

SCD-B

High performance single-channel detectors covering 1.2-5.5 μm

Key Features

- Highest sensitivity detectors across 1.2-5.5 μm region
- High signal to noise performance and dynamic range
- Fastest response speed for mid-IR applications
- Superior reliability for long life
- Repeatable results minimize testing



Opto Diode's new SCD (single-channel detector) product line block unwanted radiation below 1.2 microns. Exploiting the innate transmission bandwidth of Silicon, the new SCD-Si detectors are packaged with anti-reflection Silicon windows to block undesirable energy in the UV and visible spectrums. As a result, these detectors focus on the infrared spectrum, minimizing the effects of unwanted radiation that can interfere with test results and reduce measured dynamic range. Optimizing performance in the 1.2 to 5.5 microns infrared spectrum, the SCD-Si detectors combine the superior sensitivity and fast response-times of lead salt detectors with the band-limiting attributes of Silicon to provide excellent quality, long life and high performance detection.

Available in several configurations, customers can choose detector type (PbS or PbSe), element size (2x2 mm or 3x3 mm) and cooling alternatives to suit a variety of system and application requirements. Cooled units provide additional sensitivity for very low level signal detection and enhanced stability for environments where temperatures are in constant flux. Uncooled

SCD-Si detectors are packaged with a short cap (0.13 inches tall) to maximize the field of view (FOV). Optimizing the FOV is particularly important for applications that monitor a large area such as for gas or fire detection at an oil refinery or large manufacturing plant.

High sensitivity maximizes measurement dynamic range for applications with trace elements. Real-time measurements are easily supported with the SCD-Si's fast response time. High durability and long life minimize repair and maintenance costs. With the goal of optimizing your system's performance, Opto Diode is committed to providing high quality, reliable products.

Key Applications:

- Gas Analysis: Medical or Industrial
- Humidity Measurements
- Emissions Monitoring
- Hot Box Detection
- Process Control
- Thermal Imaging
- Fire and Flame Detection