### T-1 (3mm) SOLID STATE LAMP

Part Number: L-1154GD Green

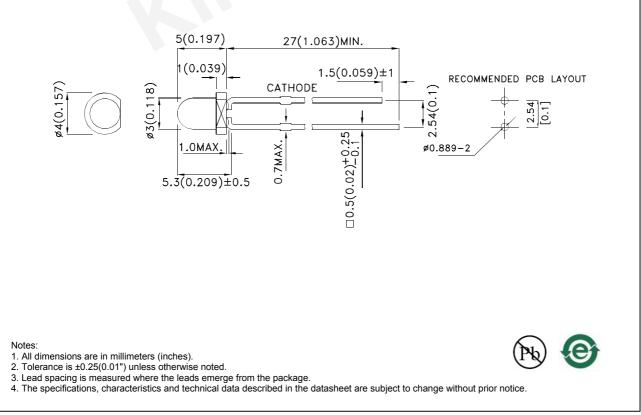
### Features

- Low power consumption.
- Popular T-1 diameter package.
- General purpose leads.
- Reliable and rugged.
- Long life solid state reliability.
- Available on tape and reel.
- RoHS compliant.

#### Description

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

#### **Package Dimensions**



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#### **Selection Guide**

Part No.	Dice	Lens Type	lv (ma @ 10		Viewing Angle [1]
			Min.	Тур.	201/2
L-1154GD	Green (GaP)	Green Diffused	10	25	60°

Notes:

θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
Luminous intensity/ luminous Flux: +/-15%.
Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

#### Electrical / Optical Characteristics at TA=25°C

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

Notes:

1.Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

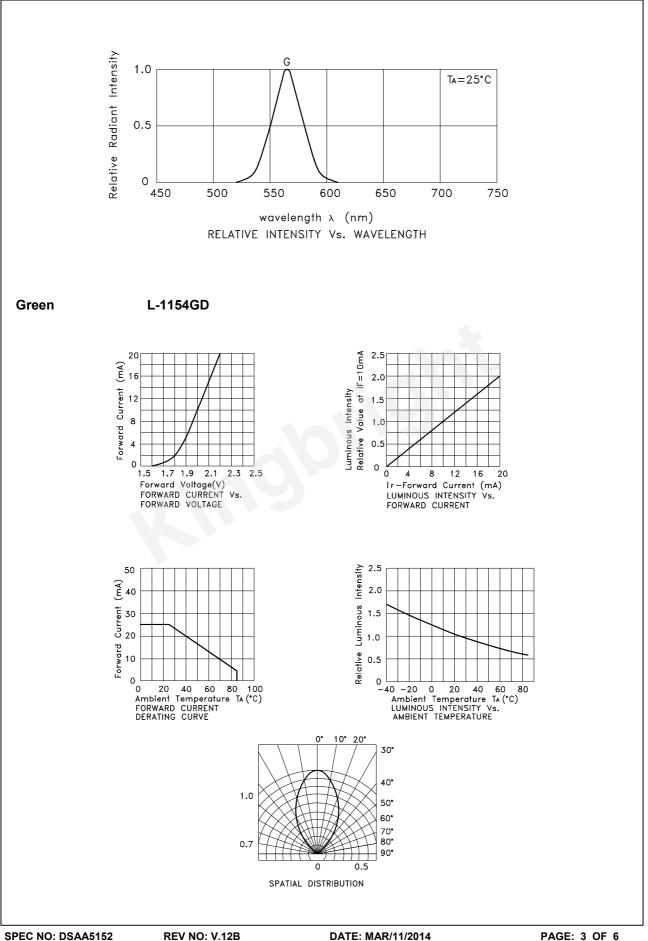
3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

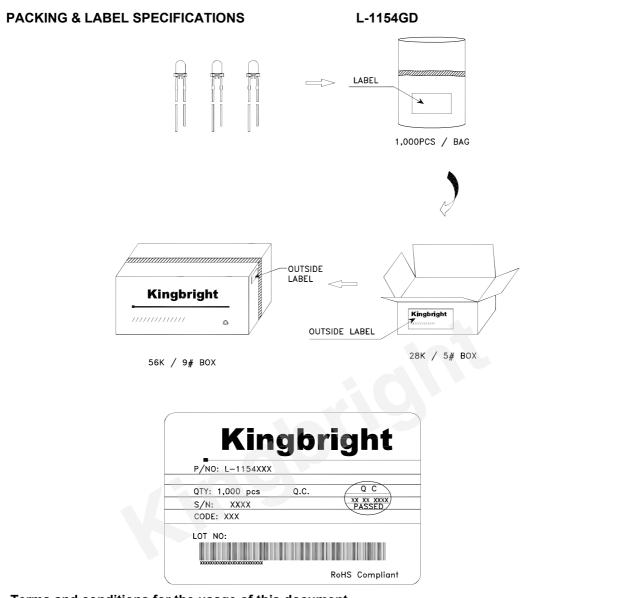
#### Absolute Maximum Ratings at TA=25°C

