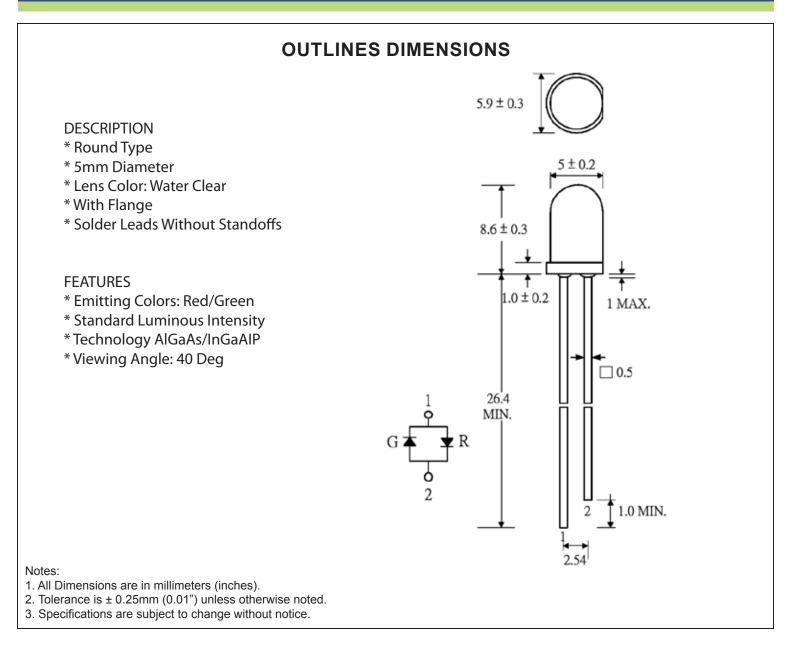


### SPECIFICATIONS

# CLB507RR1G2C



Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle
CLB507RR1G2C	AlGaAs/InGaAIP	Red/Green	Water Clear	40°





### **ABSOLUTE MAXIMUM RATINGS**

#### Parameter Symbol Max Rating Unit **Power Dissipation** PD 80 mW 120 **Pulse Current Forward Current** IFP mA 30 **Continuous Forward Current** IF mΑ V **Reverse Voltage** VR 5 **Operating Temperature Range** TOPR -40~+85 °C Storage Temperature Range °C Tstg -40~+85 IFP = Pulse Width ≤ 10 ms, Duty Ratio ≤1/10. Soldering Condition: 260 °C/ 5sec

## OPTICAL-ELECTRICAL CHARACTERISTICS

Value Test Condi-Parameter Symbol Color Unit tion Min Тур Max Red 250 \_ Luminous Intensity I<sub>F</sub> = 20mA IV mcd Green 800 -Red 1.9 2.4 \_ **Forward Voltage** Vf I⊧ = 20mA V 2.4 Green 2.0 \_ Red 10 \_ **Reverse Leakage Current**  $V_R = 5V$ IR μA Green 10 \_ \_ Red 40 \_ \_  $2\theta 1/2$ I⊧ = 20mA Viewing Angle deg Green 40 \_ \_ 645 Red \_ \_ **Dominant Wavelength** I⊧ = 20mA λD nm 572 Green \_ \_

\*Tolerance of viewing angle: -10 / +5 deg.



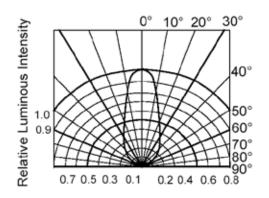
ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

### (TA=25°C)

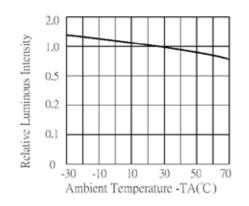
(TA=25°C)
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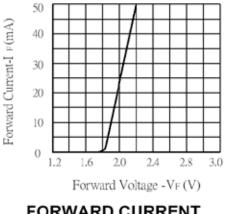
### **OPTICAL CHARACTERISTIC CURVES (RED)**



