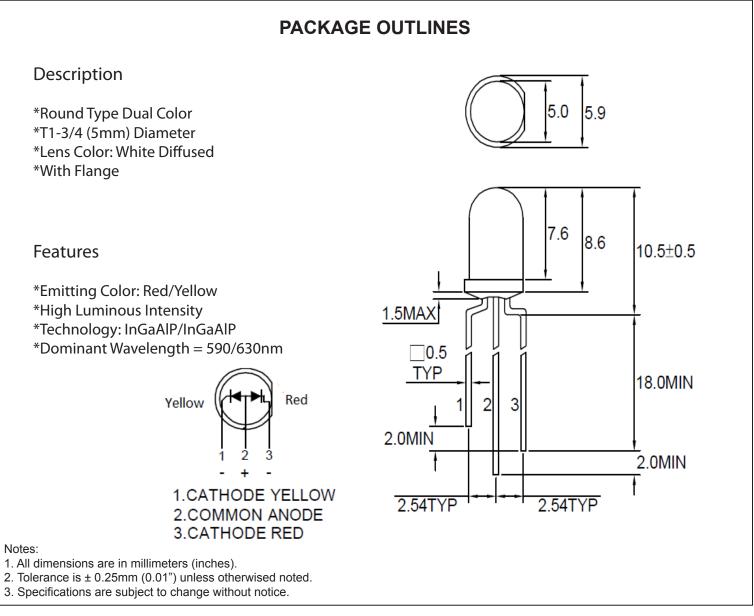


### **SPECIFICATION**

# CLB50R2Y2WCA



Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle	
CLB50R2Y2WCA	InGaAIP	Red	White Diffused	76°	
CLDOURZIZWCA	InGaAIP	Yellow	white Dinused		





### **ABSOLUTE MAXIMUM RATINGS**

# (TA=25°C)

Parameter	Symbol	Max Rating		Unit	
	Symbol	Red	Yellow		
Forward Current	lF	30	30	mA	
Peak Pulsing Current (1/10 duty f = 10KHz)	IFP	90	60	mA	
Power Dissipation	Pd	75	75	mW	
Reverse Current @ 5V	lr	10		μΑ	
Operating Temperature Range	Тор	-40~+85		°C	
Storage Temperature Range	Тѕтс	-40~+90		°C	
Soldering Temperature	Tsol	Max 260°C for 5 sec Max			

## OPTICAL-ELECTRICAL CHARACTERISTICS

(TA=25°C)

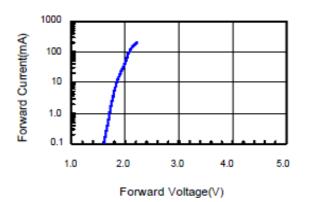
Deremeter	Symbol	Test Condition	Color	Value			Linit
Parameter				Min	Тур	Max	Unit
Luminous Intensity	lv	IF = 20mA	R	9	15	-	mcd
Luminous Intensity			Y	15	28		
	VF	I⊧ = 20mA	R	-	2.2	2.4	V
Forward Voltage			Y	-	2.3	2.6	
Viewing Angle at 50% Iv	201/2	I⊧ = 20mA	-	-	76	-	Deg
Deals Mayalanath	λp	IF = 20mA	R	_	635		nm
Peak Wavelength			Y		589		
Dominant Wayalangth	λD	l⊧ = 20mA	R		630		nm
Dominant Wavelength			Y	-	585		

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



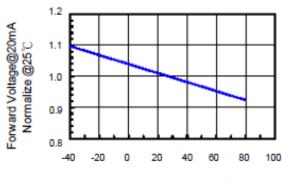


### **OPTICAL CHARACTERISTIC CURVES - RED**

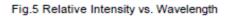


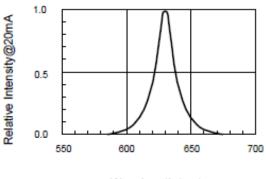
#### Fig.1 Forward current vs. Forward Voltage





Ambient Temperature(°C)





Wavelength (nm)

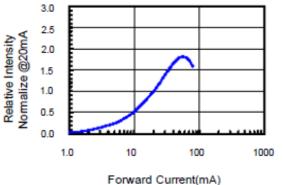
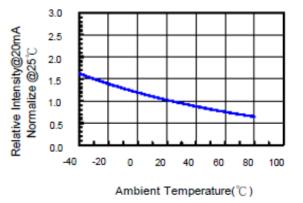


Fig.2 Relative Intensity vs. Forward Current

Fig.4 Relative Intensity vs. Temperature

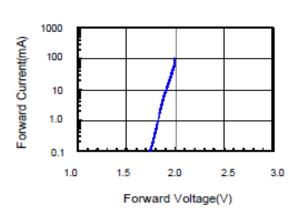




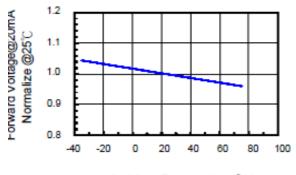


# **OPTICAL CHARACTERISTIC CURVES - YELLOW**

Fig.1 Forward current vs. Forward Voltage

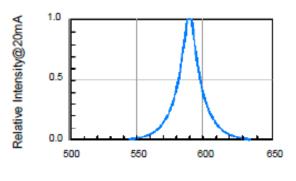


#### Fig.3 Forward Voltage vs. Temperature



Ambient Temperature(°C)





Wavelength (nm)



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

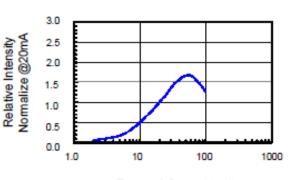
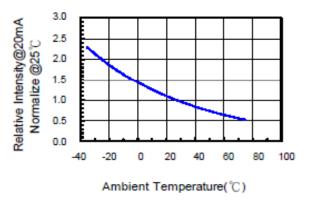


Fig.2 Relative Intensity vs. Forward Current

Forward Current(mA)

Fig.4 Relative Intensity vs. Temperature





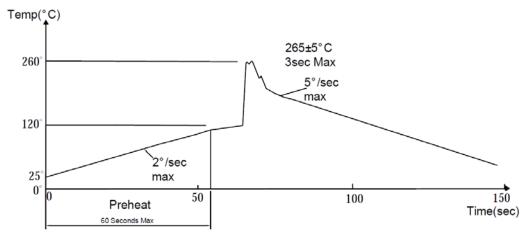
### **SOLDERING CONDITIONS - LEAD FREE**

#### 1. Iron:

Soldering Iron: 30W Max Temperature 350°C Max Soldering Time: 3 Seconds Max (One Time Only) Distance: 2mm Mn (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: 265±5°C Max Dipping Time: 5 Seconds Max Distance: 2mm Min (From Solder Joint to Body)



Note:

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

