

PRELIMINARY SPEC

Part Number: WP93WEGC

HIGH EFFICIENCY RED
GREEN

Features

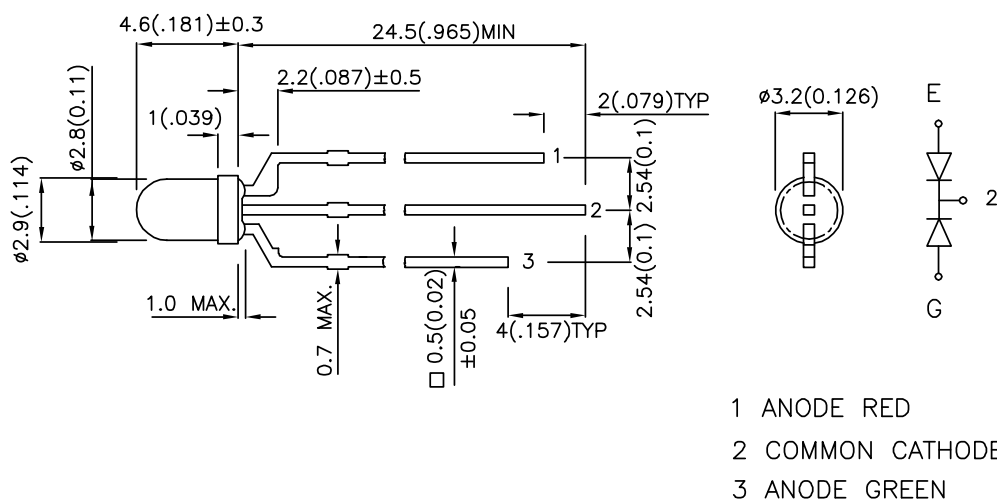
- UNIFORM LIGHT OUTPUT.
- LOW POWER CONSUMPTION.
- 3 LEADS WITH ONE COMMON LEAD.
- I.C. COMPATIBLE.
- LONG LIFE - SOLID STATE RELIABILITY.
- RoHS COMPLIANT.

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) [2] @ 20mA | | Viewing Angle [1] |
|----------|---------------------------------|-------------|------------------------|------|----------------------|
| | | | Min. | Typ. | 2 θ 1/2 |
| WP93WEGC | HIGH EFFICIENCY RED (GaAsP/GaP) | WATER CLEAR | 36 | 80 | 50° |
| | GREEN (GaP) | | 18 | 50 | |

Notes:

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

Electrical / Optical Characteristics at TA=25°C

| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|------------------------------|------------|------------|-------|-----------------|
| λ_{peak} | Peak Wavelength | High Efficiency Red Green | 627 565 | | nm | IF=20mA |
| λ_D [1] | Dominant Wavelength | High Efficiency Red Green | 625 568 | | nm | IF=20mA |
| $\Delta\lambda_{1/2}$ | 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 | 2.0 2.2 | 2.5 2.5 | V | IF=20mA |
| IR | Reverse Current | High Efficiency Red Green | | 10 10 | uA | VR = 5V |

Notes:

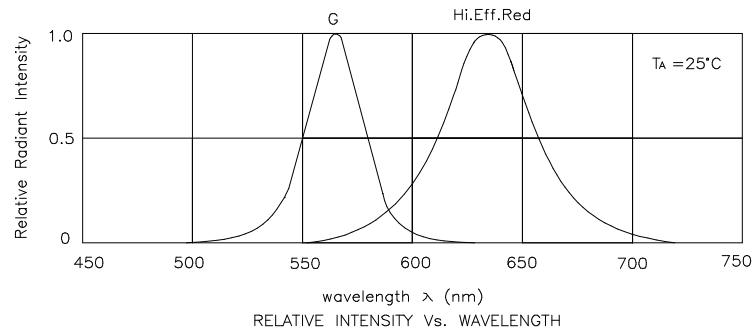
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

