

Part Number: WP819EGW/CA

High Efficiency Red  
Green

### Features

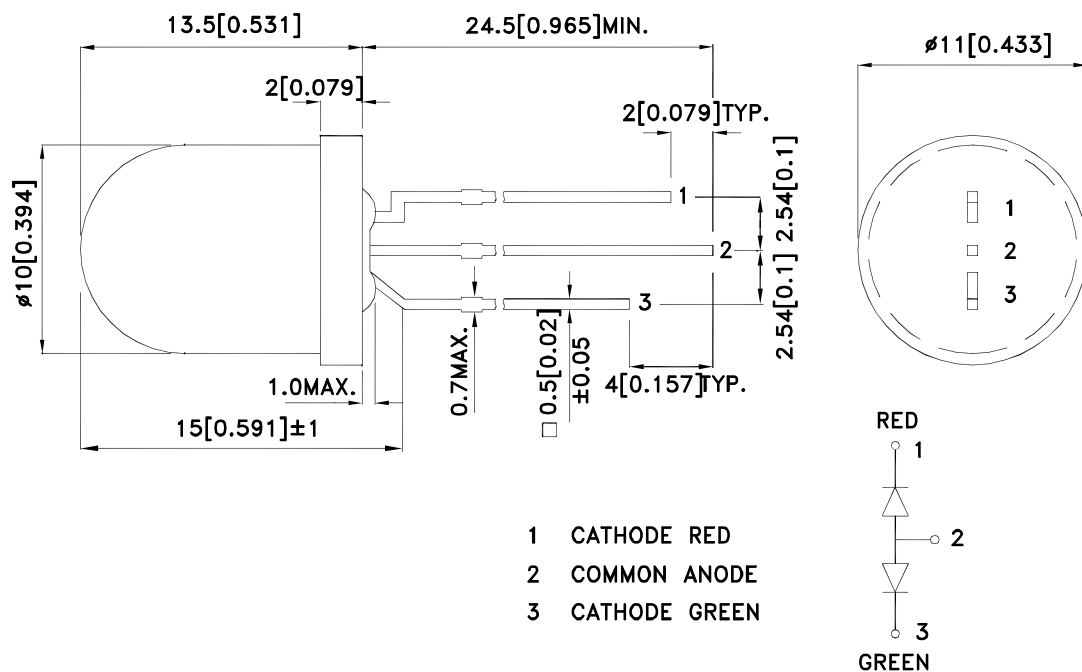
- Uniform light output.
- Low power consumption.
- 3 leads with one common lead.
- Long life - solid state reliability.
- RoHS compliant.

### Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
WP819EGW/CA	High Efficiency Red (GaAsP/GaP)	WHITE DIFFUSED	7	18	50°
	Green (GaP)		4	10	

### Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
2. Luminous intensity/ luminous Flux: +/-15%.

## Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red Green	627 565		nm	IF=20mA
λD [1]	Dominant Wavelength	High Efficiency Red Green	625 568		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red Green	45 30		nm	IF=20mA
C	Capacitance	High Efficiency Red Green	15 15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	High Efficiency Red Green	2 2.2	2.5 2.5	V	IF=20mA
IR	Reverse Current	High Efficiency Red Green		10 10	uA	VR = 5V

### Notes:

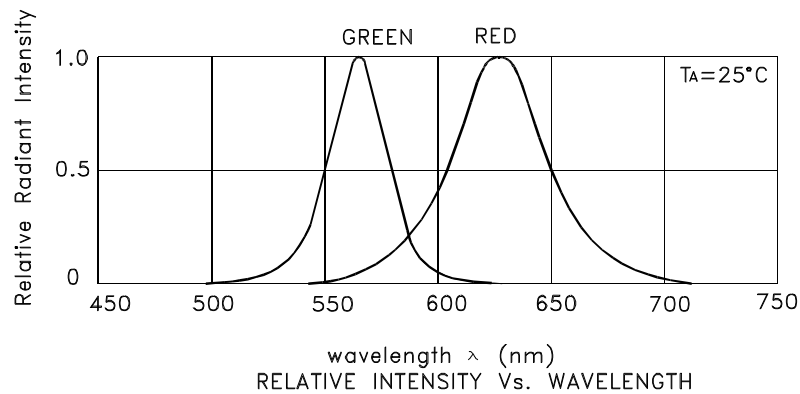
- 1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

