

PYROSENS

Pyroelectrical infrared detectors

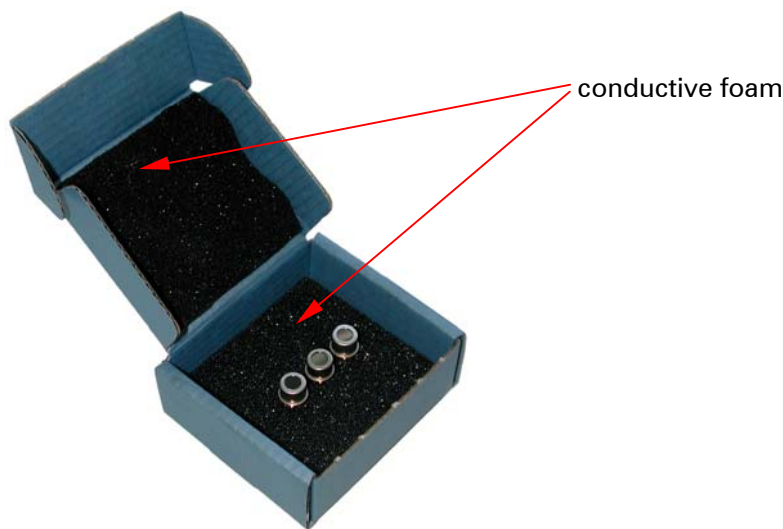
Handling Precautions for Pyroelectric Sensors

Protection from Electro-Static Discharges (ESD)

Caused by temperature changes during transportation or handling, pyroelectric detectors can generate a voltage of some hundreds of Volts.

By improper handling or storing, both the detectors themselves as well as the connected electronics can be destroyed.

For that reason we deliver all our detectors in boxes with conductive foam similar to the one depicted below.



Please observe the following instructions:

- transportation and storage of pyroelectric sensors only with electrically connected pins (resistance between the pins $< 10 \text{ M}\Omega$)
- handling of pyroelectric sensors only in ESD protected areas
- temperature ramps exceeding a rate of 10 K/min must be avoided at the sensors

Cleaning Advise

Our sensors can be cleaned in isopropyl alcohol or ethanol or in water solutions of one of it. The sensors should not to be exposed to cleaning liquids longer than 10 min.

- for cleaning use only soft tools like brush, cotton wool or cellulose tissues
- avoid pressure to the window during cleaning procedure
- do not use ultrasonic cleaner
- do not use other cleansing agents than the above recommended ones

For some special filter materials the cleaning instructions can differ from these instructions. In such cases please watch the special cleaning instructions enclosed with the sensors in such cases.

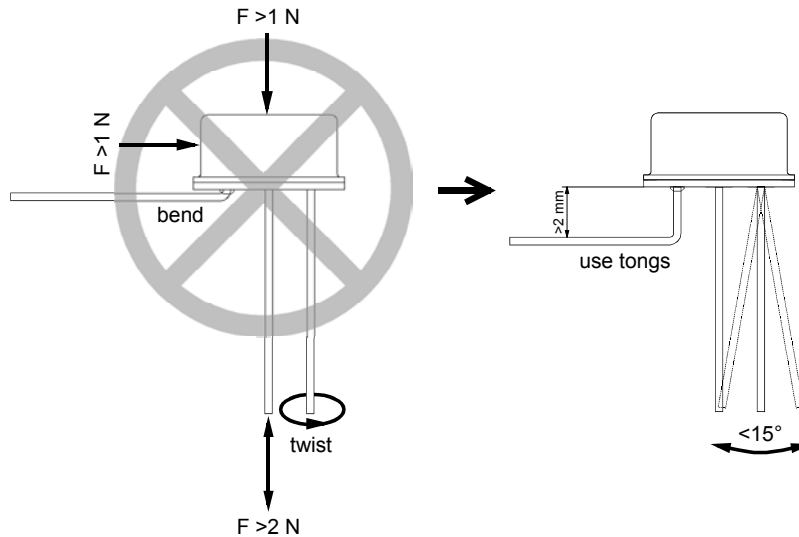
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Limits of Mechanical Stress

Our pyroelectric sensors are hermetically sealed when shipped. Bending of the wires near glass pin feed throughs by more than 15° without suitable tools can lead to cracks in the glass seals.

Mechanical strain to the sensor may cause cracks in the filter window sealing. In all that cases the sensor becomes leaky and therefore, it doesn't reach the promised properties.



Soldering instructions

Overheating and inadequate heat sinking during soldering can damage the sensor!

- Use only manual soldering considering the instructions below.
- Do not use soldering irons with a power of more than 25 W.
- Use heat sinking and minimum soldering temperature and time respectively (at maximum 3 s at 280 °C or 5 s at 240 °C).
- The minimum distance between TO39 header and PCB is 5 mm. Do not use shorter lead wires!

