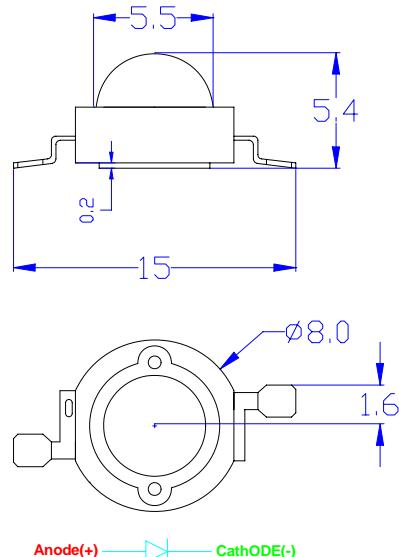




## Features:

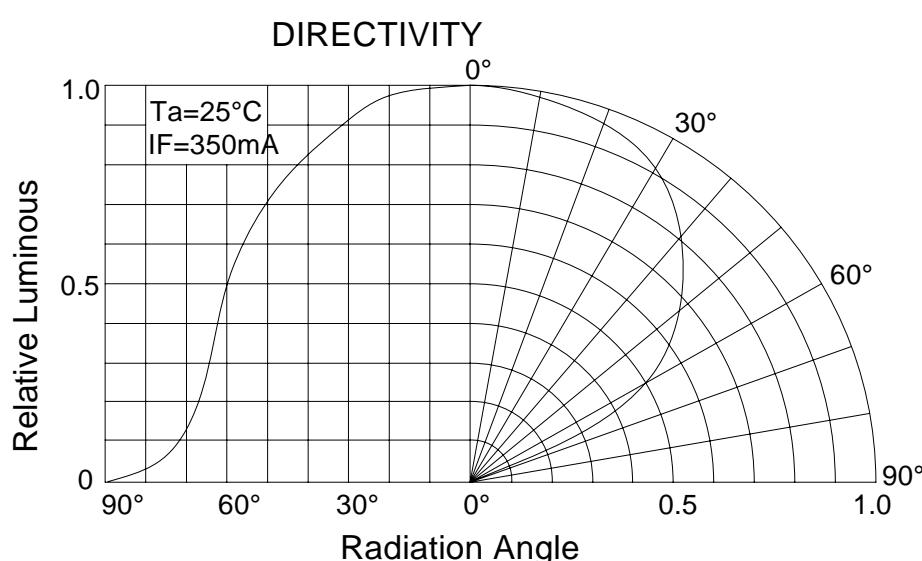
- Highest Flux Green
  - High reliability and Very long operating life  
(up to 100K hrs)
  - Low voltage DC operated
  - More Energy Efficient than Incandescent  
and most Halogen lamps
  - NO UV
  - Superior ESD protection
  - RoHS Compliant



## Typical Applications:

- Reading lights (car, bus, aircraft)
  - Portable (flashlight, bicycle)
  - Automotive Exterior (Stop-Tail-Turn, CHMSL, Mirror Side Repeat)
  - Decorative

- All dimensions are millimeters.
  - Tolerance is  $\pm 0.1\text{mm}$  unless noted



Part No.: E12LG2C**Absolute maximum ratings (Ta = 25°C)**

Parameter	Symbol	Test Condition	Value		Unit
			Min.	Max.	
DC Forward Current	IF	----	----	500	mA
Peak Pulse Current	Ipeak	Duty=0.1ms, 1kHz	----	1000	mA
Power Dissipation	Pd	----	----	1.4	W
LED Junction Temperature	Tj	----	----	120	°C
Operating Temperature	Topr	----	-25	+100	°C
Storage Temperature	Tstr	----	-40	+120	°C
ESD Sensitivity	---	HBM	8000	----	V
Soldering Temperature	---	-----	260°C for 5 Seconds max		

**Electrical and optical characteristics (Ta = 25°C)**

Parameter	Symbol	Test Condition	Value			Unit
			Min.	Typ.	Max.	
Forward Voltage	VF	IF = 350mA	3	3.4	4	V
Luminous Flux	Φv		60	70	----	lm
Viewing Angle	2 θ 1/2		----	120	----	Deg.
Dominant Wavelength	λ d		520	----	530	nm

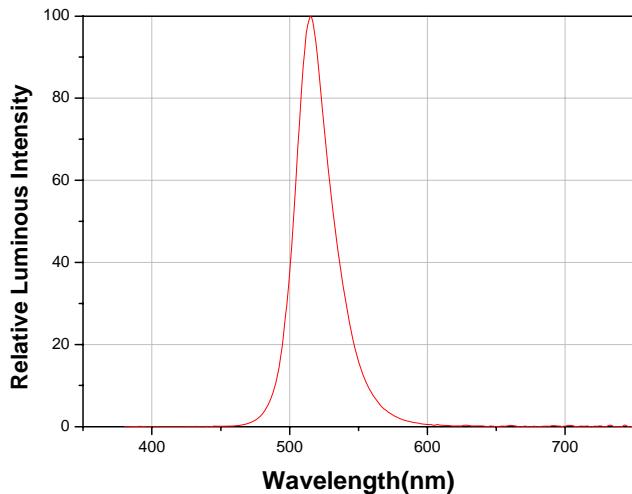
**Luminous Flux Bins (Ta = 25°C) Unit: lm**