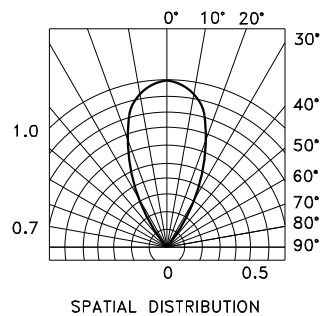
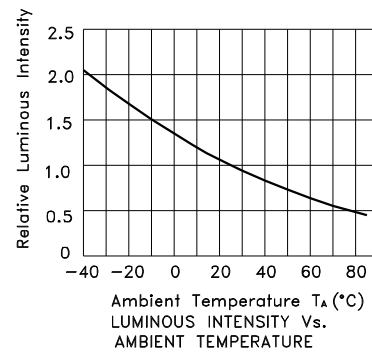
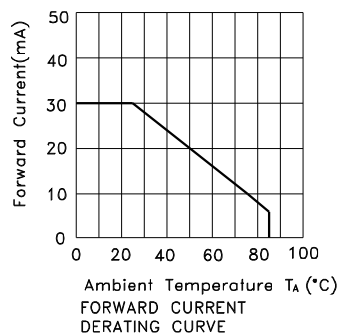
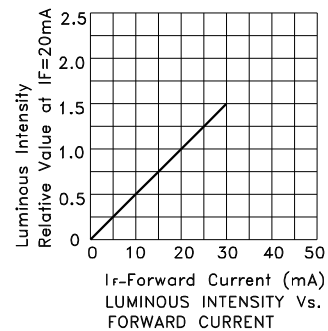
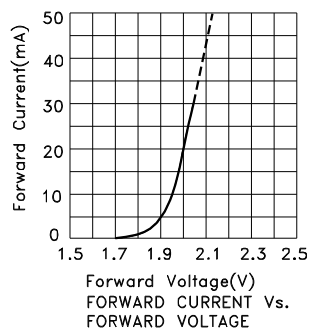
Parameter	High Efficiency Red	Green	Units
Power dissipation	75	62.5	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	160	140	mA
Reverse Voltage	5		V
Operating / Storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 3 Seconds		
Lead Solder Temperature [3]	260°C For 5 Seconds		

### Notes:

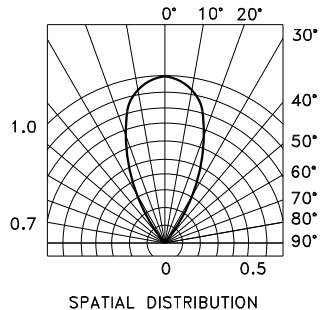
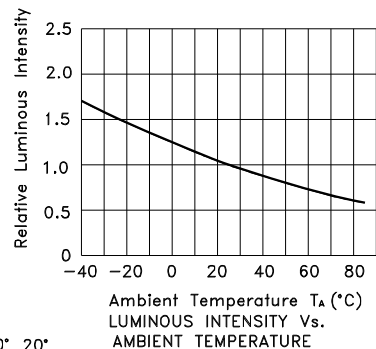
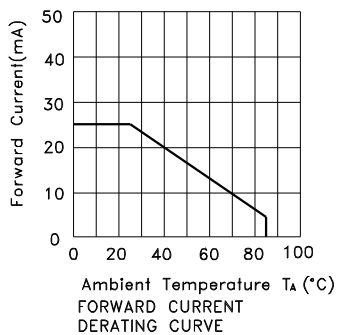
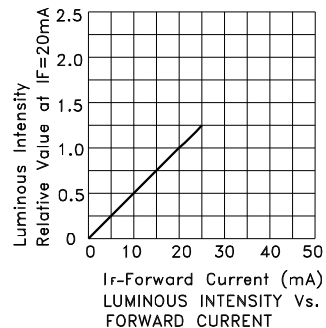
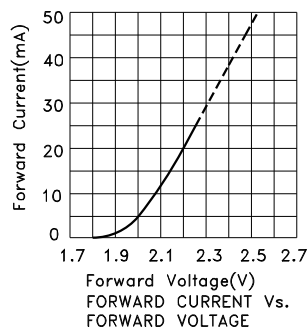
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.



