HOA2001-001

HOA Series Transmissive Optoschmitt Sensor, Transistor Output, Plastic Package

Actual product appearance may vary.

Features

- Direct TTL interface
- Buffer logic
- 0.060 in [1.52 mm] dia. detector aperture
- 0.120 in [3.05 mm] slot width
- 0.050 in [1.27 mm] offset pin circle detector leads

Description

The HOA2001 consists of an infrared emitting diode facing an Optoschmitt detector encased in a black thermoplastic housing. The photodetector consists of a photodiode, amplifier, voltage regulator, Schmitt trigger and an NPN output transistor with 10 kOhm (nominal) pull-up resistor. The buffer logic provides a high output when the optical path is clear, and a low output when the path is interrupted. The HOA2001 employs plastic molded components. For additional component information see SEP8506 and SDP8600.
Housing material is polyester. Housings are soluble in chlorinated hydrocarbons and ketones. Recommended cleaning agents are methanol and isopropanol.

Product Specifications	
Series Name	Optoschmitt Sensor
Product Type	IR Switch
Output	10 kOhm Pull-up
Output Logic	Buffer
Package Components	Plastic
Package Color	Black
Continuous Forward Current	50 mA
Forward Voltage	1.6 V
Reverse Breakdown Voltage	3 V
Reverse Current	10 µA
Maximum Trigger Current	10 mA

Housing Material	Polyester
Power Dissipation	100 mW
Operating Temperature Range	-40 °C to 70 °C [-40 °F to 158 °F]
Hysteresis (H)	0.1
Operating Supply Voltage	4.5 V to 10 V
Supply Voltage	12.0 Vdc
High Level Output Voltage	2.4 V minimum
High Level Supply Current	2.0 mA to 10 mA
Low Level Output Voltage	0.4 V maximum
Low Level Supply Current	4.0 mA to 12 mA
Output Rise Time	60 ns
Output Fall Time	15 ns
Output Sink Current	18 mA
Propagation Delay, Low-High,High-Low	5.0 µs
Duration of Output Short Vcc or Ground	1.0 second
IRED Trigger Current	10 mA
Comment	Output is LO when incident light intensity is above the turn-on threshold level.
Availability	Global
Sensor Aperture	1,52 mm [0.060 in] dia.
Slot Width	3,05 mm [0.120 in]