



SVTA-UV-B Photodetector



SVTA-UV-B Detector

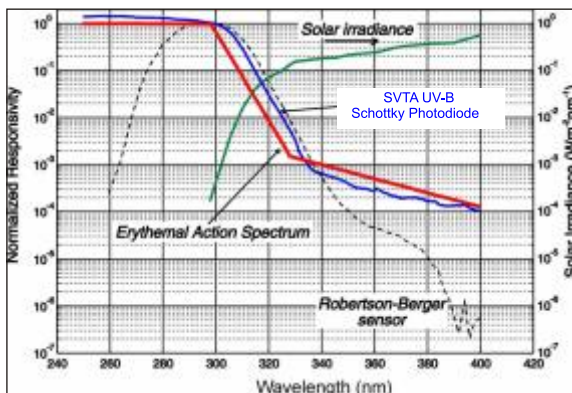
Description

SVTA-UV-B Schottky detectors are small, robust, solid-state photodiodes that provides a close match to the standard erythema response. The capability of sunlight to induce erythema (sunburning) is strongly dependent on wavelength. Radiation in the UV-B band (280-320 nm) is primarily responsible. These sensors provide 10^4 rejection of all visible peak and infrared wavelengths longer than 400 nm. The photovoltaic efficiency of the UV-B sensor is more than 10% of the fundamental quantum efficiency limit, orders of magnitude higher than standard phosphor conversion techniques.

The standard package is a TO-46 header with cap. Other types of packaging are available including ones with built-in amplification.

Specifications

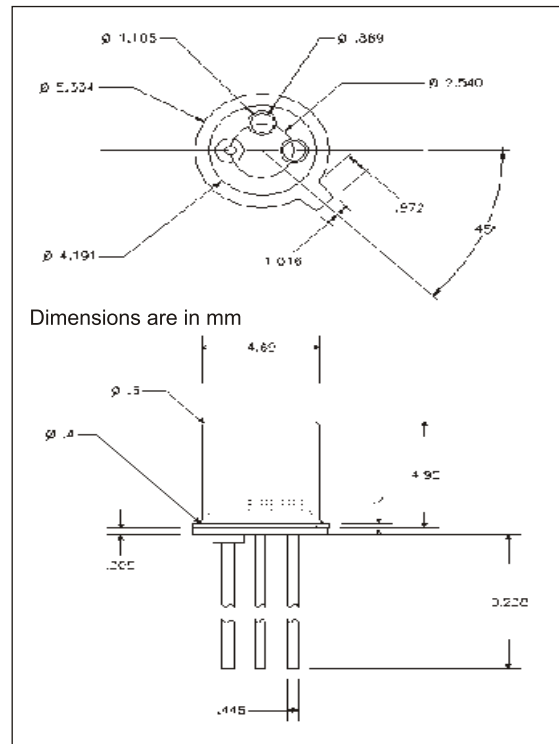
Active area.....	0.5 mm ²
Responsivity @ 300 nm	0.03 A/W typ.
Rejection @ >400 nm.....	>10 ⁴
Shunt resistance(-10 mV).....	>1 GΩ
Series resistance.....	<1 kΩ
Package type.....	TO-46



Spectral responsivity graph of a 26% AlGaIn detector shows a close match to the erythema response

Typical Applications:

- Erythema Response Matching
- Solar Irradiance Measurement
- Climatological And Biological Studies
- UV Curing and Drying
- Combustion Monitoring
- Spectroscopy
- Sterilization Control
- Arc Detection



TO-46 Standard package with UV-glass windows cap