## WP819EGW/CA High Efficiency Red

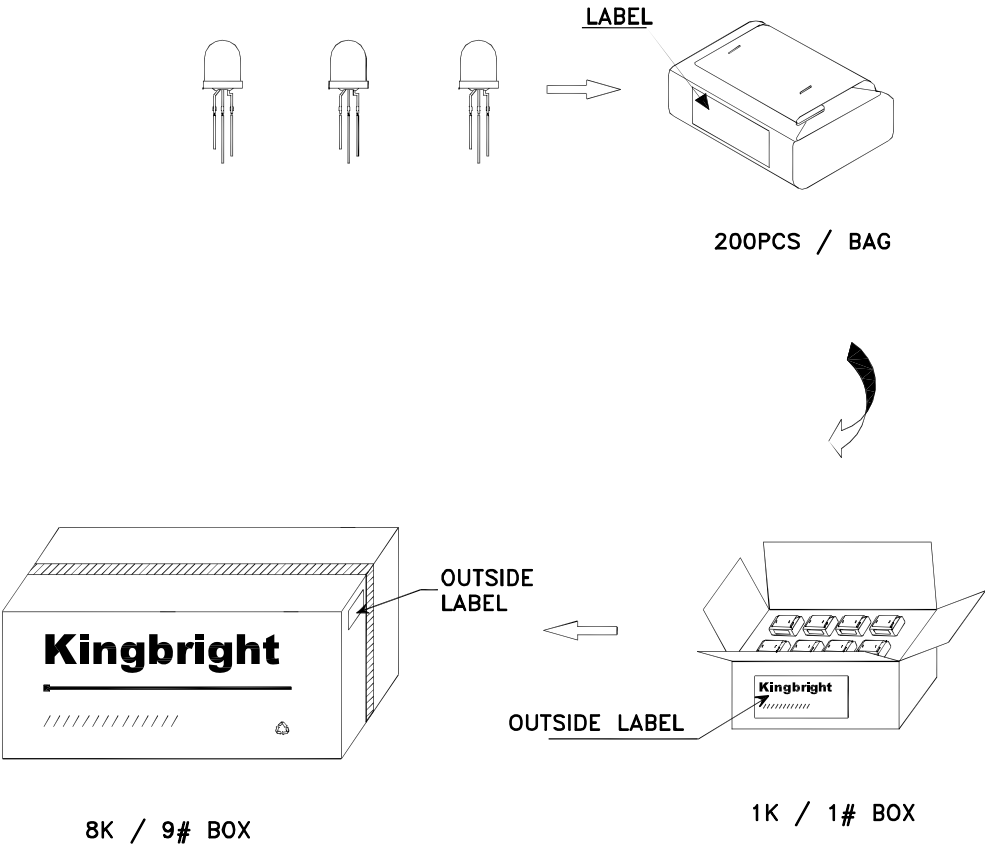



## Green



PACKING & LABEL SPECIFICATIONS

WP819EGW/CA



<b>Kingbright</b>	
P/NO: WP819xxx	
QTY: 200 pcs	Q.C. <div>Q C XX XX XXXX PASSED</div>
S/N: XXXX	
CODE: XXX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Kingbright:](#)

[WP819EGW/CA](#)