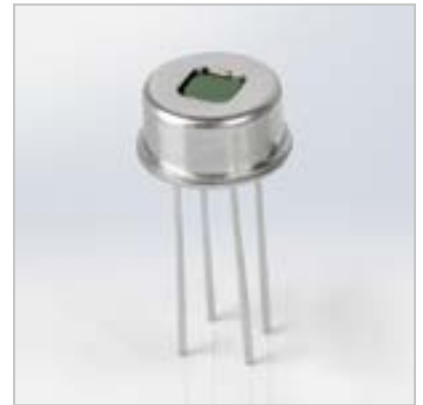


# Handling Recommendations For Packaged Lithium Tantalate Pyroelectric Detectors

## 1. Storage and Handling

It is best to store the detectors until ready for use in the original package in a dry environment at normal room temperature. The detectors are shipped in ESD-safe packaging. The pyroelectric detectors should be handled in an ESD-protected area.



## 2. Cleaning

Detectors as received would be in a clean state so cleaning should not be necessary. If cleaning the package window is required, loosely sticking particles can be blown off using nitrogen or bottled compressed air. To wipe the package window clean, use a lint-free cotton bud with a 50/50 mixture of isopropyl alcohol and deionized water using light strokes in circular movements from the inside to outside. Do not reuse the cotton bud on additional detectors. Take care to avoid using excessive pressure on the window as this may destroy the hermetic seal or damage the window. Do not use acetone or halogenated solvents.

NEVER use an ULTRASONIC CLEANER to clean detectors or detector assemblies.

### 3. Soldering

When hand soldering the following are the precautions and recommendations:

- Use a low wattage microelectronic soldering iron with no-clean flux.
- Ensure a minimum distance of 4 mm between the bottom of the detector and the detector board (see Figure 1).
- A soldering temperature of 265 °C for less than 10 seconds.
- Use heat sink clips or pliers on lead wires between the solder joint and base of the package. If heat sinking is not possible then use minimum soldering iron tip temperature and time to form the solder joint. Do not exceed 265 °C for 10s.
- DO NOT BEND leads at sharp angles less than 2 mm from the base of package as this may damage the glass feedthrough seals (see Figure 1). No force should be applied to the pins at the glass to metal seal.
- DO NOT APPLY any pressure or load to the detector cap housing the optical filter or window.
- Clean after soldering per the solder manufacturers guidelines as long as it does not use acetone or halogenated solvents.

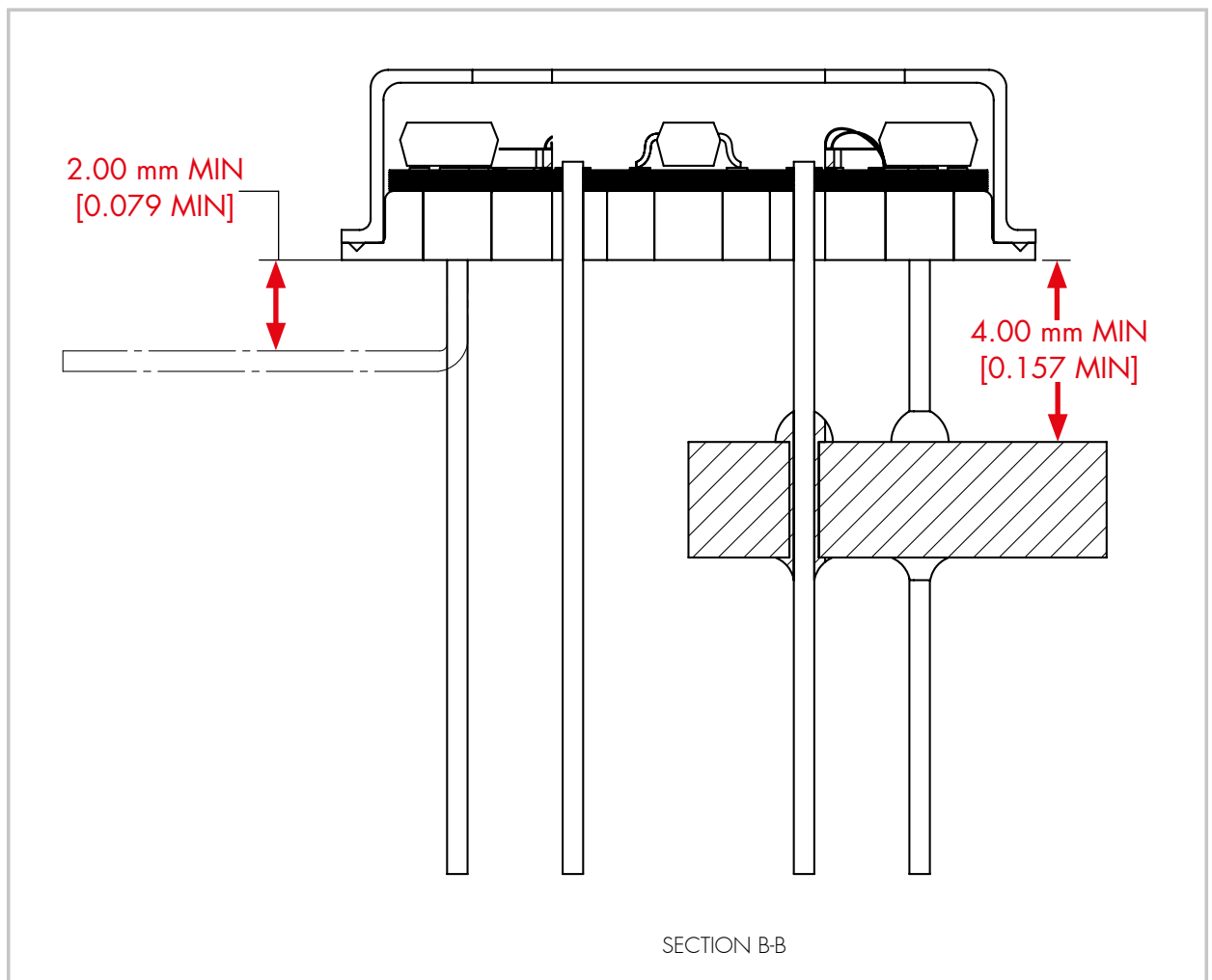


Figure 1