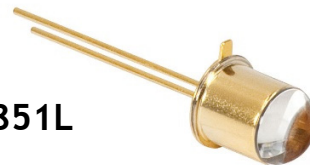


LED851L



Description

The LED851L is an AlGaAs LED mounted in a hermetically sealed TO-18 package with a spherical glass lens. This LED emits light with a spectral output centered at 850 nm.

Specifications

Absolute Max Ratings ^a	
Specification	Max
Power Dissipation	160 mW
Reverse Voltage	5.0 V
DC Forward Current	100 mA
Forward Voltage @ 20 mA	1.70 V
Reverse Current	10 μ A
Pulsed Forward Current ^b	1000 mA
Operating Case Temperature	-40 to 80 °C
Storage Temperature	-40 to 100 °C
Optical Specifications	
	Typical
Center Wavelength	850 nm \pm 15 nm
FWHM	40 nm
Half Viewing Angle	10°
Total Optical Power	13 mW @ 20 mA

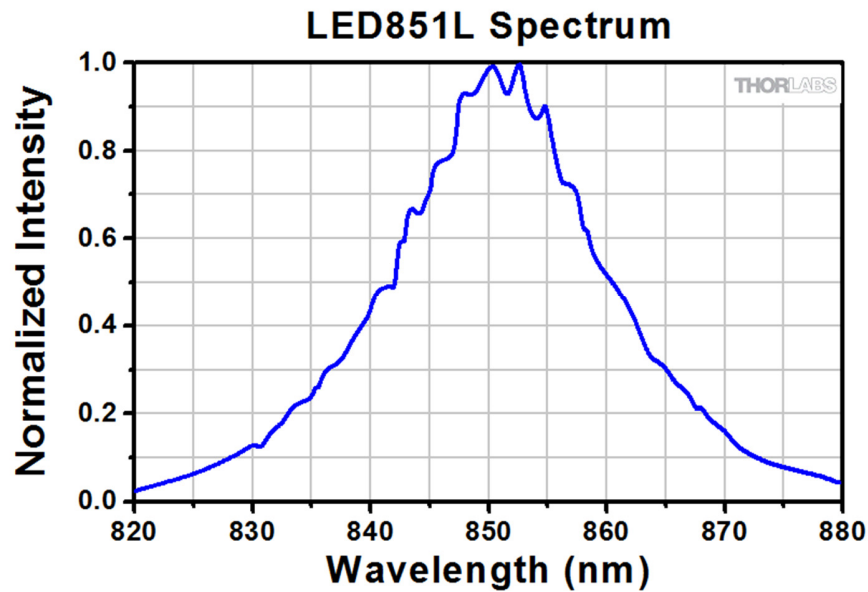


- All maximum measurements specified are at 25 °C.
- Pulse width is 1 ms with 10% duty cycle.

Soldering Specifications	
	Conditions
Manual Soldering	295 °C \pm 5 °C , for less than 3 seconds
Wave Soldering	260 °C \pm 5 °C , for less than 5 seconds
Reflow Soldering	Preheating: 70 °C to 80 °C , for 30 seconds Soldering: 245 °C \pm 5 °C , for less than 5 seconds

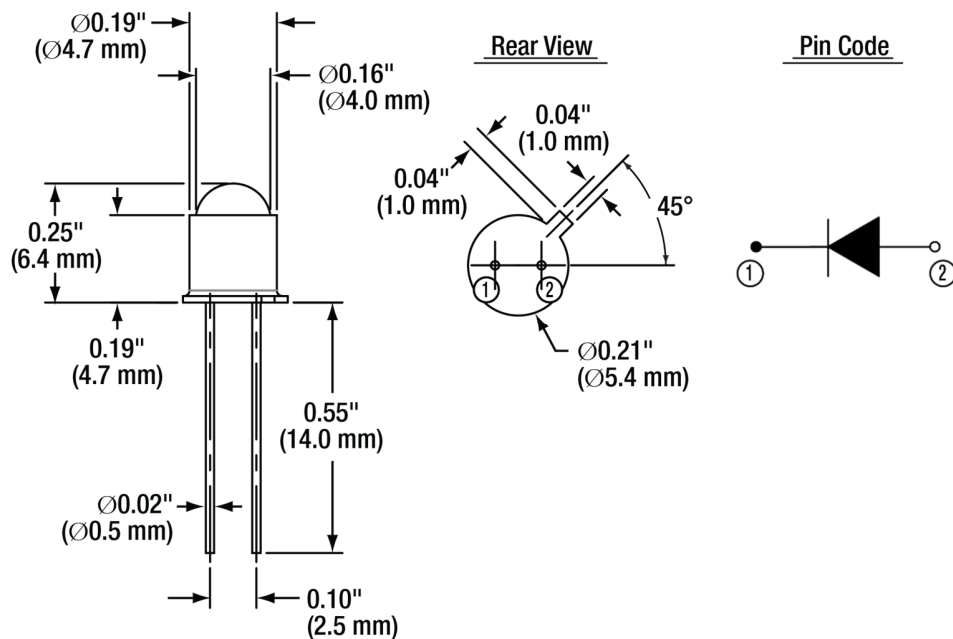
Cleaning Solvents							
Solvent	Ethyl Alcohol	Isopropyl Alcohol	Propanol	Acetone	Chloroform	Trichloroethylene	MKS
Approved	Yes	Yes	Yes	No	No	No	No

Typical Performance Plot



These measurements were taken at a case temperature of 25 °C.

Drawing



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.