

SPECIFICATIONS **CLB297RR1G1W**

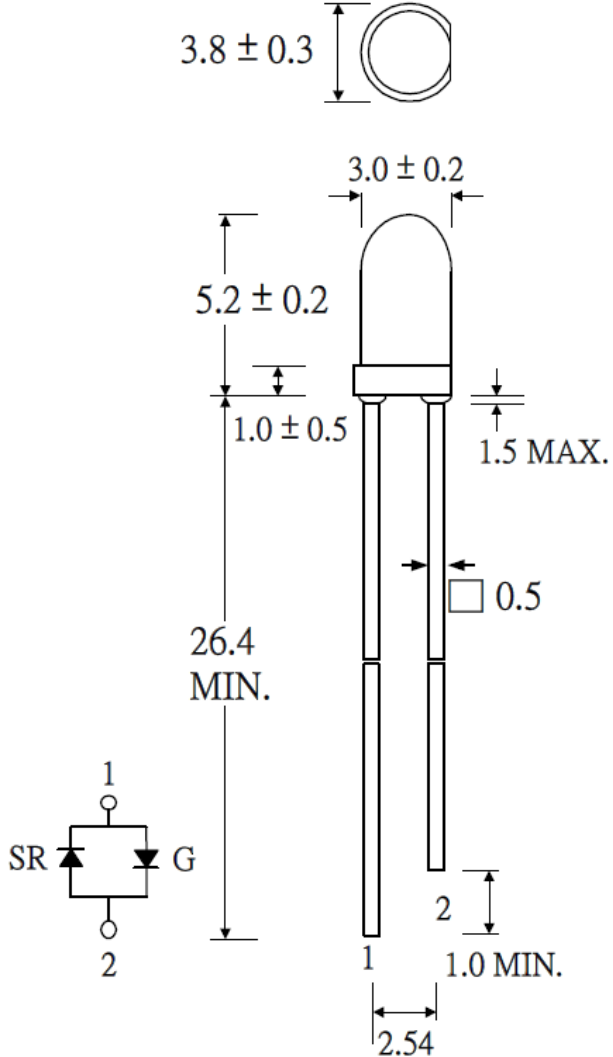
OUTLINES DIMENSIONS

DESCRIPTION

- Round Type
- 3mm Diameter
- Lens Color: White Diffused
- With Flange
- Solder leads without standoffs

FEATURES

- Emitted Color: Super Red/Green
- High Luminous Intensity
- Technology: GaAIAs/GaP
- Viewing Angle: 60°



Notes:
 1. All Dimensions are in millimeters (inches).
 2. Tolerance is ± 0.25mm (0.01") unless otherwise noted.
 3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle
CL297RR1G1W	AlGaAs/GaP	Red/Green	White Diffused	60°



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ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

Parameter	Symbol	Max Rating	Unit
Power Dissipation	PD	80	mW
Pulse Current Forward Current	IFP	50	mA
Reverse Voltage	VR	5	V
Operating Temperature Range	TOPR	-40~+85	°C
Storage Temperature Range	TSTG	-40~+85	°C
IFP = Pulse Width ≤ 10 ms, Duty Ratio ≤ 1/10. Soldering Condition: 260 °C/ 5sec			

OPTICAL-ELECTRICAL CHARACTERISTICS
(TA=25°C)

