

### **Agilent Technologies**

## **Ambient Light Photo Sensor (ALPS)**

#### **Key markets**

- Portable devices Mobile Phones, PDAs, Digital Still Cameras, Camcorders
- Consumer Home Lighting, Audio Sets, LCD TVs
- Automotive Vehicle Dashboards, Head and Rear Lights, Traffic Lights

Agilent's Ambient Light Photo Sensor (HSDL-9000) detects the amount of light available and signals as to whether or not backlighting is necessary in order to see a screen or keypad in mobile electronic devices such as phones, PDAs and laptop computers. Backlighting is only necessary about 40 percent of the time, so the HSDL-9000 can add significant time between battery recharges.

The HSDL-9000 outperforms other light detection solutions because its spectral response peaks at the same frequency (550 nm) as the human eye does. Other solutions using a silicon photodiode provide varying degrees of performance, especially in different light sources such as fluorescent and halogen. Agilent HSDL-9000 performs equally well with all light sources.



#### Features

- Miniature PLCC Surface-Mount
   Package
- Lead-Free Package
- Integrated Photodiode and Analog to Digital Circuitry
- Peaks in the Human Luminosity Curve at 550nm
- Adjustable Sensitivity Control 3 digital levels or analog level presets

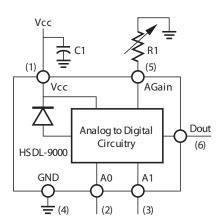
#### **Benefits**

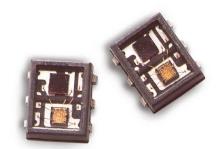
- High level of integration brings faster and more accurate response in various ambient lighting conditions
- Designed to respond the same as the human eye's spectral wavelength response
- Conserves battery power in many portable devices

#### **Key Parameters :**

- Size : 1.1 (H) x 4.0 (W) x 3.2 (D) mm
- Supply voltage : 2.7 to 3.6 V
- Operating temperature : -25 °C to +85 °C
- Power consumption :
  - 30µA Typical Idle (standby) current
  - <10nA Typical Shutdown current

#### **Application Circuit for ALPS**





#### **Order information :**

- Part Number : HSDL-9000
- Packaging Type: Tape & Reel
- Quantity : 1500

# To find out more visit www.agilent.com/view/ir

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