

Part Number: WP130WDT/EGW

High Efficiency Red
Green

Features

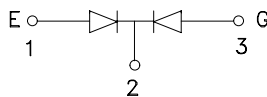
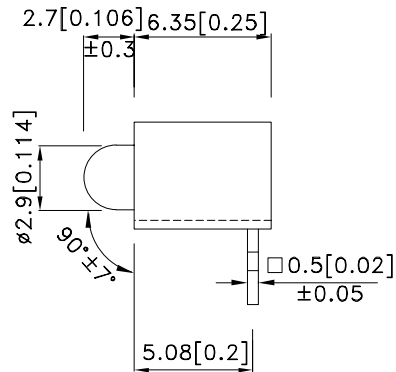
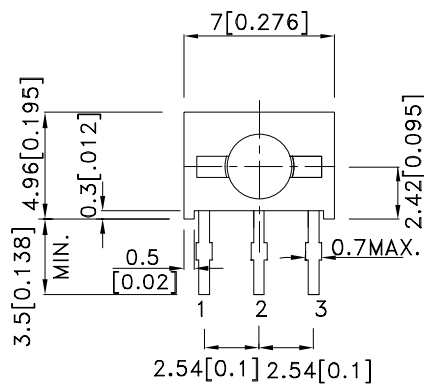
- PRE-TRIMMED LEADS FOR PC BOARD MOUNTING.
- 3 LEADS WITH COMMON CATHODE.
- I.C. COMPATIBLE.
- BLACK CASE ENHANCES CONTRAST RATIO.
- UL RATING : 94V-0.
- HOUSING MATERIAL: TYPE 66 NYLON.
- RoHS COMPLIANT.

Description

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

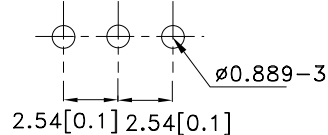
The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

Package Dimensions



- 1 ANODE RED
- 2 COMMON CATHODE
- 3 ANODE GREEN

RECOMMENDED PCB LAYOUT



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. | 2θ1/2 |
| WP130WDT/EGW | High Efficiency Red (GaAsP/GaP) | WHITE DIFFUSED | 7 | 30 | 60° |
| | Green (GaP) | | 7 | 25 | |

Notes:

1. θ1/2 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 | I _F =20mA |
| λ_D [1] | Dominant Wavelength | High Efficiency Red Green | 625 568 | | nm | I _F =20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | High Efficiency Red Green | 45 30 | | nm | I _F =20mA |
| C | Capacitance | High Efficiency Red Green | 15 15 | | pF | V _F =0V;f=1MHz |
| V _F [2] | Forward Voltage | High Efficiency Red Green | 2 2.2 | 2.5 2.5 | V | I _F =20mA |
| I _R | Reverse Current | High Efficiency Red Green | | 10 10 | uA | V _R = 5V |

Notes:

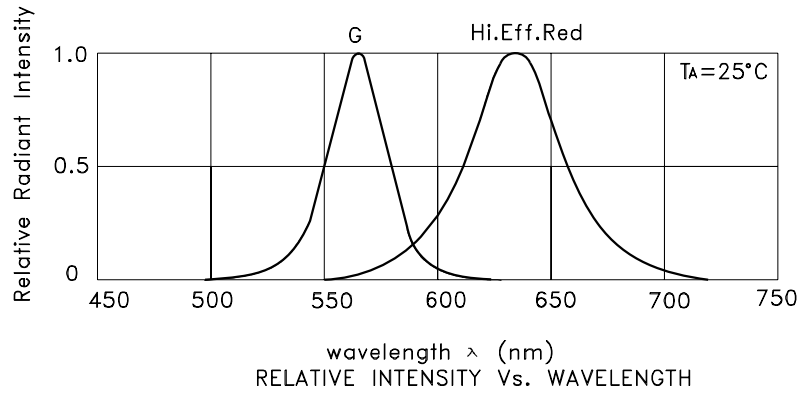
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