Parameter	Green	Units		
Power dissipation	62.5	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]	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.





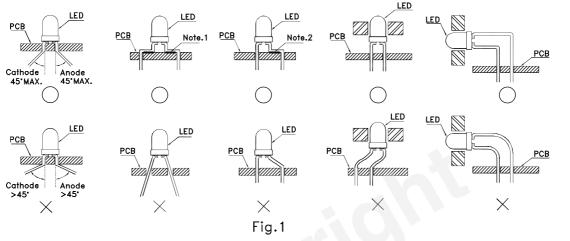
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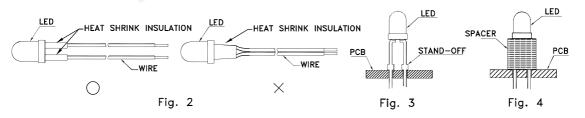
### PRECAUTIONS

1. The lead pitch of the LED must match the pitch of the mounting holes on the PCB during component placement. Lead-forming may be required to insure the lead pitch matches the hole pitch. Refer to the figure below for proper lead forming procedures. (Fig. 1)

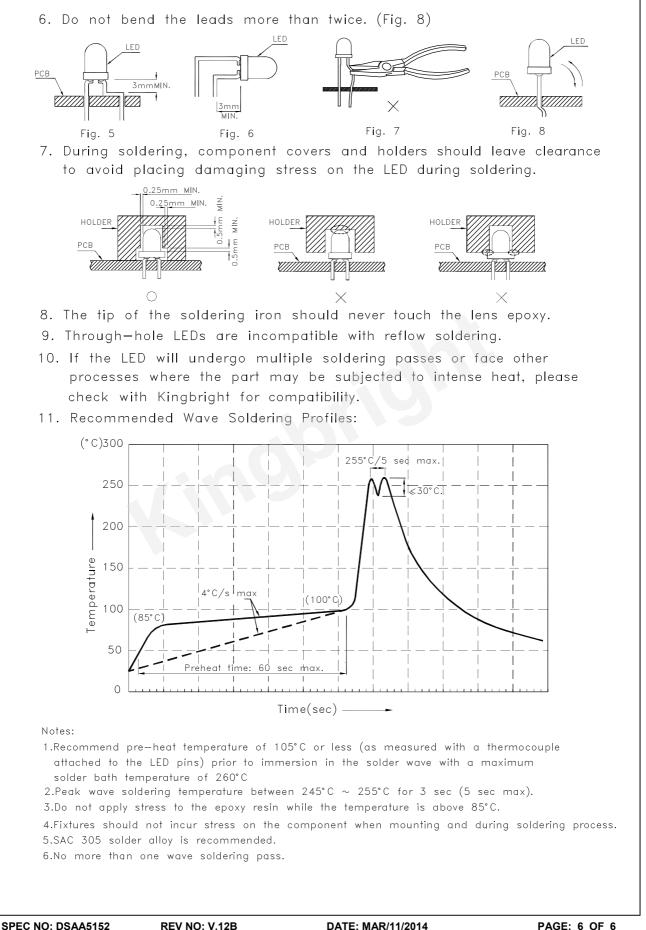


" $\bigcirc$ " Correct mounting method "imes" Incorrect mounting method

- When soldering wire to the LED, use individual heat-shrink tubing to insulate the exposed leads to prevent accidental contact short-circuit. (Fig.2)
- 3. Use stand-offs (Fig.3) or spacers (Fig.4) to securely position the LED above the PCB.



- 4. Maintain a minimum of 3mm clearance between the base of the LED lens and the first lead bend. (Fig. 5 and 6)
- 5. During lead forming, use tools or jigs to hold the leads securely so that the bending force will not be transmitted to the LED lens and its internal structures. Do not perform lead forming once the component has been mounted onto the PCB. (Fig. 7)



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