



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.

HOA2006-001

HOA Series Transmissive Optoschmitt Sensor, Transistor Output, Plastic Package

Features

- Direct TTL interface
- Buffer logic
- Visible ambient light and dust protective filter
- 0.47 in [12 mm] slot width
- Snap-in housing

Description

The HOA2006 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 a 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 blocked. Both emitter and detector have 0.060 in (1.52 mm) x 0.060 in (1.52 mm) vertical apertures.

The sensor housing contains IR (Infrared) transmissive optical windows. This arrangement provides excellent protection against visible ambient light while eliminating aperture openings which could be clogged by airborne contaminants.

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



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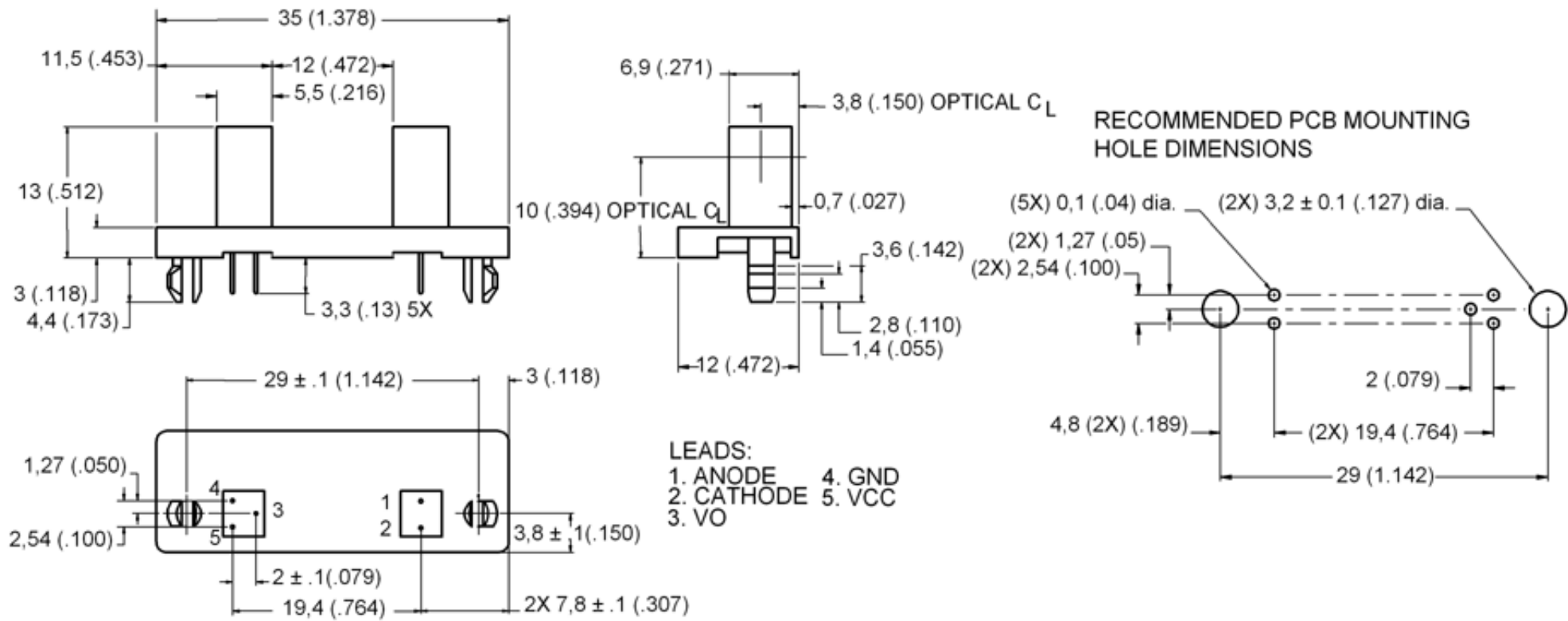
Product Specifications	
Product Type	IR Switch
Output	10 kOhm Pull-up
Output Logic	Buffer
Package Style	PCB Holder
Mounting Configuration	Snap-In
Package Components	Plastic
Package Color	Black
Forward Current	20 mA
Continuous Forward Current	50 mA
Forward Voltage	1.7 V
Reverse Breakdown Voltage	3 V
Reverse Current	10 μ A
Maximum Trigger Current	20 mA
Housing Material	Polycarbonate
Rise and Fall Time	60/15ns
Power Dissipation	100 mW
Operating Temperature Range	-40 °C to 70 °C [-40 °F to 158 °F]
Hysteresis (H)	10%
Operating Supply Voltage	4.5 V to 12.0 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
Short Circuit Output Current	18 mA
Internal Pull-up Resistor	10 kOhm
Output Rise Time	60 ns

Output Fall Time	15 ns
Output Sink Current	18 mA
Propagation Delay, Low-High,High-Low	5.0 μ s
Duration of Output Short Vcc or Ground	1.0 second
IRED Trigger Current	20 mA
Comment	Single Channel
Availability	Global
Product Name	Optoschmitt Sensor
Sensor Aperture	1,52 mm x 1,52 mm [0.060 in x 0.060 in]
Slot Width	12 mm [0.47 in]

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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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