method): soldering temperature 295 °C during three seconds.
Hand soldering: soldering iron temperature 380 °C during two seconds/pin.

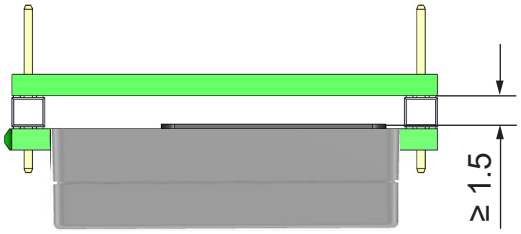
Mechanical properties

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

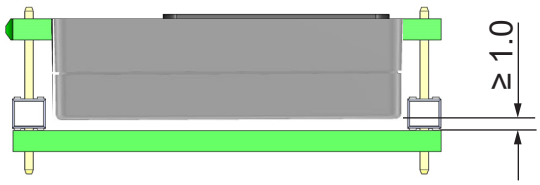
Layout considerations:

Use cut-outs or slits in main board to reduce mechanical stress to sensor due to board thermal expansion.
To ensure stability, do install pin headers on both sides of sensor.

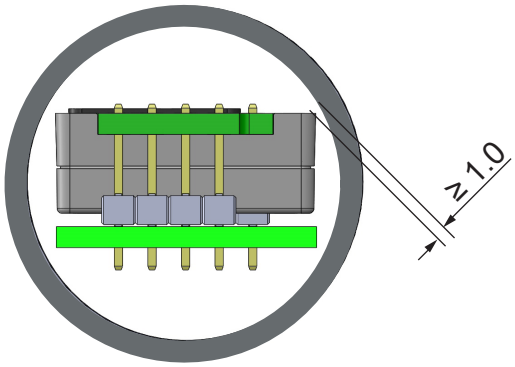


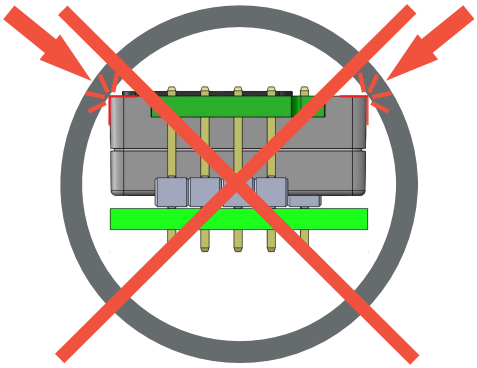


[mm]



NOTE:
≥ 1.5mm minimum distance
from particle filter to cover/PCB.





[mm]

NOTE:
≥ 1.0mm minimum distance
from OBA to cover/PCB.

Storage

Storage in sealed ESD bags.
Storage temperature: -40–70 °C
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.