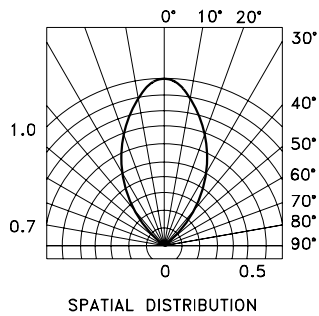
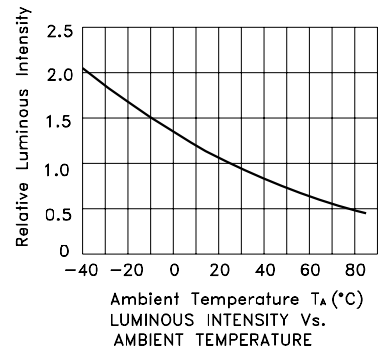
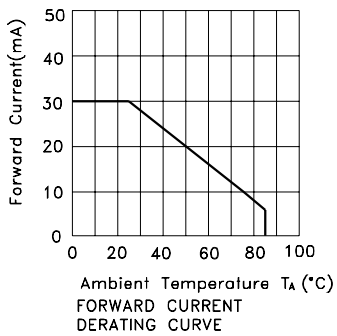
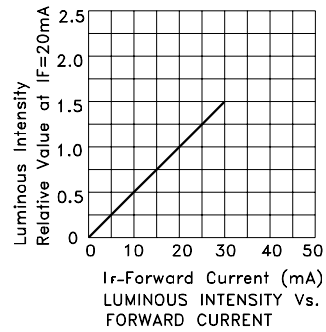
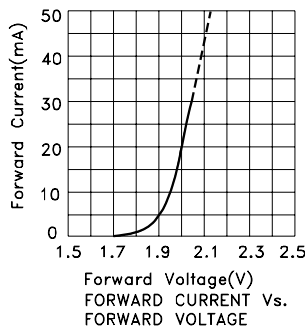
| Parameter | High Efficiency Red | Green | Units |
|---------------------------------|---------------------|-------|-------|
| Power dissipation | 75 | 62.5 | mW |
| DC Forward Current | 30 | 25 | mA |
| Peak Forward Current [1] | 160 | 140 | mA |
| Reverse Voltage | 5 | | V |
| Operating / Storage 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.

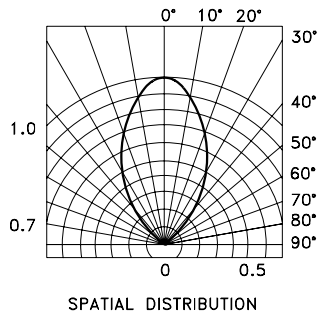
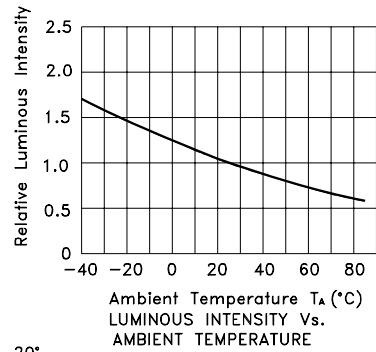
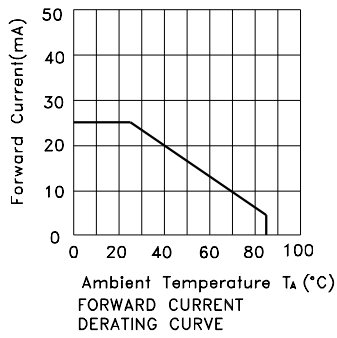
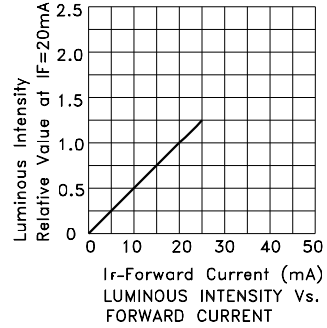
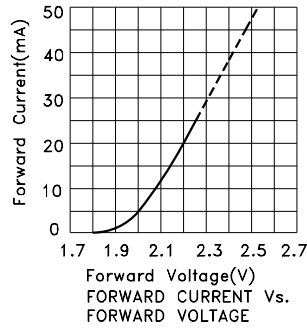


