HONEYWELL

HOA6994-T51

See full Datasheet below...

HOA6994-T51

HOA Series IR Opaque Optoschmitt Sensor, Transistor Output, Two Mounting Tabs, Plastic Package

Actual product appearance may vary.

Features

Direct TTL interface
Buffer or inverting logic available
Three device output options
Four mounting configurations
Choice of detector aperture
0.125 in [3.18 mm] slot width
24.0 in [610 mm] min. 26 AWG UL 1429 wire leads

Description

The HOA698X/699X series consists of an infrared emitting diode facing an Optoschmitt detector encased in a black thermoplastic housing. Detector switching takes place whenever an opaque object passes through the slot between emitter and detector. The photodetector consists of a photodiode, amplifier, voltage regulator, Schmitt trigger and various output configurations. The user can choose from available options:(1) detector aperture, (2) mounting tab configuration, (3) detector output configuration, and (4) housing material.

The HOA698X series utilizes an IR transmissive polysulfone housing which features smooth optical faces without external aperture openings; this feature is desirable when aperture blockage from airborne contaminants is a possibility. The HOA699X series employs an opaque polysulfone housing with aperture openings for use in applications in which maximum rejection of ambient light is important, and situations in which maximum position resolution is desired. The HOA698X/699X series employs plastic molded components. For additional component information see SEP8506 and SDP8XX4.

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

Device Polarity:

Buffer - Output is LO when optical path is blocked.
Inverter - Output is HI when optical path is blocked.

Wire color code and functions are:

Red - IRED Anode
Black - IRED Cathode
Green - Detector Ground
White - Detector Vcc
Blue - Detector Output

Supporting Documentation

▶ **Dimensions**   ▶ **Schematics and Performance Charts**   ▶ **Engineering Drawing**

Product Specifications	
Series Name	Optoschmitt Sensor
Product Type	IR Switch
Output	10 kOhm Pull - up
Output Logic	Buffer
Mounting Configuration	Two Mounting Tabs
Package Components	Plastic
Package Color	Black
Continuous Forward Current	50 mA
Forward Voltage	1.6 V
Reverse Breakdown Voltage	3 V
Reverse Current	10 µ A
Maximum Trigger Current	15 mA
Housing Material	Polysulfone, Opaque
Power Dissipation	100 mW
Operating Temperature Range	- 40 °C to 70 °C [- 40 °F to 158 °F]
Hysteresis (H)	0.05
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	15 mA
Low Level Output Voltage	0.4 V maximum
Low Level Supply Current	15 mA
Output Rise Time	70 ns
Output Fall Time	70 ns
Propagation Delay, Low - High,High - Low	5.0 µ s
Duration of Output Short Vcc or Ground	1.0 second
IRED Trigger Current	15 mA
IRED Anode Color	Red
IRED Cathode Color	Black
Detector Vcc Color	White
Detector Output Color	Blue
Detector Ground Color	Green
Comment	Output is LO when incident light intensity is above the turn - on threshold level.
Availability	Global
Sensor Aperture	1,52 mm x 0,25 mm [0.060 in x 0.010 in]
Slot Width	3,18 mm [0.125 in]