THORLABS

LED465E

Blue LED

Specifications and Documentation

Part 1. Introduction: LED465E LED

The LED465E emits blue light with a spectral output centered at 465 nm. This LED is encased in a Ø5.0 mm clear molded package.

Part 2. Specifications

2.1. Electrical Specifications

	Typical	Maximum Ratings
Power Dissipation		200 mW
Reverse Voltage		5.0 V
DC Forward Current		50 mA
Forward Voltage @ 20 mA	3.2 V	4.0 V
Operating Temperature		-30 to 85 ºC
Storage temperature Range		-30 to 100 ºC

Note: All maximum measurements specified are at 25 ºC.

2.2. Optical Specifications

	Typical
Center Wavelength	465 ± 10 nm
FWHM	25 nm
Half Viewing Angle	±8º
Optical Power @ 20 mA	20.0 mW

2.3. Soldering Specifications

	Conditions
Manual Soldering	265 ºC

2.4. Cleaning Solvents

Solvent	Ethyl Alcohol	Isopropyl Alcohol	Propanol	Acetone	Chloroseen	Tricloroethylene	MKS
Approved	Yes	Yes	Yes	No	No	No	No

2.5. Physical Specifications

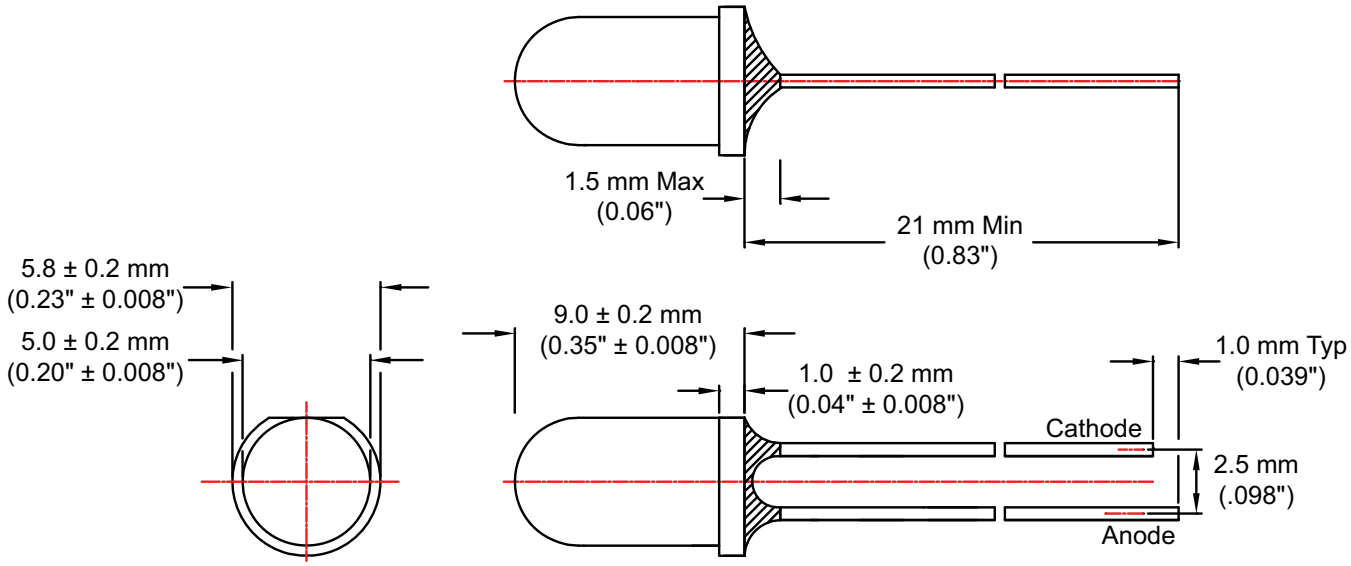
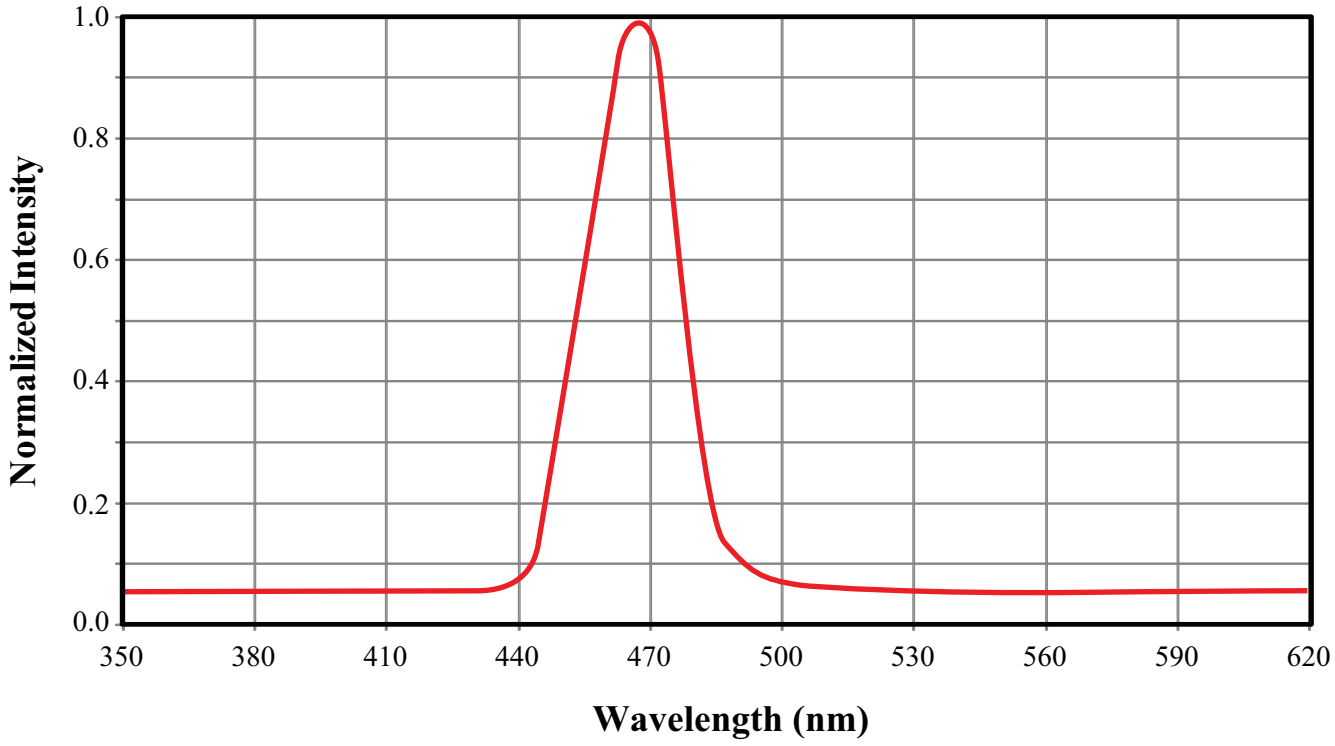
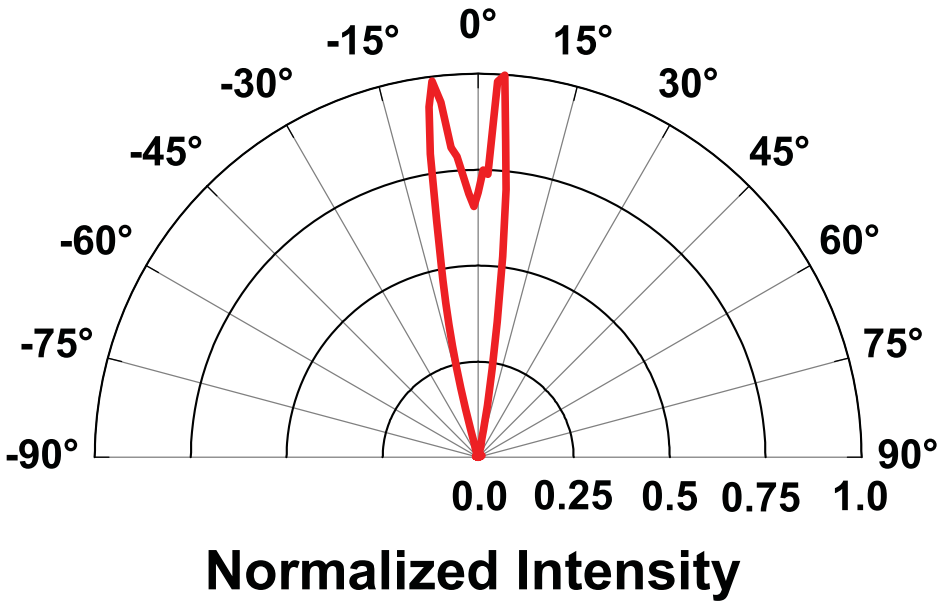


Figure 1: LED465E drawing

2.6. Typical Spectral Intensity Distribution



2.7. Typical Radial Intensity Distribution



Part 3. Precautions and Warranty Information

These products are ESD (electro static discharge) sensitive and as a result are not covered under warranty. In order to ensure the proper functioning of an LED care must be given to maintain the highest standards of compliance to the maximum electrical specifications when handling such devices. The LEDs are particularly sensitive to any voltage that exceeds the absolute maximum ratings of the product. Any applied voltage in excess of the maximum specification will cause damage and possible complete failure to the product. The user must use handling procedures that prevent any electro static discharges or other voltage surges when handling or using these devices.

Thorlabs, Inc. Life Support and Military Use Application Policy is stated below:

THORLABS' PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS OR IN ANY MILITARY APPLICATION WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE PRESIDENT OF THORLABS, INC. As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury to the user.

2. A critical component is any component in a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system or to affect its safety or effectiveness.

3. The Thorlabs products described in this document are not intended nor warranted for usage in Military Applications.

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