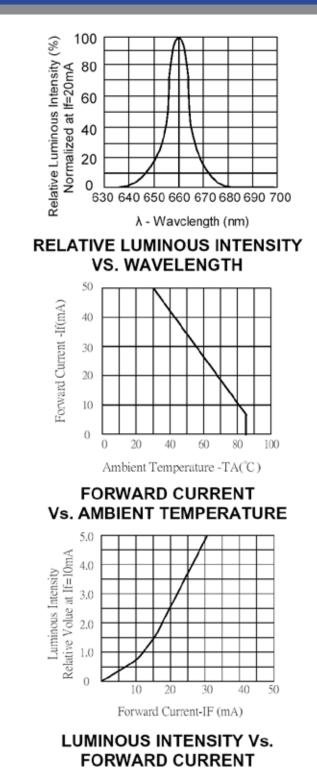
#### **RADIATION DIAGRAM**



#### LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



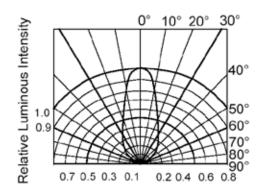
FORWARD CURRENT Vs. FORWARD VOLTAGE



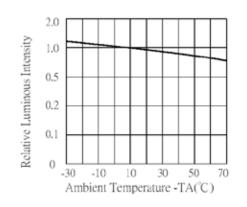




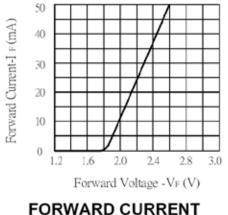
### **OPTICAL CHARACTERISTIC CURVES (GREEN)**



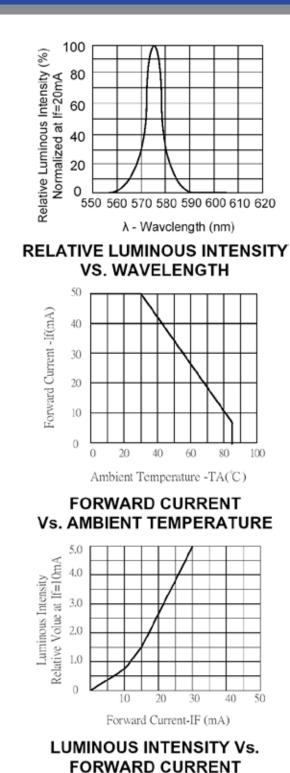
#### **RADIATION DIAGRAM**



#### LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



Vs. FORWARD VOLTAGE







### SOLDERING CONDITIONS – LAMP TYPE LED

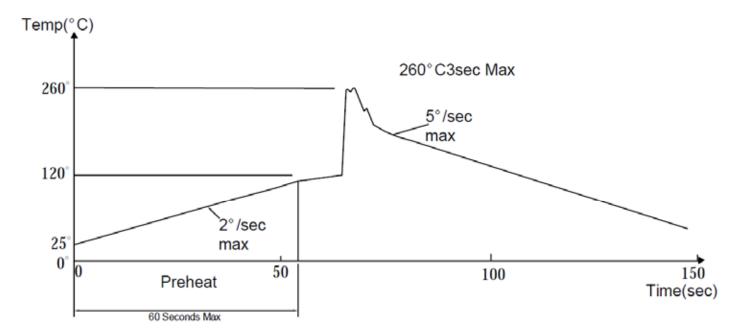
### SOLDERING CONDITION (Pb-Free)

1. Iron:

Soldering Iron: 30W Max Temperature 350°C Max Soldering Time: 3 Seconds Max (One Time) Distance: 2mm Min (From solder joint to body)

2. Wave Soldering Profile

Dip Soldering Preheat: 120°C Max Preheat time: 60 seconds Max Ramp-up 2°C/sec (Max) Ramp-Down: -5°C/sec (Max) Solder Bath: 260°C Max Dipping Time: 3 seconds Max Distance: 2mm Min (from solder joint to body)



Notes:

- 1. Wave solder should not be made more than one time.
- 2. Only select one of the soldering conditions as above.

