

WP57EGW

HIGH EFFICIENCY RED  
GREEN

### Features

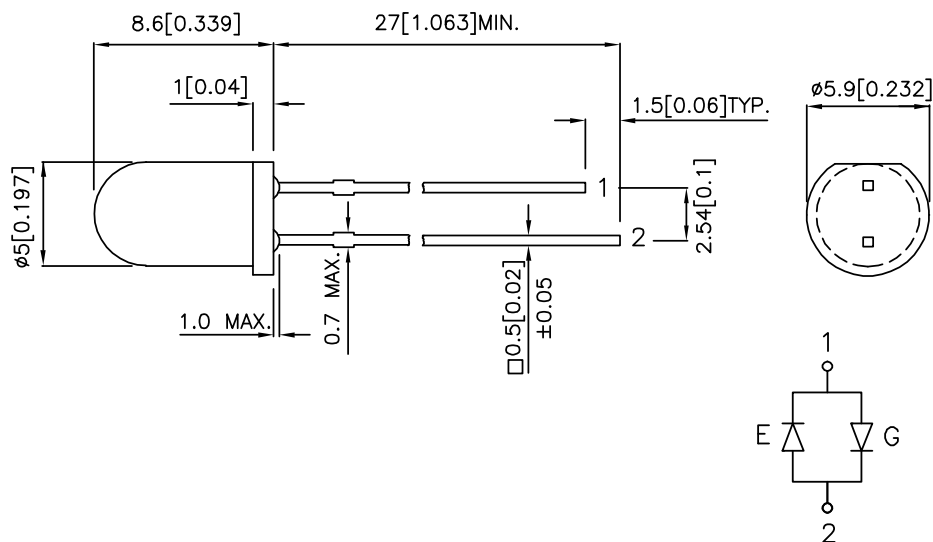
- LOW POWER CONSUMPTION.
- I.C. COMPATIBLE.
- LONG LIFE - SOLID STATE RELIABILITY.
- RoHS COMPLIANT.

### 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  $\pm 0.25$  (0.01") unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 $\theta$ 1/2
WP57EGW	HIGH EFFICIENCY RED (GaAsP/GaP)	WHITE DIFFUSED	10	30	60°
	GREEN (GaP)		10	20	

Note:

1. $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

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

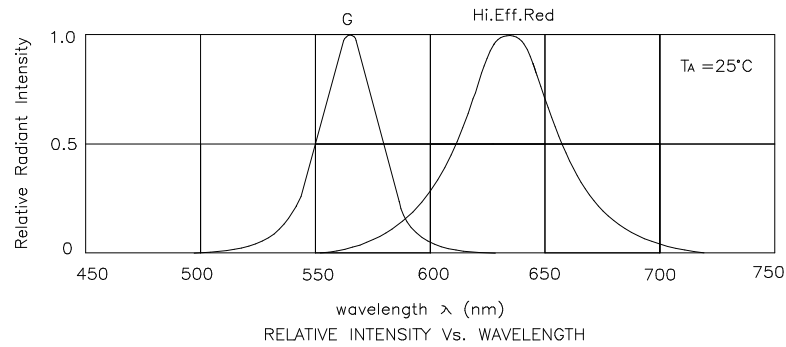
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	High Efficiency Red Green	627 565		nm	I <sub>F</sub> =20mA
$\lambda_D$	Dominant Wavelength	High Efficiency Red Green	625 568		nm	I <sub>F</sub> =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	High Efficiency Red Green	45 30		nm	I <sub>F</sub> =20mA
C	Capacitance	High Efficiency Red Green	15 15		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub>	Forward Voltage	High Efficiency Red Green	2.0 2.2	2.5 2.5	V	I <sub>F</sub> =20mA

## Absolute Maximum Ratings at TA=25°C

Parameter	High Efficiency Red	Green	Units
Power dissipation	105	105	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	160	140	mA
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		

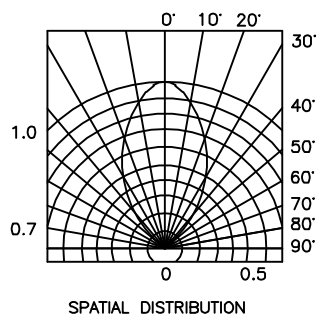
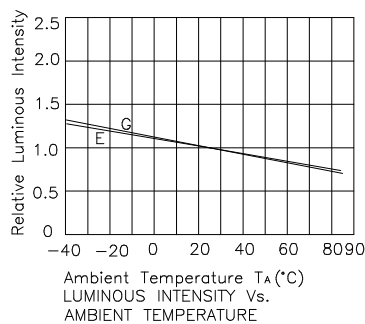
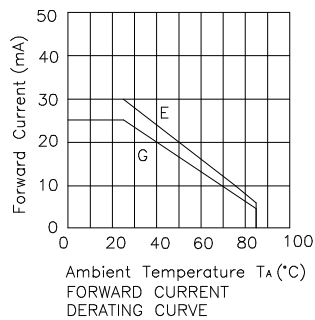
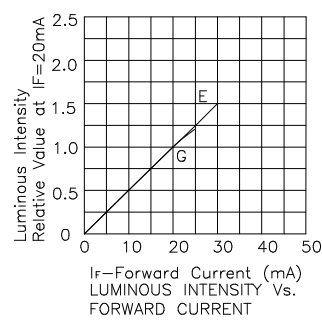
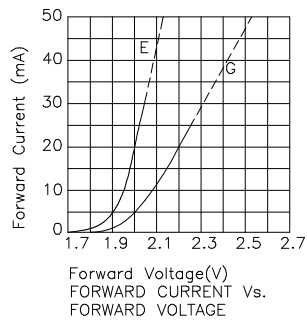
Notes:

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



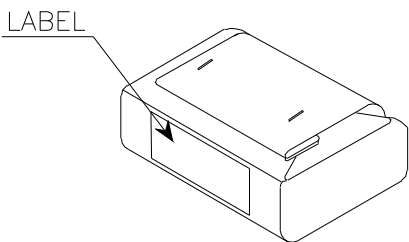
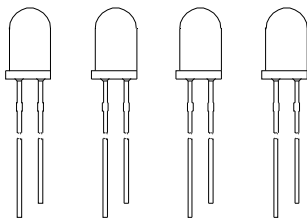
High Efficiency Red /Green

WP57EGW



PACKING & LABEL SPECIFICATIONS

WP57EGW

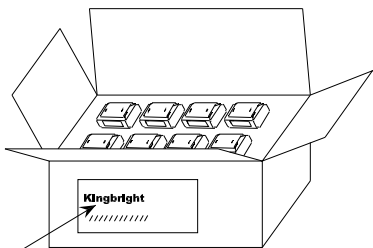


500PCS / BAG




32K / 9# BOX

OUTSIDE LABEL



16K / 5# BOX

OUTSIDE LABEL

<b>Kingbright</b>	
Q.C.	QC XXX XX: 2005 PASSED
TYPE NO : WP57XXX	
QUANTITY : 500 pcs	
S/N : XXX	CODE: XX
LOT NO:  XXXXXXXXXX	
RoHS Compliant	

Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous Intensity: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.