### Honeywell



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.

### 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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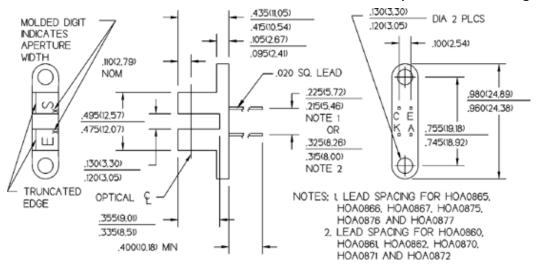
Product TypeIR SwitchOn-State Collector Current1.80 mAOutputTransistorMounting ConfigurationTwo Mounting TabsPackage ComponentsPlasticPackage ColorBlackForward Current20 mAContinuous Forward Current50 mAForward Voltage1.6 VReverse Breakdown Voltage3 VReverse Current10 μARise and Fall Time15 μsPower Dissipation100 mWOperating Temperature Range-40 °C to 85 °C [-40 °F to 185 °F]Dark Current100 nA	Product Specifications	
OutputTransistorMounting ConfigurationTwo Mounting TabsPackage ComponentsPlasticPackage ColorBlackForward Current20 mAContinuous Forward Current50 mAForward Voltage1.6 VReverse Breakdown Voltage3 VReverse Current10 μARise and Fall Time15 μsPower Dissipation100 mWOperating Temperature Range-40 °C to 85 °C [-40 °F to 185 °F]	Product Type	IR Switch
Mounting ConfigurationTwo Mounting TabsPackage ComponentsPlasticPackage ColorBlackForward Current20 mAContinuous Forward Current50 mAForward Voltage1.6 VReverse Breakdown Voltage3 VReverse Current10 μARise and Fall Time15 μsPower Dissipation100 mWOperating Temperature Range-40 °C to 85 °C [-40 °F to 185 °F]	On-State Collector Current	1.80 mA
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 μA   Rise and Fall Time 15 μs   Power Dissipation 100 mW   Operating Temperature Range -40 °C to 85 °C [-40 °F to 185 °F]	Output	Transistor
Package ColorBlackForward Current20 mAContinuous Forward Current50 mAForward Voltage1.6 VReverse Breakdown Voltage3 VReverse Current10 μARise and Fall Time15 μsPower Dissipation100 mWOperating Temperature Range-40 °C to 85 °C [-40 °F to 185 °F]	Mounting Configuration	Two Mounting Tabs
Forward Current20 mAContinuous Forward Current50 mAForward Voltage1.6 VReverse Breakdown Voltage3 VReverse Current10 μARise and Fall Time15 μsPower Dissipation100 mWOperating Temperature Range-40 °C to 85 °C [-40 °F to 185 °F]	Package Components	Plastic
Continuous Forward Current50 mAForward Voltage1.6 VReverse Breakdown Voltage3 VReverse Current10 μARise and Fall Time15 μsPower Dissipation100 mWOperating Temperature Range-40 °C to 85 °C [-40 °F to 185 °F]	Package Color	Black
Forward Voltage1.6 VReverse Breakdown Voltage3 VReverse Current10 μARise and Fall Time15 μsPower Dissipation100 mWOperating Temperature Range-40 °C to 85 °C [-40 °F to 185 °F]	Forward Current	20 mA
Reverse Breakdown Voltage 3 V   Reverse Current 10 μA   Rise and Fall Time 15 μs   Power Dissipation 100 mW   Operating Temperature Range -40 °C to 85 °C [-40 °F to 185 °F]	Continuous Forward Current	50 mA
Reverse Current10 μARise and Fall Time15 μsPower Dissipation100 mWOperating Temperature Range-40 °C to 85 °C [-40 °F to 185 °F]	Forward Voltage	1.6 V
Rise and Fall Time15 μsPower Dissipation100 mWOperating Temperature Range-40 °C to 85 °C [-40 °F to 185 °F]	Reverse Breakdown Voltage	3 V
Power Dissipation100 mWOperating Temperature Range-40 °C to 85 °C [-40 °F to 185 °F]	Reverse Current	10 μΑ
Operating Temperature Range -40 °C to 85 °C [-40 °F to 185 °F]	Rise and Fall Time	15 µs
	Power Dissipation	100 mW
Dark Current 100 nA	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	0.6 V
Availability	Global
Product Name	Transmissive Sensor
Sensor Aperture	1,52 mm x 1,27 mm [0.060 in x 0.050 in]
Slot Width	3,18 mm [0.125 in]

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### HOA0862-T55

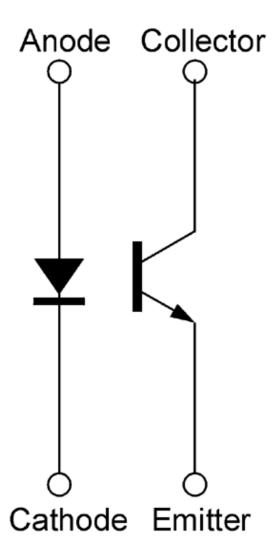
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### **A** WARNING

#### **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.

### **A** 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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