



### HLC1395-001



*Actual product appearance may vary.*

**HLC1395 Series Infrared Reflective Sensor, Short Distance Detection, Transistor Output, Plastic Package**

#### Features

- Side-looking plastic package
- Phototransistor output
- IR emitter and phototransistor detector in a single package
- Low profile for design flexibility
- Designed for short distance detection
- High sensitivity
- Unfocused for sensing diffused surfaces

#### Description

The HLC1395 is a miniature infrared sensor designed to sense reflective objects at short distances. Both the GaAs IRED and the NPN phototransistor are mounted side-by-side in a single black plastic package with an integral barrier to minimize crosstalk. The sensor is configured with the IRED cathode and the phototransistor emitter connected to a common lead.

The housing consists of an opaque polysulfone outer shell with transfer-molded, IR-transmissive epoxy encapsulant. Housings are soluble in chlorinated hydrocarbons and ketones. Recommended cleaning agents are methanol and isopropanol.

Product Specifications	
Series Name	Reflective Sensor
Product Type	IR Switch
On-State Collector Current	0.30 mA
Output	Transistor
Package Components	Plastic
Forward Current	10 mA
Continuous Forward Current	50 mA
Forward Voltage	1.6 V
Reverse Breakdown Voltage	3 V
Reverse Current	10 $\mu$ A

Rise and Fall Time	15 ns
Power Dissipation	100 mW
Operating Temperature Range	-40 °C to 85 °C [-40 °F to 185 °F]
Dark Current	100 nA
Collector DC Current	30 mA
Collector-Emitter Breakdown Voltage	30 V
Emitter-Collector Breakdown Voltage	5 V
Collector-Emitter Saturation Voltage	0.4 V
Availability	Global
Optimum Point of Response	1,02 mm [0.04 in]