

Honeywell Sensing and Control



HOA1877-002



Actual product appearance may vary.

Features

Choice of phototransistor or photodarlington output
Wide operating temperature range [-55 °C to 100 °C]

• 0.50 in [12.7 mm] high optical axis position

• 0.375 in [9.52 mm] slot width

Description

The HOA1877 series consists of an infrared emitting diode facing an NPN silicon phototransistor (HOA1877-001, -002) or photodarlington (HOA1877-003) encased in a black thermoplastic housing. Detector switching takes place whenever an opaque object passes through the slot between emitter and detector. The HOA1877 series has a 0.050 in (1.27 mm) dia. detector aperture and employs metal can packaged components. For additional component information see SE1450, SD1440, and SD1410.

Package

HOA Series Transmissive Optoschmitt Sensor, Transistor Output, Plastic

Housing material is polycarbonate. 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 Components	Metal
Package Color	Black
Forward Current	30 mA
Continuous Forward Current	50 mA
Forward Voltage	1.6 V
Reverse Breakdown Voltage	3 V

Reverse Current	10 μΑ
Housing Material	Polycarbonate
Rise and Fall Time	15 µs
Power Dissipation	75 mW
Operating Temperature Range	-55 °C to 100 °C [-67 °F to 212 °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	12,70 mm [0.500 in] dia.
Slot Width	9,53 mm [0.375 in]