

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.

### SE3470-003

# SE Series AlGaAs Infrared Emitting Diode, TO-46 Metal Can Package

#### **Features**

- TO-46 metal can package
- Choice of flat window or lensed package
- 90 ° or 20 ° (nominal) beam angle option
- 880 nm wavelength
- Higher output power than GaAs at equivalent drive currents
- Wide operating temperature range [-55 °C to 125 °C]
- Ideal for high pulsed current applications
- Mechanically and spectrally matched to SD3421/5421 photodiode, SD3443/5443/5491 phototransistor, SD3410/5410 photodarlington and SD5600 series Schmitt trigger

### **Description**

The SE3470/5470 series consists of aluminum gallium arsenide infrared emitting diode mounted in a TO-46 metal can package. The SE3470 series has flat window cans providing a wide beam angle, while the SE5470 series has glass lensed cans providing a narrow beam angle. These devices typically exhibit 70% greater power output than gallium arsenide devices at the same forward current. The TO-46 packages offer high power dissipation capability and are ideally suited for operation in hostile environments.

## Honeywell

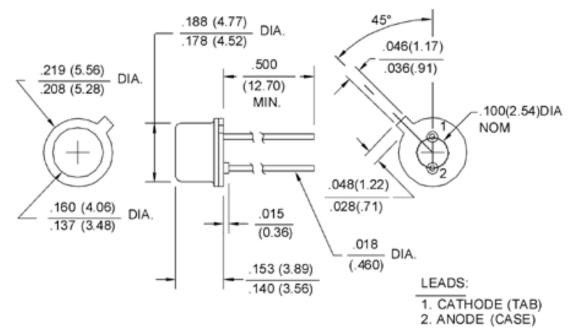
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Product Specifications	
Product Type	IR Component
Power Output	10.5 mW min
Beam Angle (Degree)	90
Package Style	T0-46, Flat Window
Package Components	Metal
Forward Current	100 mA
Continuous Forward Current	100 mA
Forward Voltage	1.9 V
Reverse Breakdown Voltage	3 V
Output Wavelength	880 nm
Spectral Bandwidth	80 nm
Spectral Shift With Temperature	0.2 nm/°C
Rise and Fall Time	0.7 µs
Power Dissipation	150 mW
Operating Temperature Range	-55 °C to 125 °C [-67 °F to 257 °F]
Availability	Global
Product Name	Infrared Emitting Diode

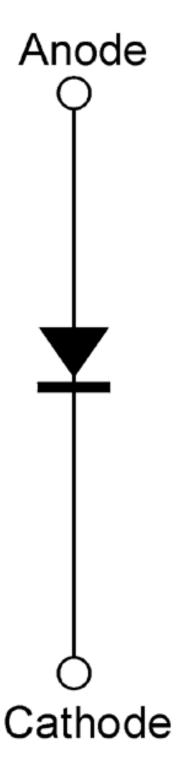
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### **A** WARNING

### 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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