

### PRELIMINARY SPEC

P/N: L-7700C4VGC-H



### Technical Data



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

#### Description

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.

#### Features

- \* HIGH LUMINANCE OUTPUT.
- \* DESIGN FOR HIGH CURRENT OPERATION.
- \* SOLDERLESS MOUNTING TECHNIQUE.
- \* LOW POWER CONSUMPTION.
- \* LOW THERMAL RESISTANCE.
- \* LOW PROFILE.
- \* PACKAGED IN TUBES FOR USE WITH  
AUTOMATIC INSERTION EQUIPMENT.
- \* RoHS COMPLIANT.

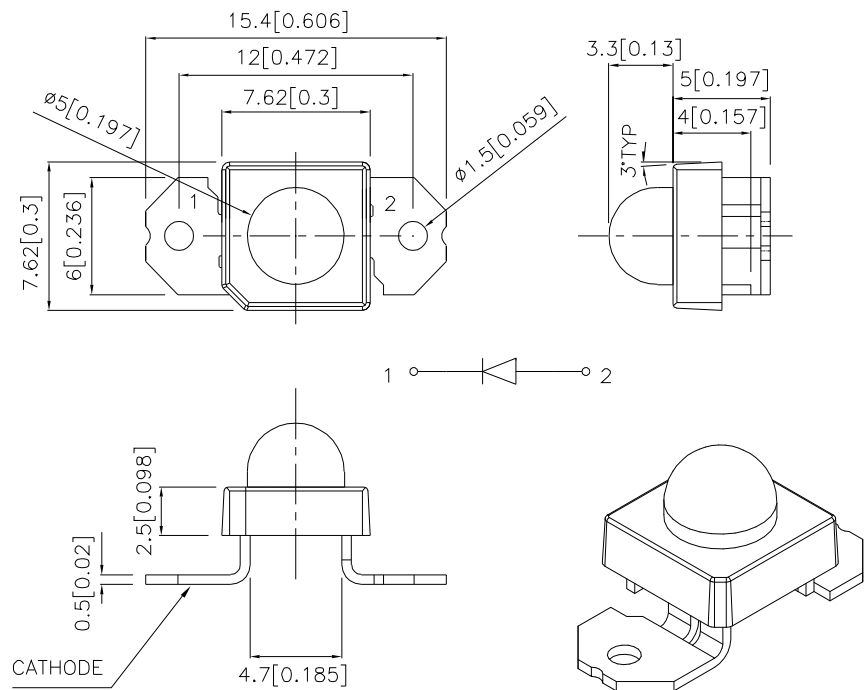
#### Benefits

- \*Rugged Lighting Products.
- \*Electricity savings.
- \*Maintenance savings.
- \*Environmental Conformance.

#### Typical Applications

- \*Automotive Exterior Lighting.
- \*Solid State Lighting and Signaling.

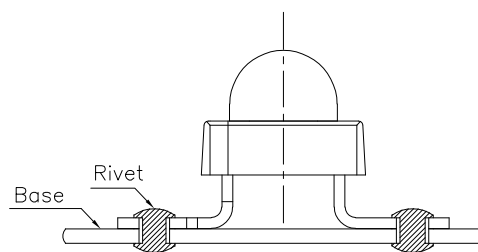
## Outline Drawings



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

PATENT PENDING



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

PARAMETER	VG-H	UNITS
DC Forward Current	50	mA
Power dissipation	230	mW
Reverse Voltage	5	V
Operating Temperature	-40 To +85	°C
Storage Temperature	-55 To +85	°C

## Selection Guide

Part No.	LED COLOR	Iv(cd) <sup>[1]</sup> @ 50mA		Viewing Angle <sup>[2]</sup>
		Min.	Typ.	2θ1/2 Typ.
L-7700C4VGC-H	GREEN (InGaN)	7.5	16	30°

Notes:

- 1.Luminous intensity is measured with an integrating sphere after the device has stabilized.  
2.θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Optical Characteristics at TA=25°C If=50mA Rθj-a=200°C/W

DEVICE TYPE	PEAK WAVELENGTH λPEAK (nm) TYP.	DOMINANT <sup>[1]</sup> WAVELENGTH λDOM (nm) TYP.	SPECTRAL LINE WAVELENGTH Δλ1/2(nm) TYP.
L-7700C4VGC-H	520	525	35

