



TAOS Inc.

is now

ams AG

The technical content of this TAOS datasheet is still valid.

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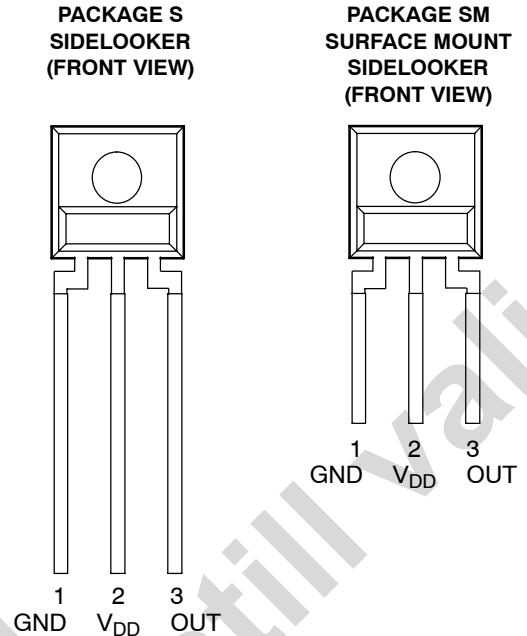
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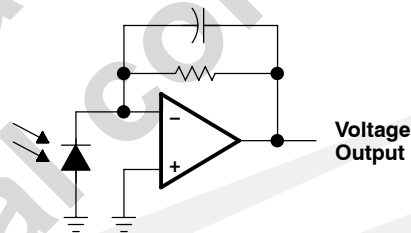
- **Integral Visible Light Cutoff Filter**
- **Monolithic Silicon IC Containing Photodiode, Operational Amplifier, and Feedback Components**
- **Converts Light Intensity to a Voltage**
- **High Irradiance Responsivity, Typically 111 mV/($\mu\text{W}/\text{cm}^2$) at $\lambda_p = 940 \text{ nm}$ (TSL260R)**
- **Compact 3-Lead Plastic Package**
- **Single Voltage Supply Operation**
- **Low Dark (Offset) Voltage....10mV Max**
- **Low Supply Current.....1.1 mA Typical**
- **Wide Supply-Voltage Range.... 2.7 V to 5.5 V**
- **Replacements for TSL260, TSL261, and TSL262**
- **RoHS Compliant (-LF Package Only)**



Description

The TSL260R, TSL261R, and TSL262R are infrared light-to-voltage optical sensors, each combining a photodiode and a transimpedance amplifier (feedback resistor = 16 M Ω , 8 M Ω , and 2.8 M Ω respectively) on a single monolithic IC. Output voltage is directly proportional to the light intensity (irradiance) on the photodiode. These devices have improved amplifier offset-voltage stability and low power consumption and are supplied in a 3-lead plastic sidelooker package with an integral visible light cutoff filter and lens. When supplied in the lead (Pb) free package, the device is RoHS compliant.

Functional Block Diagram



Available Options

DEVICE	T _A	PACKAGE - LEADS	PACKAGE DESIGNATOR	ORDERING NUMBER
TSL260R	0°C to 70°C	3-lead Sidelooker	S	TSL260R
TSL260R	0°C to 70°C	3-lead Sidelooker — Lead (Pb) Free	S	TSL260R-LF
TSL260R	0°C to 70°C	3-lead Surface-Mount Sidelooker — Lead (Pb) Free	SM	TSL260RSM-LF
TSL261R	0°C to 70°C	3-lead Sidelooker	S	TSL261R
TSL261R	0°C to 70°C	3-lead Sidelooker — Lead (Pb) Free	S	TSL261R-LF
TSL261R	0°C to 70°C	3-lead Surface-Mount Sidelooker — Lead (Pb) Free	SM	TSL261RSM-LF
TSL262R	0°C to 70°C	3-lead Sidelooker	S	TSL262R
TSL262R	0°C to 70°C	3-lead Sidelooker — Lead (Pb) Free	S	TSL262R-LF
TSL262R	0°C to 70°C	3-lead Surface-Mount Sidelooker — Lead (Pb) Free	SM	TSL262RSM-LF