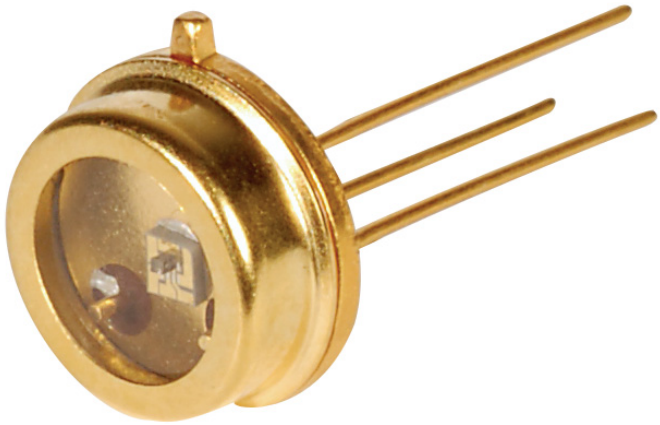
THORLABS

LED341W

UV LED with Window

Specifications and Documentation



Part 1. Introduction: LED341W UV LED

The LED341W emits light with a spectral output centered at 340 nm. This LED is encased in a TO-39 package with a UV glass window.

Part 2. Specifications for an LED341W

2.1. Electrical Specifications

	Typical	Maximum Ratings
Power Dissipation		150 mW
Reverse Voltage		6.0 V
DC Forward Current		20 mA
Forward Voltage @ 20 mA	5.5 V	7.5 V
Reverse Current V_r = -5 V		100µA
Pulsed Current (1 ms pulse with 1% duty cycle)		100 mA
Operating Temperature		-30 ºC to 50 ºC
Storage temperature Range		-30 ºC to 100 ºC

Note: All maximum measurements specified are at 25 ºC.

2.2. Optical Specifications

	Typical
Center Wavelength	340 nm ±10 nm
FWHM	15 nm
Half Viewing Angle	60º
Total Optical Power	0.33 mW @ 20mA

Note: Peak center wavelength measurement tolerance is +/- 2 nm.

2.3. Soldering Specifications

	Conditions
Manual Soldering	295 ºC ± 5 ºC , for less than 3 seconds
Wave Soldering	260 ºC ± 5 ºC , for less than 5 seconds
Reflow Soldering	**Preheating:** 70 ºC to 80 ºC , for 30 seconds **Soldering:** 245 ºC ± 5 ºC , for less than 5 seconds

