



## HSDL-9001 New Ambient Light Photo Sensor

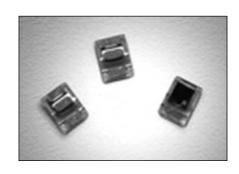
## from Agilent Technologies

The HSDL-9001 is a low-cost analog-output ambient light photo diode in an ultra-low cost miniature Ouad-Flat-No Lead (QFN) lead-free surface mount package. It consists of a photodiode that peaks in the human luminosity curve at 550 nm. As shown in the diagram, it provides excellent responsivity, close to the response of the human eye. This device offers a design alternative to the HSDL-9000 digital-output ambient light photo sensor with infinite ambient light detection threshold control. Both the HSDL-9000 and HSDL-9001 are ideal for applications in which the measurement

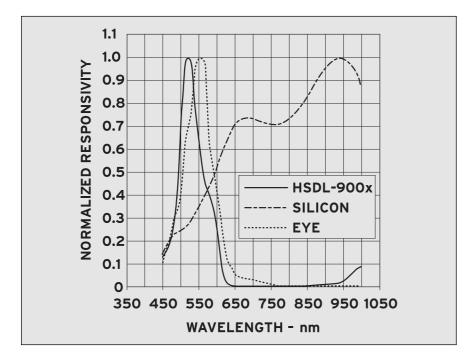
of ambient light is used to control display backlighting. Mobile appliances, such as mobile phones and PDAs that draw heavy current for backlighting the display, will benefit from the significant reduction in power consumption achieved by incorporating the HSDL-9000 and HSDL-9001.

## **Features**

- Excellent responsivity which peaks in the human luminosity curve at 550 nm
  - Responsivity close to that of the human eye



- Miniature QFN surfacemount package
  - $\bullet$  Height: 0.60 mm
  - Width: 2.00 mm
  - Depth: 1.50 mm
- Infinite ambient light detection threshold control
- Guaranteed temperature performance
  - -25...+85 °C
- V<sub>CC</sub> supply 2.7...3.6 V
- Lead-free package



## **Applications**

- Detection of ambient light to control display backlighting
  - Mobile devices: mobile phones, PDAs
  - Computing devices: notebooks, webpads
  - Consumer devices: TVs, video cameras, digital still cameras

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