



*Representative photograph, actual product appearance may vary.*

*Due to regional agency approval requirements, some products may not be available in your area. Please contact your regional Honeywell office regarding your product of choice.*

## HOA1881-012

**HOA Series Transmissive Sensor, Transistor Output, Plastic Package**

### Features

- Choice of phototransistor or photodarlington output
- 0.060 in [1.52 mm] dia. detector aperture
- 0.125 in [3.18 mm] slot width
- 18.0 in [457 mm] min. 22 AWG UL 1429 wire leads

### Description

The HOA1881 series consists of an infrared emitting diode facing an NPN silicon phototransistor (HOA1881-011, -012) or photodarlington (HOA1881-013) encased in a black thermoplastic housing. Detector switching takes place whenever an opaque object passes through the slot between emitter and detector. The lead wires of minimum length 18.0 in (457 mm) provide alternate electrical connection when PC board mounting is not possible. The HOA1881 series employs plastic molded components. For additional component information see SEP8506, SDP8406, and SDP8106.

Housing material is nylon. Housings are soluble in chlorinated hydrocarbons and ketones. Recommended cleaning agents are methanol and isopropanol.

Wire color code and functions are:

- Black - IRED Anode
- Orange - Detector Collector
- Brown - IRED Cathode
- Red - Detector Emitter



## HOA1881-012

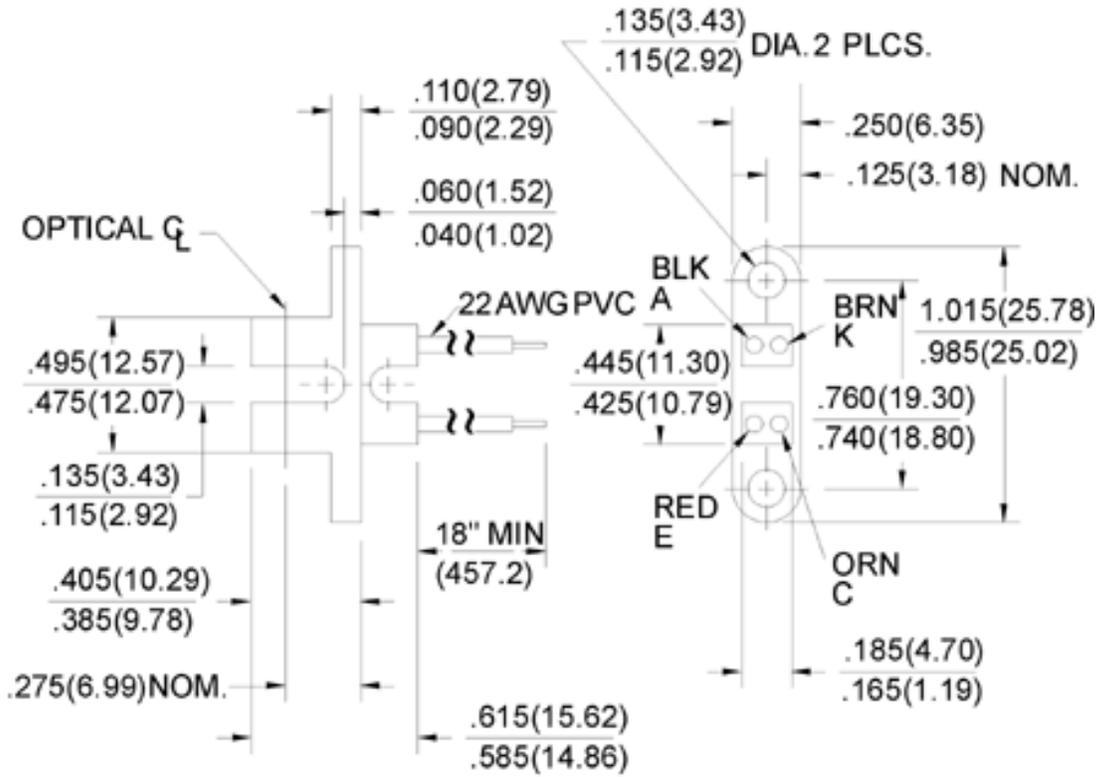
**HOA Series Transmissive Sensor, Transistor Output, Plastic Package**

Product Specifications	
Product Type	IR Switch
On-State Collector Current	1.80 mA
Output	Transistor
Package Components	Plastic
Package Color	Black
Forward Current	20 mA
Continuous Forward Current	50 mA
Forward Voltage	1.6 V
Reverse Breakdown Voltage	3 V
Reverse Current	10 $\mu$ A
Housing Material	Nylon
Rise and Fall Time	15 $\mu$ s
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
Detector Color	Orange
IRED Anode Color	Black
IRED Cathode Color	Brown
Detector Emitter Color	Red
Availability	Global
Product Name	Transmissive Sensor
Sensor Aperture	1,52 mm [0.060 in] dia.
Slot Width	3,18 mm [0.125 in]

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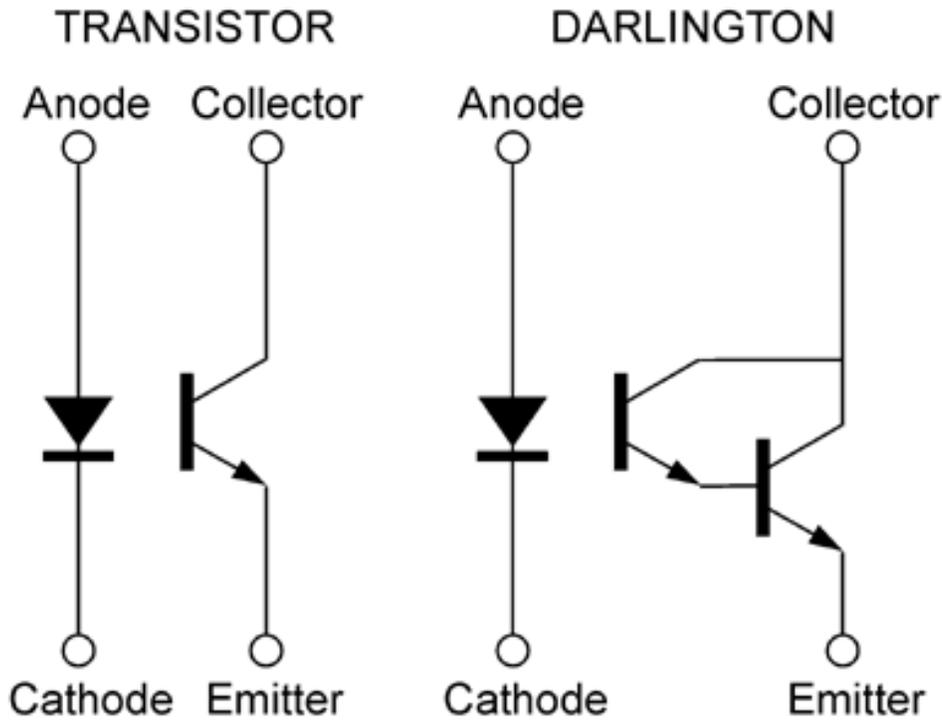
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### **⚠ WARNING**

#### **PERSONAL INJURY**

DO NOT USE these products as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury.

**Failure to comply with these instructions could result in death or serious injury.**

 **WARNING**

**MISUSE OF DOCUMENTATION**

- The information presented in this product sheet (or catalog) is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

**Failure to comply with these instructions could result in death or serious injury.**

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