



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

L-7113UVC

ULTRAVIOLET

Features

- LOW POWER CONSUMPTION.
- GENERAL PURPOSE LEADS.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.
- AVAILABLE ON TAPE AND REEL.
- RoHS COMPLIANT.

Description

The source color devices are made with InGaN on SiC Light Emitting Diode.

This device radiates intense ultraviolet (UV) light when operated. Most of the UV light emitted is not visible. Exposure to UV radiation can be harmful to your health. Protect your eyes and skin during operation. Do not look directly at the device during operation. Exposure to UV light, even for a brief period, can damage your eyes.

Do not operate the device unless you have had proper safety training and take appropriate precautions.

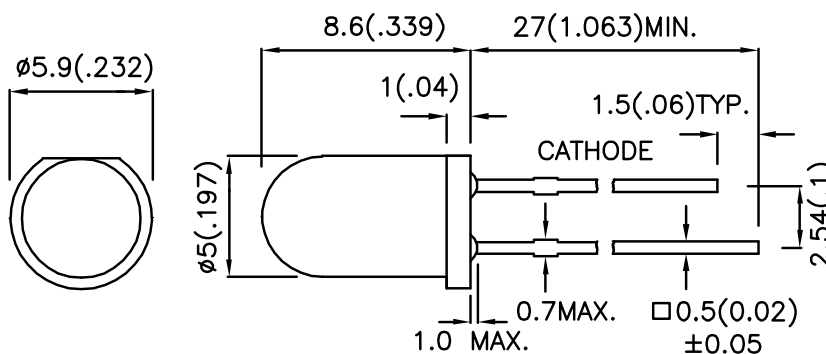
Do not permit children or untrained personnel to operate the device.

Static electricity and surge damage the LEDs.

It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25 (0.01)$ unless otherwise noted.
3. Lead spacing is measured where the lead emerge from the package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Φ_e (mW) @ 20mA		Viewing Angle
			Min.	Typ.	$2\theta_{1/2}$
L-7113UVC	ULTRAVIOLET (InGaN)	WATER CLEAR	7	30	20°

Note:

1. $\theta_{1/2}$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at $T_A=25^\circ\text{C}$

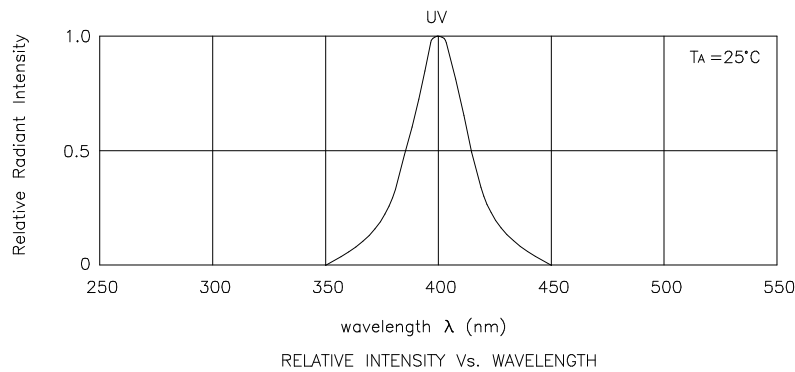
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Ultraviolet	400		nm	$I_F=20\text{mA}$
λ_D	Dominant Wavelength	Ultraviolet	395		nm	$I_F=20\text{mA}$
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Ultraviolet	26		nm	$I_F=20\text{mA}$
C	Capacitance	Ultraviolet	30		pF	$V_F=0\text{V}; f=1\text{MHz}$
V_F	Forward Voltage	Ultraviolet	3.8	4.2	V	$I_F=20\text{mA}$
I_R	Reverse Current	Ultraviolet		10	uA	$V_R = 5\text{V}$

Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

Parameter	Ultraviolet	Units
Power dissipation	100	mW
DC Forward Current	30	mA
Peak Forward Current [1]	100	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

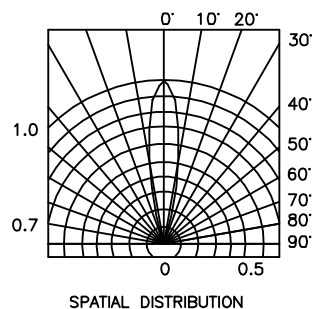
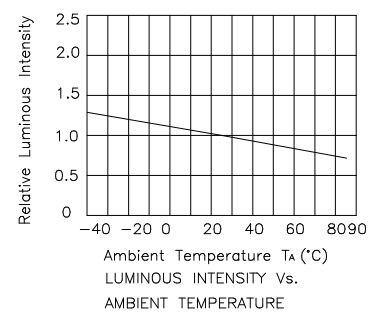
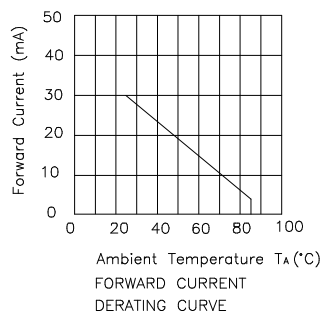
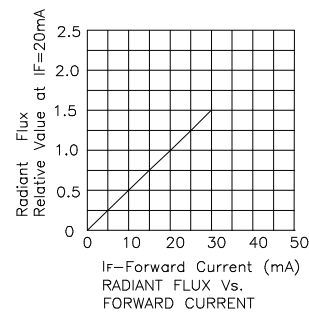
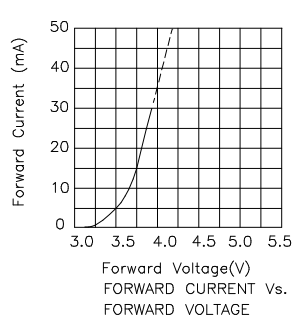
Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.



Ultraviolet

L-7113UVC



Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: $\pm 1\text{nm}$
2. Luminous Intensity: $\pm 15\%$
3. Forward Voltage: $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.