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 | | |

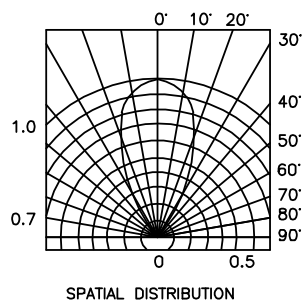
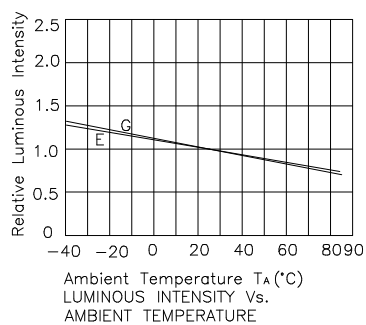
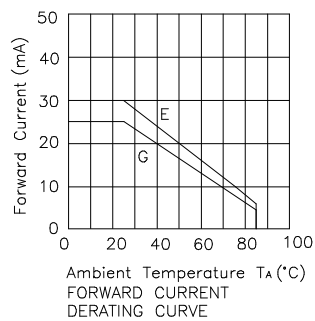
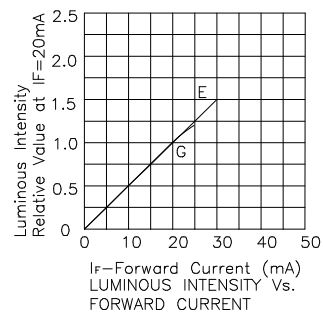
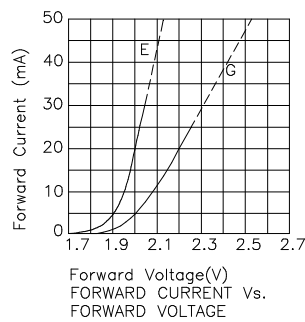
Notes:

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



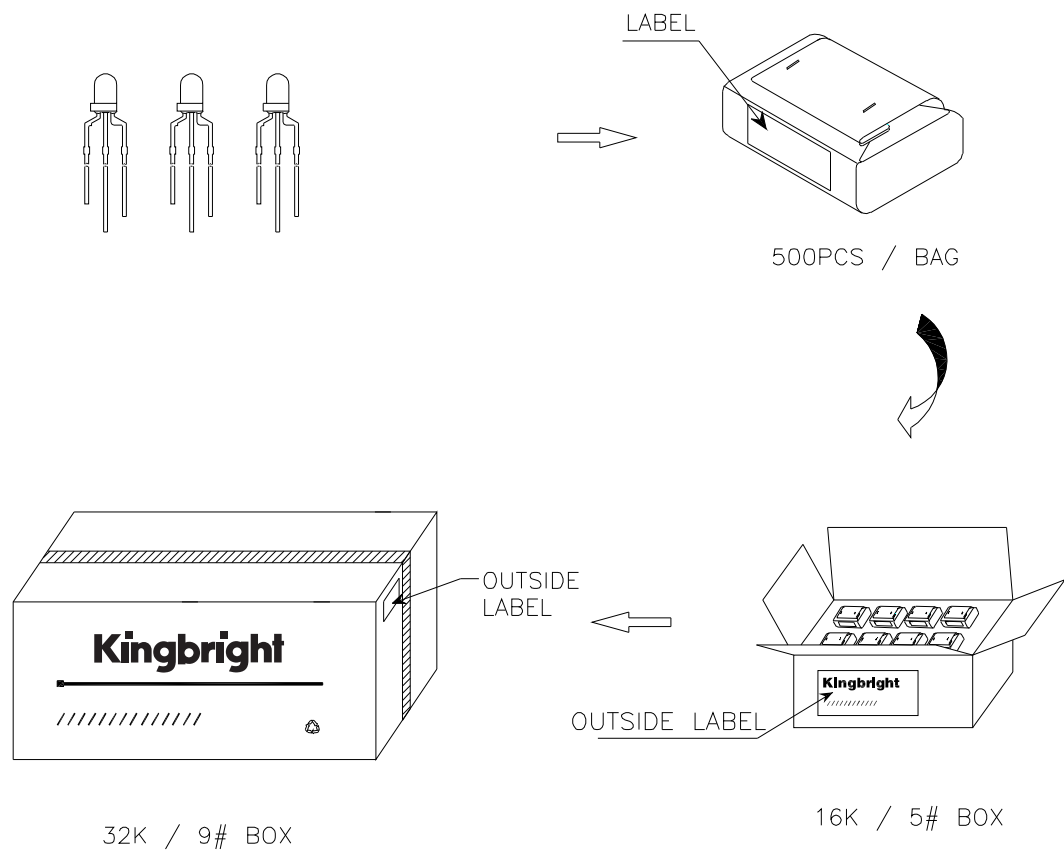
High Efficiency Red / Green


WP93WEGC



PACKING & LABEL SPECIFICATIONS

WP93WEGC



| | |
|--|----------|
| Kingbright | |
| Q.C. | |
| TYPE NO : WP93Wxxx | |
| QUANTITY : 500 pcs | |
| S/N : xxx | CODE: XX |
| LOT NO  | |
| MADE IN CHINA | |
| RoHS Compliant | |