WP130WDT/EGW High Efficiency Red



Kingbright

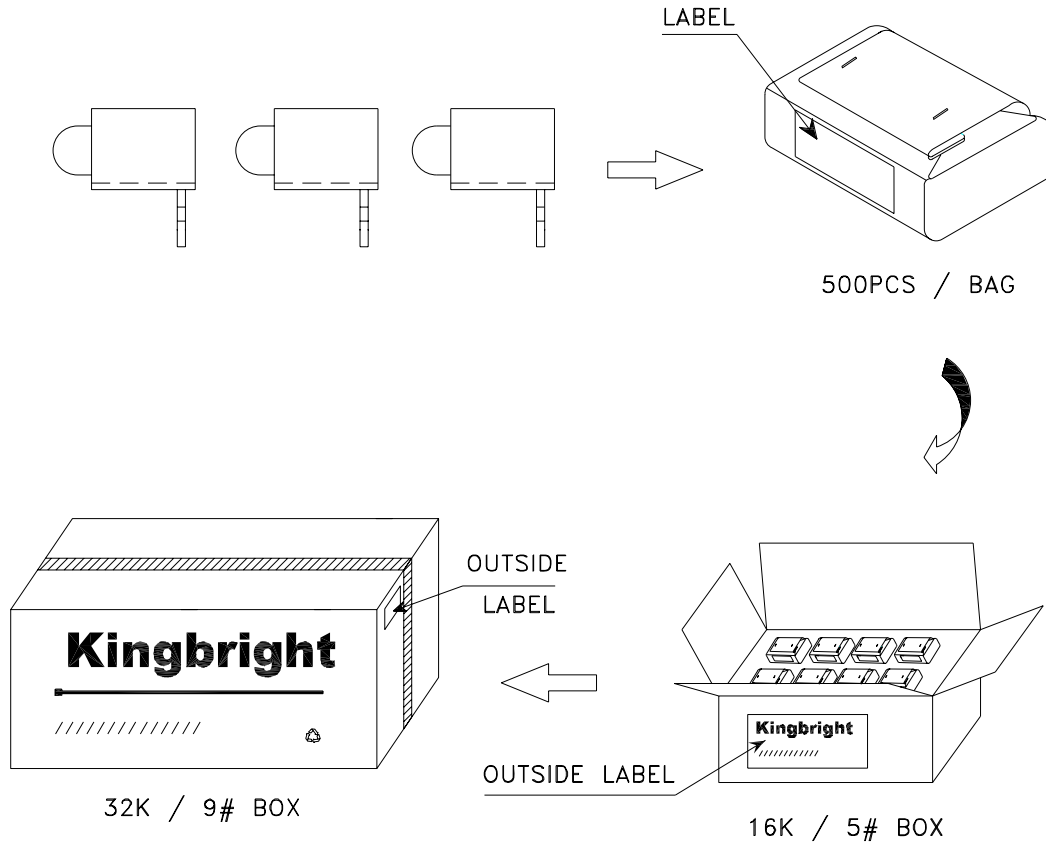
Green




Kingbright

PACKING & LABEL SPECIFICATIONS

WP130WDT/EGW



| | |
|---|--------------------------|
| Kingbright | |
| Q.C. | QC XX XX XX PASSED |
| TYPE NO : WP130WDTxxx | |
| QUANTITY : 500 pcs | |
| S/N : XX | CODE: XX |
| LOT NO :  XX-XXXX | |
| RoHS Compliant | |