



HOA1879-015



HOA Series Transmissive Sensor, Transistor Output, Plastic Package

Actual product appearance may vary.

Features

- Phototransistor output
- Accurate position sensing
- Choice of detector aperture
- 0.125 in [3.18 mm] slot width
- Dust protective housing

Description

The HOA1879 series consists of an infrared emitting diode facing an NPN silicon phototransistor encased in a black IR transmissive thermoplastic housing. Detector switching takes place whenever an opaque object passes through the slot between emitter and detector. The HOA1879 series employs an IR transmissive housing which features smooth optical faces without external aperture openings; this feature is desirable when aperture blockage from airborne contaminants is a possibility. The HOA1879-011 and -012 have a 0.060 in (1.52 mm) dia. detector aperture, while the HOA1879-015 has a 0.010 in (0.25 mm) x 0.040 in (1.02 mm) vertical aperture in front of the detector. This feature is ideal for use in applications where maximum position resolution is desired. The HOA1879 series employs plastic molded components. For additional component information see SEP8506 and SDP8406.

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

Product Specifications	
Series Name	Transmissive Sensor
Product Type	IR Switch
On-State Collector Current	0.50 mA
Output	Transistor
Package Style	Side-Looking
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 μ A
Housing Material	Polysulfone, IR Transmissive
Rise and Fall Time	15 μ 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
Availability	Global
Sensor Aperture	1,02 mm x 0,25 mm [0.040 in x 0.010 in]
Slot Width	3,18 mm [0.125 in]