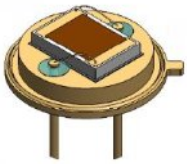
Infrared Materials
The Leader in High Performance IR Detectors

HANDLING PRECAUTIONS FOR DETECTORS MOUNTED ON HEADERS WITH OR WITHOUT CAP, AND WITHOUT WINDOW



1. CLEANING: Clean outside edge of header and cap if applicable with a 50/50 mixture of isopropyl alcohol and water. Use light strokes with a cotton tipped applicator. Avoid getting mixture inside of housing. Do not touch lead wires or surface of detector. Do not use acetone or halogenated solvents.

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

2. HANDLING: Do not touch lead wires or detector with anything that could damage the leads or the surface active area of the detector. Store detector assemblies in a clean, dry environment.

3. DETECTOR POWER DISSIPATION: Detectors are typically biased with a series load resistor. As a rule of thumb, detectors should not dissipate more than $10E^{-5}$ watts per square centimeter of sensitive area.

4. ESD SENSITIVITY: Photodetectors 1x1mm in area or larger are not particularly sensitive to Electro-Static Discharge. However, the same precautions should be taken as in handling other electronic components. Detectors are not immune from ESD damage. Detectors smaller than 1x1mm in area are quite vulnerable to ESD damage and full ESD precautions should be taken at all times when handling small area detectors or detector arrays.

5. SOLDERING: The same limitations apply as for soldering transistors. When hand soldering observe the following precautions:

- Use a low wattage microelectronic soldering iron.

- Use heat sink clips or pliers on lead wires between solder joint and base of package. If heat sinking is not possible, then use minimum soldering iron tip temperature and time to form solder joint.

- DO NOT BEND leads at sharp angles near base of package as this may damage the hermetic seals.

- Clean properly as required after soldering (See Note 1).

6. STORAGE: The detectors can be damaged, or have their characteristics changed by exposure to light, moisture or heat. They should be stored in a dark, dry environment at a temperature between 25°C and 50°C. PbS detectors that have changed in performance due to moisture absorption may be baked in an oven at +70-85ºC for 3-6 hours followed by a stabilization period of 7-10 days in an IR dark, dry environment. Please note that this procedure, will not recover the detector performance if the cause is due to exposure to conditions other than moisture alone.

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