

10mm SOLID STATE LAMP

L-813GD

GREEN

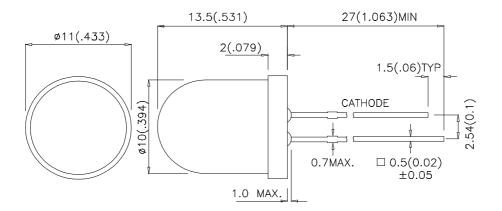
Features

- •10mm DIAMETER BIG LAMP.
- •I.C. COMPATIBLE.
- •RELIABLE AND RUGGED.
- •LONG LIFE SOLID STATE RELIABILITY.
- •RoHS COMPLIANT.

Description

The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

Package Dimensions



- 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 leads emerge from the package.
- 4. Specifications are subject to change without notice.

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APPROVED: J. Lu

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Selection Guide

Part No.	Dice	Lens Type	lv (mcd) @ 20mA		Viewing Angle
			Min.	Тур.	2 θ 1/2
L-813GD	GREEN (GaP)	GREEN DIFFUSED	18	60	60°

Note:

Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Green	565		nm	IF=20mA
λD	Dominant Wavelength	Green	568		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Green	30		nm	IF=20mA
С	Capacitance	Green	15		pF	VF=0V;f=1MHz
VF	Forward Voltage	Green	2.2	2.5	V	IF=20mA
lr	Reverse Current	Green		10	uA	VR = 5V

Absolute Maximum Ratings at Ta=25°C

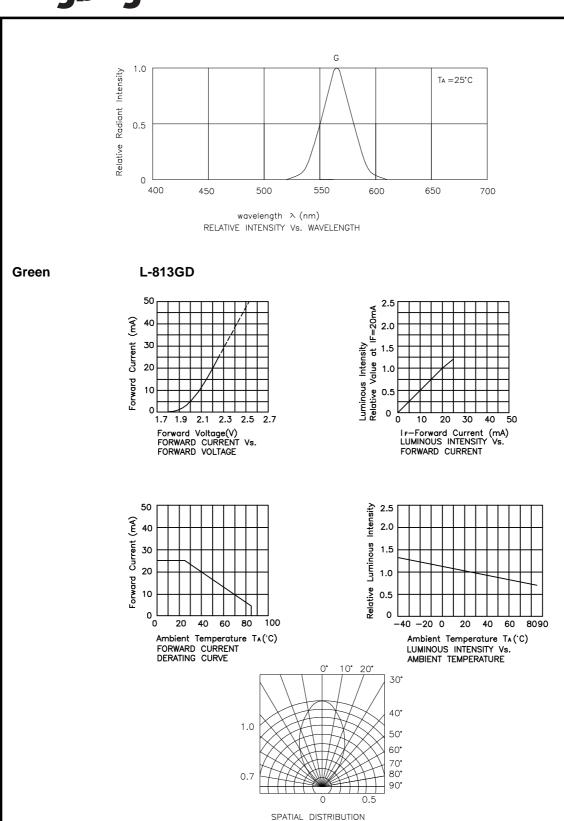
Parameter	Green	Units			
Power dissipation	105	mW			
DC Forward Current	25	mA			
Peak Forward Current [1]	140	mA			
Reverse Voltage	5	V			
Operating / Storage Temperature -40°C To +85°C					
Lead Solder Temperature [2]	260°C For 3 Seconds				
Lead Solder Temperature [3]	d Solder Temperature [3] 260°C For 5 Seconds				

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

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 $^{1.\,\}theta1/2$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

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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: +/-1nm
- 2. Luminous Intensity: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

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