

Photodiodes with integrated amplifiers

Product Features

Integrated amplifier (ASD)

DC supply (max): +/- 18V

DC supply (typ): 5V

Gain: 107

Technology: transimpedance amplifier with series 3T diode

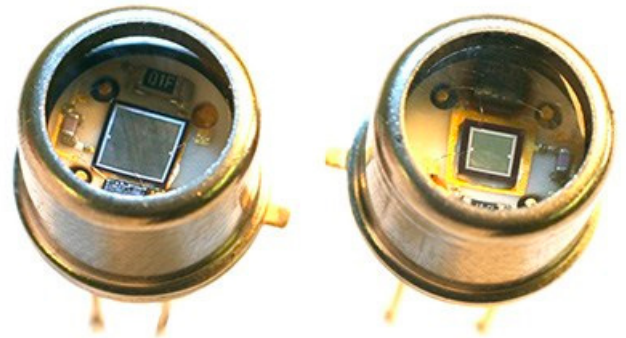
General purpose (series 0)

Bias: 0-30V

Response: 400-1064nm

Responsivity (900nm) 0.54 A/W

Technology: pn junction



Blue and UV (series 1)

Bias: 0-10V

Response: 250-1064nm

Responsivity (250nm): 0.12 A/W

Responsivity (436nm): 0.16 A/W

Technology: pn junction

UV enhanced (series 7)

Bias: 0V

Response: 200-1100nm

Responsivity (245nm): 0.1 A/W

Responsivity (340nm): 0.5 A/W

Technology:

Ultra high speed (AEPX)

Bias: 5V

Response: 450-1064nm

Responsivity (820nm) 0.35 A/W

Risetime: 0.3 to 0.6 ns

Technology: epitaxial

Product Description

Amplified Single Element Detector (ASD) Series ****NEW****

Centronic ASD Series integrate high performance single element photodiodes coupled to a high input impedance op-amp to create a low noise, high gain photodetector. Light falling on the active area of the photodiode causes the output voltage to swing positive with respect to ground. The photodiode has been optimised for sensitivity to near infrared wavelengths. The detector and circuit are hermetically sealed in an industry standard TO5 package with a flat glass window.

General Purpose Silicon Sensors (Series 0)

Series 0 photodiodes are designed for operation at up to 30V reverse bias voltage for applications where low capacitance and high speed are important. These detectors are tailored for peak responsivity in the 780-950 nm range but are successfully used for pulsed applications throughout the spectral range from 430-1064 nm.

Blue and UV sensitive (Series 1)

Series 1 photodiodes offer a broadband spectral response extending into the UV region. The series is particularly intended for applications from 250 to 430 nm where high levels of illumination occur. The detectors may be operated with reverse bias up to 10 volts or in the photovoltaic mode for best signal to noise performance. And are particularly suitable for monitoring the operation of UV lamps.

UV Enhanced Detector (Series -7)

Series 7 Super UV Photodiodes compliment Series 1* and primarily designed for application in the 194-400 nm range where high shunt resistance and maximum sensitivity are needed. These detectors are available in a range of standard packages with a choice of window material to suit specific applications.

Ultra High Speed Detectors (AEPX)

The AEPX Series of photodiodes is offered in a range of small active area sizes suitable for high frequency fibre optic applications. These photodetectors take advantage of an epitaxial structure to achieve good high frequency response at operating voltages as low as 5 volts. The detectors may also be operated at higher bias levels up to 20 volts to achieve extremely fast pulsed response.