



## HOA0862-T55

HOA Series Infrared Transmissive Sensor, Transistor Output, Two Mounting Tabs, Plastic Package

### Features

- Phototransistor output
- Accurate position sensing
- Four mounting configurations
- 0.125 in [3.18 mm] slot width
- Choice of detector aperture
- Choice of opaque or IR transmissive housings

### Description

The HOA086X/087X series consists of an infrared emitting diode facing an NPN silicon phototransistor encased in a black thermoplastic housing. The phototransistor switching takes place whenever an opaque object passes through the slot between emitter and detector. This series allows the user to choose from available options: (1) mounting tab configurations, (2) lead spacing, (3) electro-optical characteristics, (4) detector aperture size, and (5) housing materials.

The HOA86X 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 HOA087X series employs an opaque polysulfone housing with aperture openings for use in applications in which maximum rejection of ambient light is important and in situations where maximum position resolution is desired. The HOA086X/087X series employs plastic molded components. For additional component information see SEP8506 and SDP8406.

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



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### Product Specifications

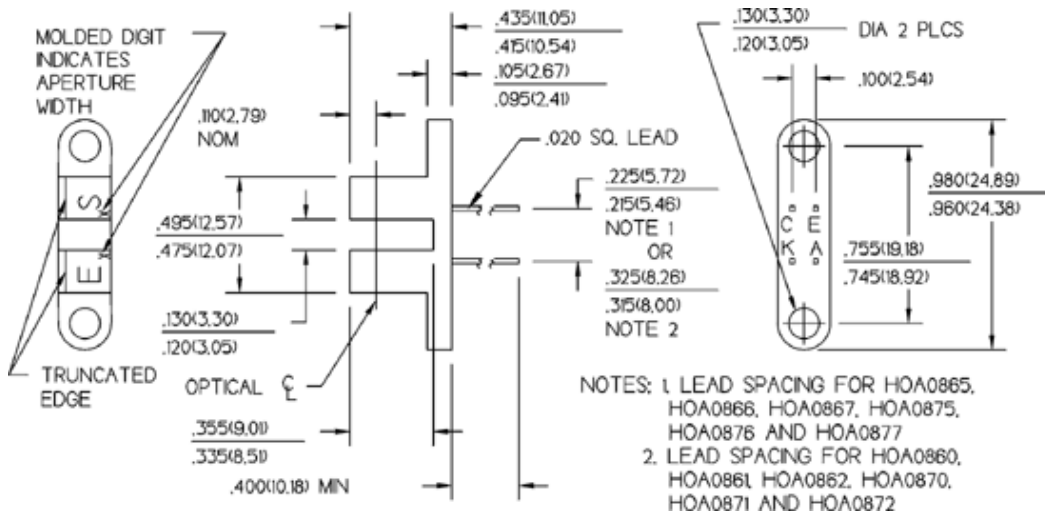
| Product Specifications      |                                    |
|-----------------------------|------------------------------------|
| Product Type                | IR Switch                          |
| On-State Collector Current  | 1.80 mA                            |
| Output                      | Transistor                         |
| Mounting Configuration      | Two Mounting Tabs                  |
| 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 $\mu$ A                         |
| Rise and Fall Time          | 15 $\mu$ s                         |
| Power Dissipation           | 100 mW                             |
| Operating Temperature Range | -40 °C to 85 °C [-40 °F to 185 °F] |
| Dark Current                | 100 nA                             |

|   |   |
|---|---|
| <b>Collector DC Current</b>                 | 30 mA                                   |
| <b>Collector-Emitter Breakdown Voltage</b>  | 30 V                                    |
| <b>Emitter-Collector Breakdown Voltage</b>  | 5 V                                     |
| <b>Collector-Emitter Saturation Voltage</b> | 0.6 V                                   |
| <b>Availability</b>                         | Global                                  |
| <b>Product Name</b>                         | Transmissive Sensor                     |
| <b>Sensor Aperture</b>                      | 1,52 mm x 1,27 mm [0.060 in x 0.050 in] |
| <b>Slot Width</b>                           | 3,18 mm [0.125 in]                      |



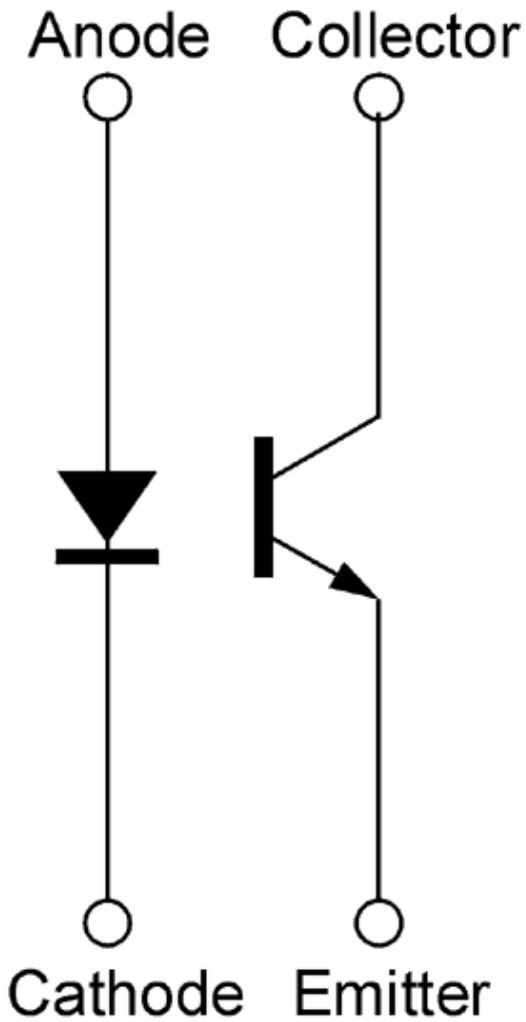
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## Honeywell

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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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