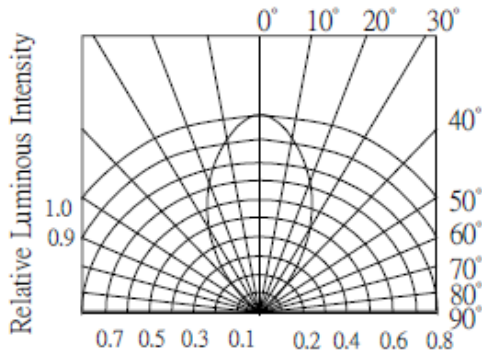
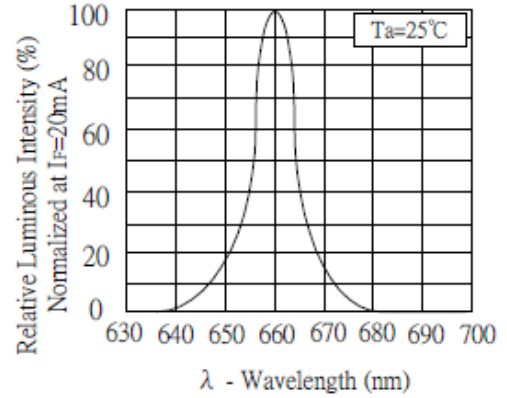
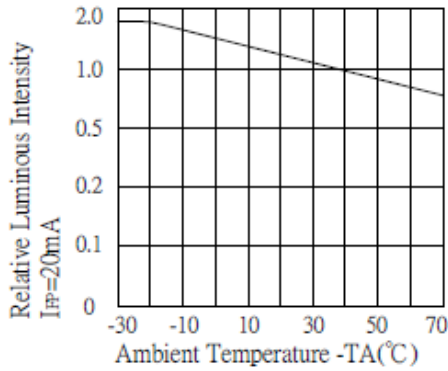
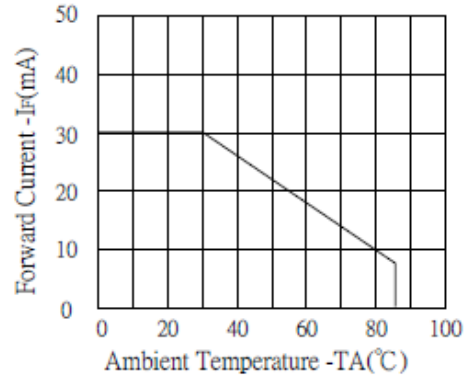
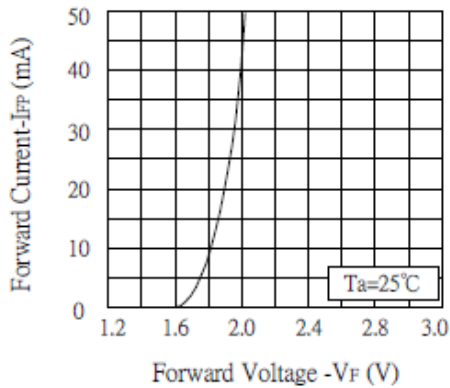
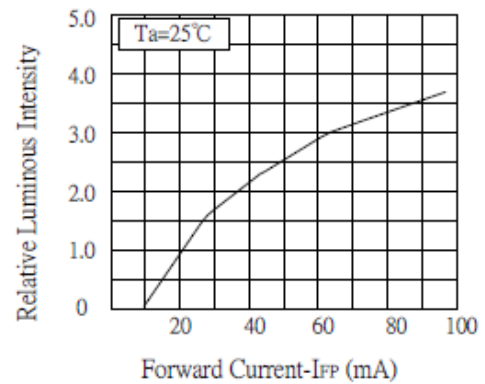
Parameter	Symbol	Test Condition	Color	Value			Unit
				Min	Typ	Max	
Luminous Intensity	IV	IF = 20mA	Red	-	25	-	mcd
			Green	-	8	-	
Forward Voltage	VF	IF = 20mA	RED	-	1.9	2.4	V
			Green	-	2.1	2.6	
Reverse Leakage Current	IR	VR = 5V	RED	-	-	10	µA
			Green	-	-	10	
Viewing Angle	2θ1/2	IF = 20mA	RED	-	60	-	deg
			Green	-	60	-	
Dominant Wavelength	λD	IF = 20mA	RED	-	645	-	nm
			Green	-	570	-	
Peak Wavelength	λP	IF = 20mA	RED	-	660	-	nm
			Green	-	568	-	

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



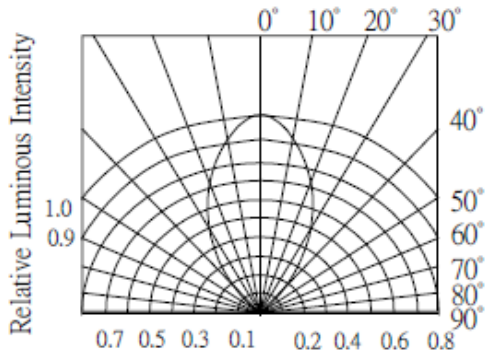
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OPTICAL CHARACTERISTIC CURVES (RED)

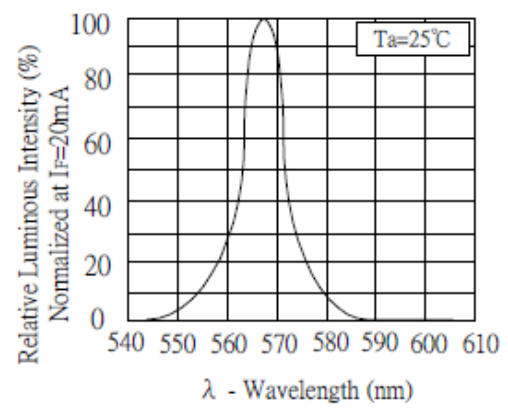

RADIATION DIAGRAM

RELATIVE LUMINOUS INTENSITY Vs. WAVELENGTH

LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE

MAX FORWARD CURRENT Vs. AMBIENT TEMPERATURE

FORWARD CURRENT Vs. FORWARD VOLTAGE

LUMINOUS INTENSITY Vs. FORWARD CURRENT


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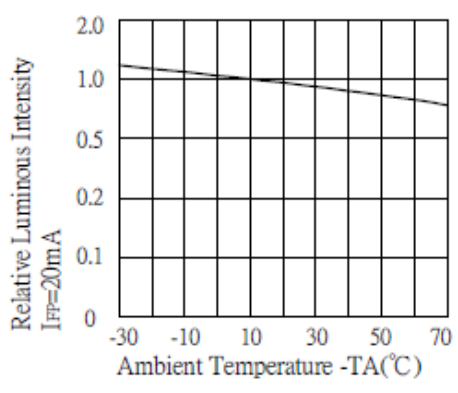
OPTICAL CHARACTERISTIC CURVES (GREEN)



