



### HOA1406-003



*Actual product appearance may vary.*

#### HOA Series Reflective Sensor, Darlington Output, Metal Can Packaged Components

#### Features

- Choice of phototransistor or photodarlington output
- Low profile package
- Hermetic style emitter and detector
- Focused for maximum response
- 24.0 in [610 mm] min. 26 AWG Teflon insulated lead wires

#### Description

The HOA1406 series consists of an infrared emitting diode facing an NPN silicon phototransistor (HOA1406-001) or photodarlington (HOA1406-003) encased side-by-side on converging optical axes, in a black thermoplastic housing. The detector responds to radiation from the IRED only when a reflective object passes within its field of view. This low profile sensor is ideally suited for applications where space is limited, or stacking of sensors is required. The HOA1406 series employs hermetically sealed metal can packaged components. For additional component information see SE2460, SD2440, SD2410.

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

Wire color code and functions are:

- IRED anode - red
- IRED cathode - black
- Collector - white
- Emitter - green

Product Specifications	
Series Name	Reflective Sensor
Product Type	IR Switch
On-State Collector Current	2.00 mA
Output	Darlington
Package Style	Side-Looking
Package Components	Plastic
Package Color	Black
Forward Current	40 mA
Continuous Forward Current	50 mA
Forward Voltage	1.6 V
Reverse Breakdown Voltage	3 V
Reverse Current	10 $\mu$ A
Housing Material	Polycarbonate
Rise and Fall Time	75 $\mu$ s
Power Dissipation	75 mW
Operating Temperature Range	-40 °C to 100 °C [-40 °F to 212 °F]
Dark Current	250 nA
Collector DC Current	30 mA
Collector-Emitter Breakdown Voltage	15 V
Emitter-Collector Breakdown Voltage	5 V
Collector-Emitter Saturation Voltage	1.1 V
Availability	Global
Optimum Point of Response	3,05 mm [0.12 in]