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

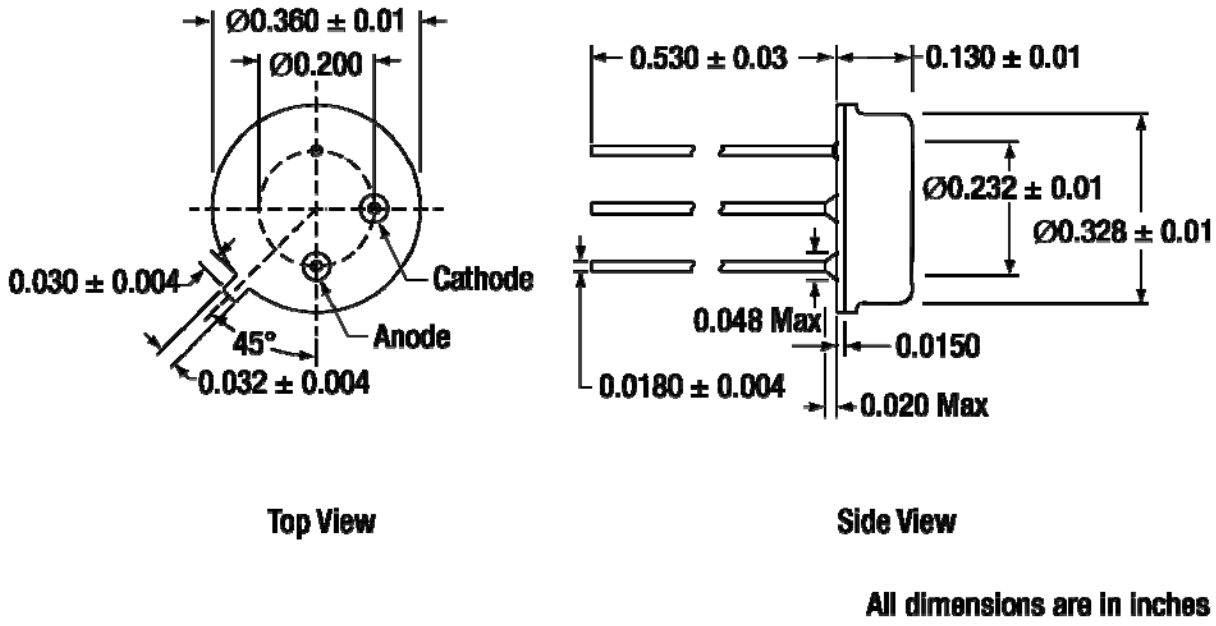
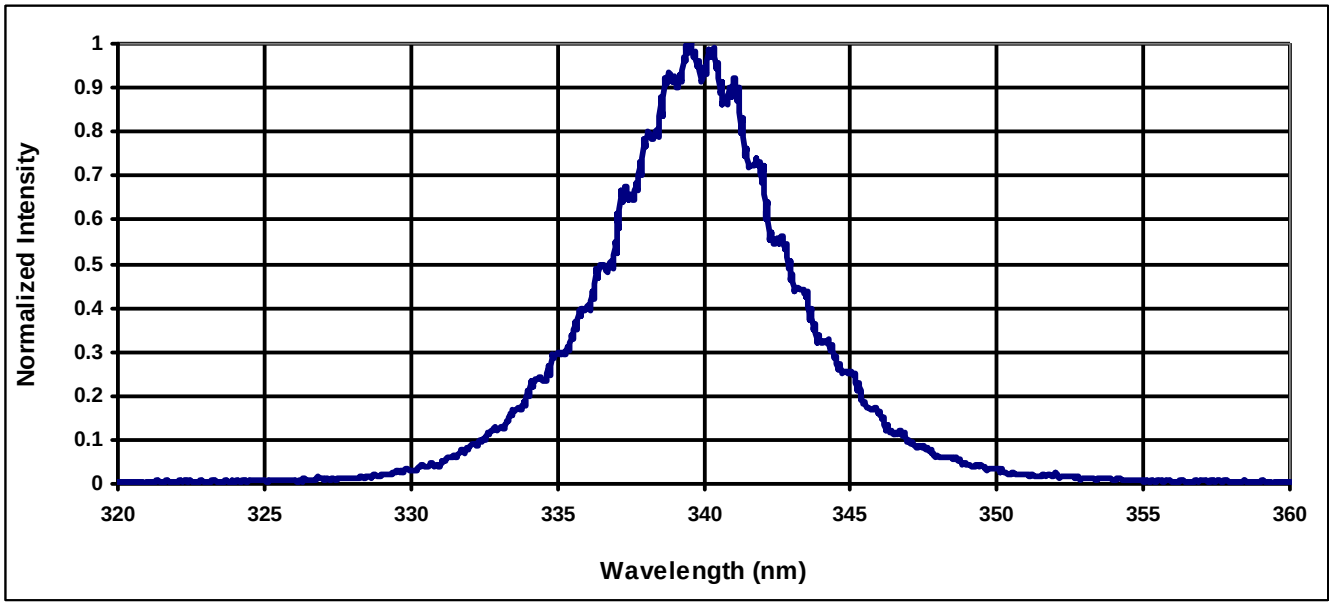


Figure 1: LED341W Mechanical Drawing

2.6. Typical Spectral 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.

Part 4. Contact Information

USA, Canada, and South America
Thorlabs, Inc.
56 Sparta Ave
Newton, NJ 07860
USA
Tel: 973-300-3000
Fax: 973-300-3600
www.thorlabs.com
email: sales@thorlabs.com

Europe
Thorlabs GmbH
Hans-Böckler-Str. 6
85221 Dachau
Germany
Tel: +49-(0)8131-5956-0
Fax: +49-(0)8131-5956-99
www.thorlabs.com
email: Europe@thorlabs.com

Japan and Asia
Thorlabs Japan Inc.
3-6-3, Kitamachi
Nerima-ku, Tokyo 179-0081
Japan
Tel: 81-3-6915-7701
Fax: 81-3-6915-7716
www.thorlabs.jp
email: sales@thorlabs.jp

UK and Ireland
Thorlabs LTD.
1 Saint Thomas Place, Ely
Cambridgeshire CB7 4EX
Great Britain
Tel: +44 (0)1353-654440
Fax: +44 (0)1353-654444
www.thorlabs.com
email: sales.uk@thorlabs.com

Scandinavia
Thorlabs Sweden AB
Bergfotsgatan 7
431 35 Mölndal
Sweden
Tel: +46-31-733-30-00
Fax: +46-31-703-40-45
www.thorlabs.com
email: scandinavia@thorlabs.com