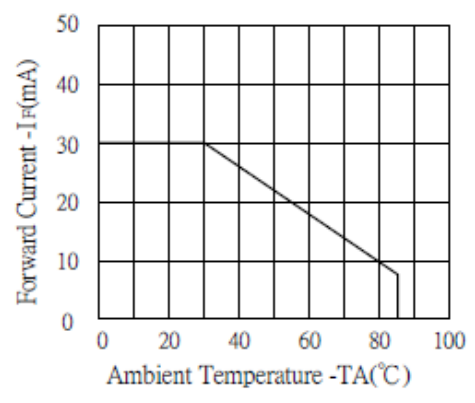
RADIATION DIAGRAM



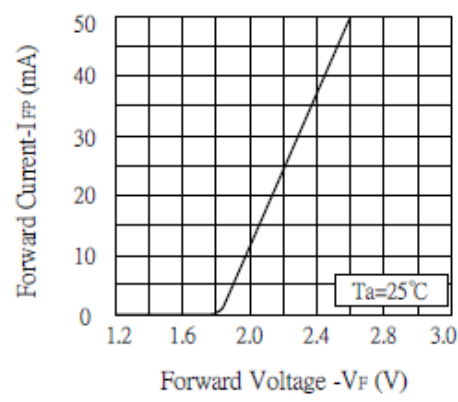
RELATIVE LUMINOUS INTENSITY Vs. WAVELENGTH



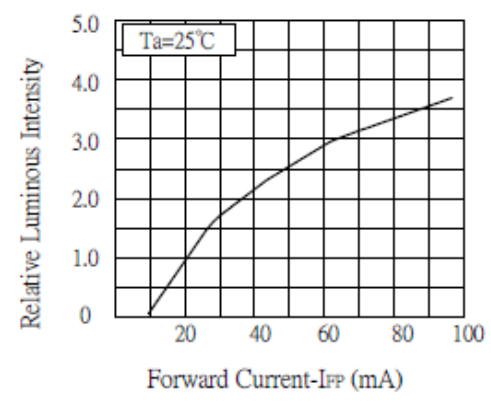
LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



MAX FORWARD CURRENT Vs. AMBIENT TEMPERATURE



FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT

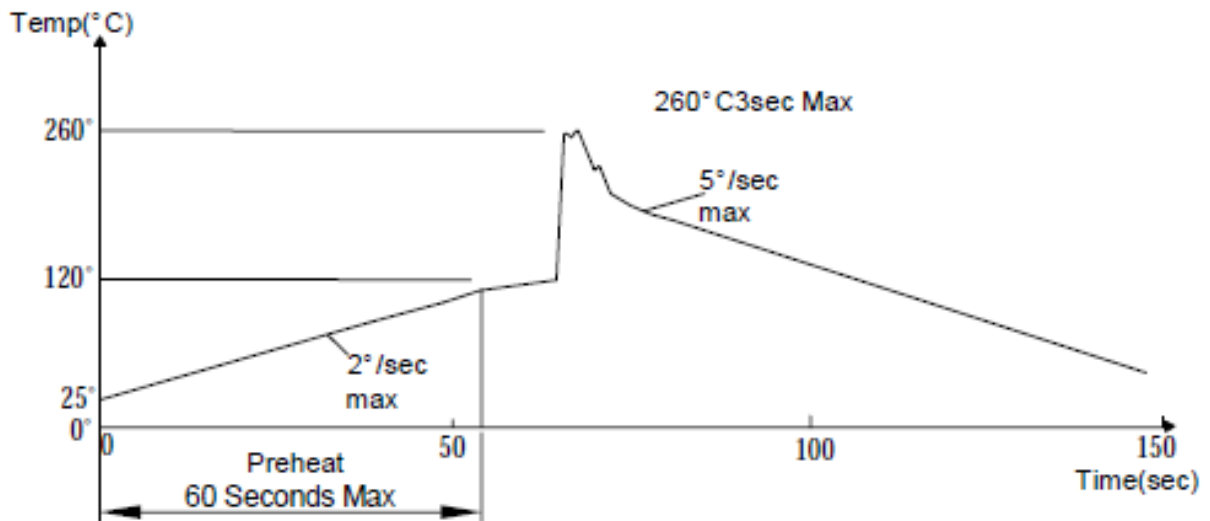


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SOLDERING CONDITIONS – LAMP TYPE LED

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)



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