Bin	J	K	L
Min	60	70	80
Max	70	80	100

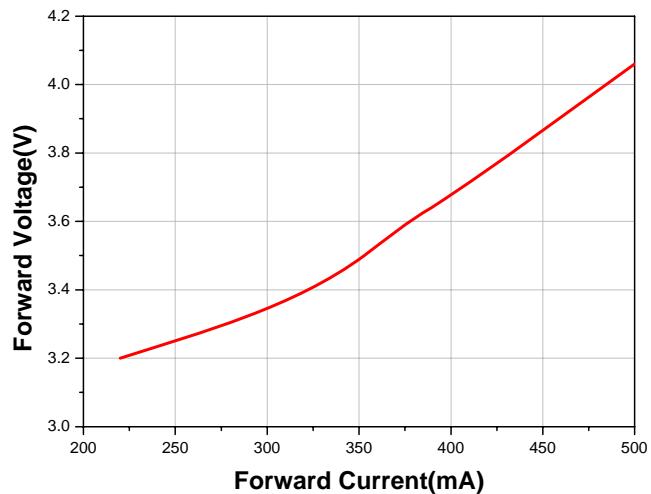


Typical Electro-Optical Characteristics Curves

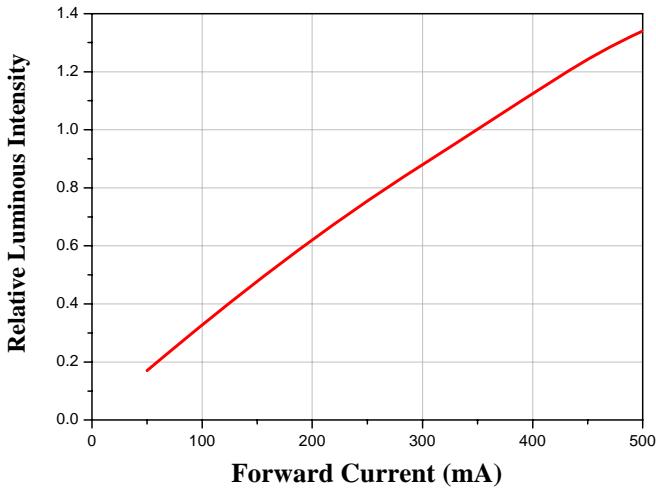
Relative Spectral Distribution  
 $I_f=350\text{mA}$ ,  $T_{\text{Ambient}}=25^\circ\text{C}$



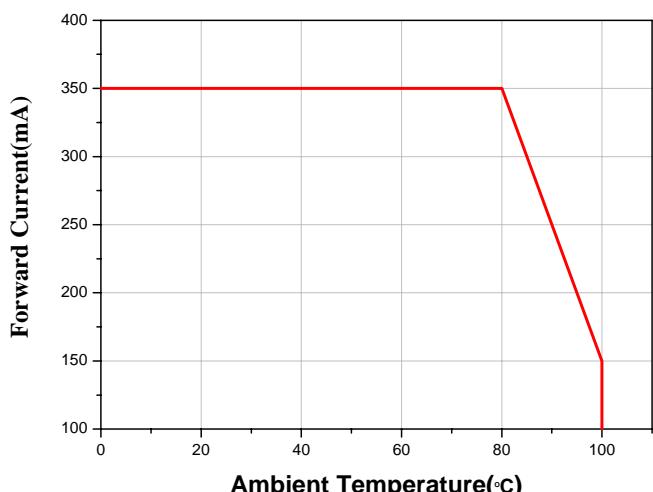
Forward Voltage vs Forward Current,  $T_{\text{Ambient}}=25^\circ\text{C}$



Relative Luminous Intensity vs Forward Current,  $T_{\text{Ambient}}=25^\circ\text{C}$



Forward Current Derating Curve,  
Derating based on  $T_{j\text{MAX}}=120^\circ\text{C}$





## **Precautions For Use**

### **■ Storage**

LEDs should be stored at temperatures less than 30°C and humidity less than 50%.

LEDs should be used within 168 hours (7 days) after the package is opened.

**■ Special thermal designs are recommended to take in outer heat sink design, such as FR4PCB on Aluminum with thermal vias or FPC on Aluminum with thermal conductive adhesive, etc.**

**■ Sufficient thermal management must be conducted, or the die junction temperature will be over the limit under large electronic driving and LED lifetime will decrease critically.**

### **■ Proper Handling**

When handling the product, do not apply direct pressure on the silicone rubber. Do not touch the silicone rubber with tweezers to avoid scratching or other damage.

## **Note**

1. Flux is measured with an accuracy of  $\pm 15\%$
2. CCT is measured with an accuracy of  $\pm 200K$
3. Dominant Wavelength is measured with an accuracy of  $\pm 1.5nm$
4. Forward Voltage is measured with an accuracy of  $\pm 0.15V$