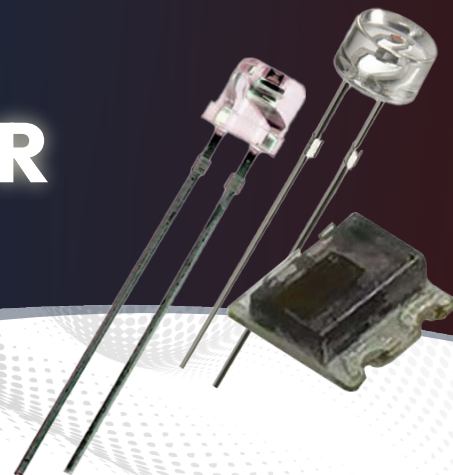


AMBIENT LIGHT SENSOR

Smart Sensing for Dynamic Lighting Environments



What is an Ambient Light Sensor?

Ambient light sensors detect surrounding light levels and automatically adjust display or illumination intensity—mimicking the adaptability of human vision for optimal viewing and energy efficiency.

Features & Benefits

- ✓ **Human-Eye-Like Detection -**
Responds to visible light similar to human perception
- ✓ **Dynamic Adjustment -**
Automatically adapts brightness to ambient conditions
- ✓ **High Sensitivity -**
Accurate low-light response for enhanced performance
- ✓ **Energy Efficient -**
Reduces power consumption by optimizing brightness
- ✓ **Wide Voltage Range -**
Operates from 2.5V to 5.5V—ideal for many platforms
- ✓ **Compact Design -**
Available in both through-hole and SMD packages for flexible integration

Applications

- Mobile Devices & Tablets
- Smart Lighting Systems
- Security & Surveillance Cameras
- Smoke Alarms & Environmental Sensors
- IoT & Wearable Devices
- Home Automation & Security Lighting

Part no.	Type	Output Current(μA)
BL-HALS-A6J	Surface mount	72
BL-ALS3015-RR	Through hole	120
BL-ALS3006-RR	Through hole	120
BL-ALS3001-RR	Through hole	120

Visual Examples

- **Top Right:** Through-hole ambient light sensors
- **Center:** Surface-mount versions for compact designs
- **Bottom Row:**
- Real-world applications including smartphone screen adjustment, motion-activated lighting, and safety devices

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