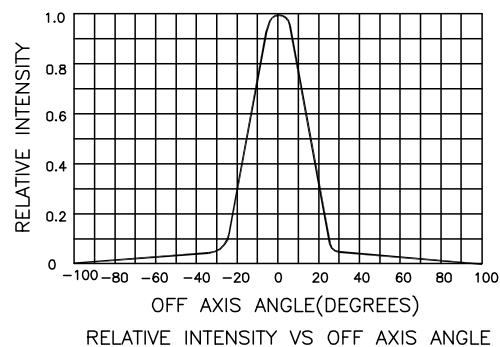
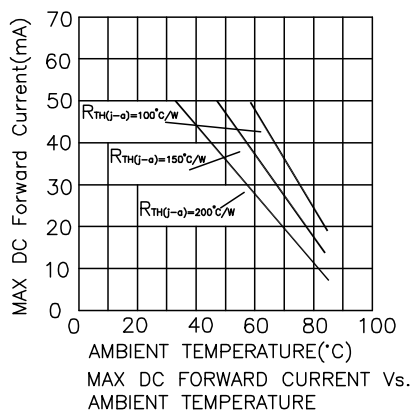
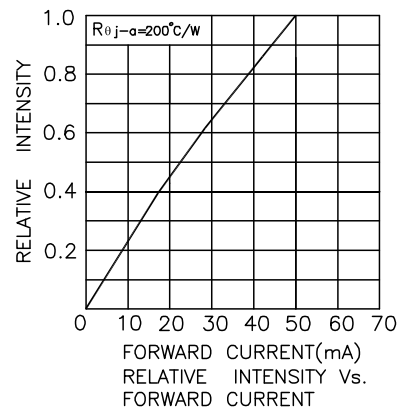
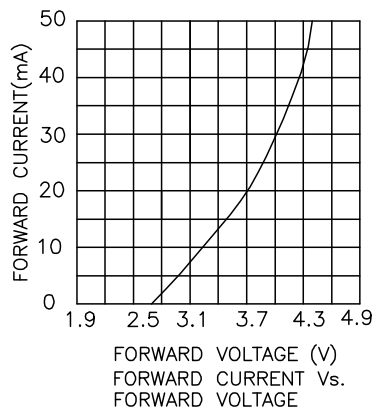
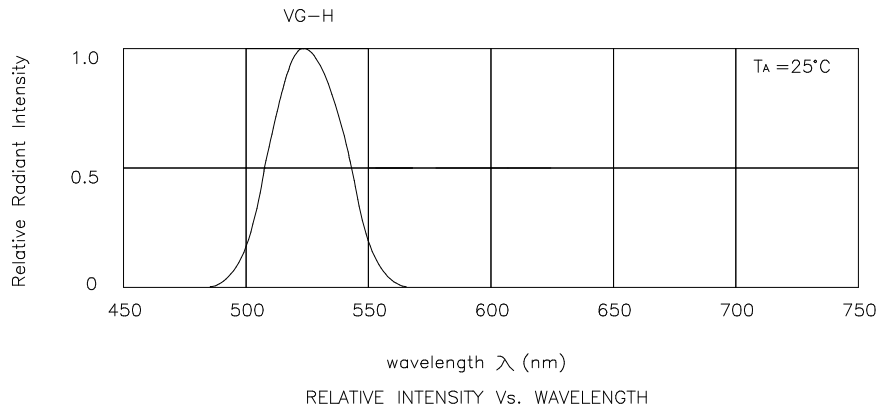
Note:

- 1.The dominant wavelength is derived from the CIE Chromaticity Diagram and represents the perceived color of the device.

## Electrical Characteristics at TA=25°C

DEVICE TYPE	FORWARD VOLTAGE VF(VOLTS) @ If=50mA			REVERSE CURRENT IR (uA) @ VR=5V	CAPACITANCE C (pF) @ VF=0V F=1MHZ	THERMAL RESISTANCE Rθj-pin °C/W
	MIN.	TYP.	MAX.	MAX.	TYP.	TYP.
L-7700C4VGC-H	4.2	4.5	4.8	10	27	130

## Figures



### Remarks:

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

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

Note: Accuracy may depend on the sorting parameters.