

WP443HDT

BRIGHT RED

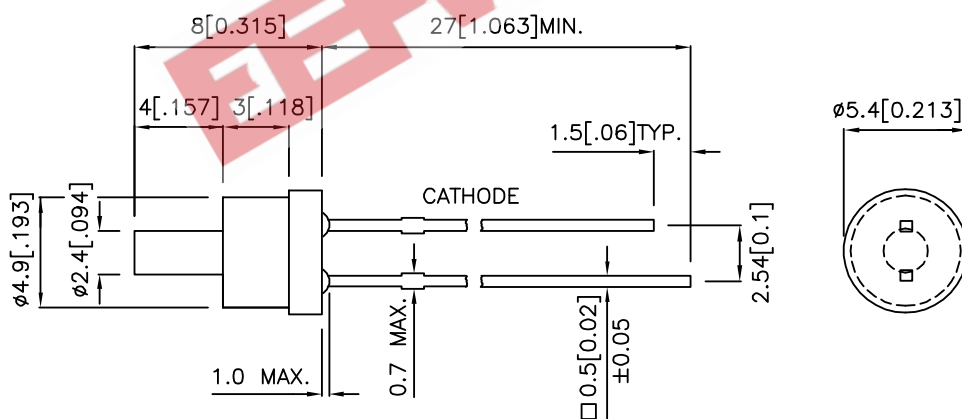
Features

- LOW POWER CONSUMPTION.
- I.C.COMPTATIBLE.
- LONG LIFE - SOLID STATE RELIABILITY.
- FITS 2.4mm HOLE IN PANEL UP TO 4mm THICK.
- RoHS COMPLIANT.

Description

The Bright Red source color devices are made with Gallium Phosphide Red 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. Specifications are subject to change without notice.

Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 10mA | | Viewing Angle |
|----------|------------------|--------------|--------------------|------|------------------|
| | | | Min. | Typ. | 2θ1/2 |
| WP443HDT | BRIGHT RED (GaP) | RED DIFFUSED | 0.4 | 2 | 100° |

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at TA=25°C

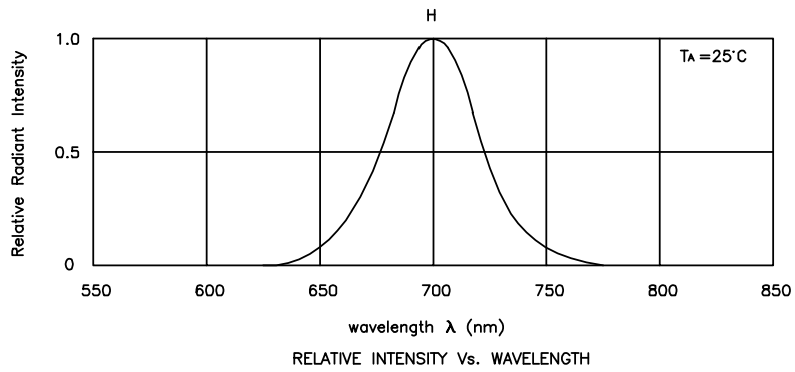
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|--------|--------------------------|------------|------|------|-------|-----------------|
| λpeak | Peak Wavelength | Bright Red | 700 | | nm | IF=20mA |
| λD | Dominant Wavelength | Bright Red | 660 | | nm | IF=20mA |
| Δλ1/2 | Spectral Line Half-width | Bright Red | 45 | | nm | IF=20mA |
| C | Capacitance | Bright Red | 40 | | pF | VF=0V;f=1MHz |
| VF | Forward Voltage | Bright Red | 2.25 | 2.5 | V | IF=20mA |
| IR | Reverse Current | Bright Red | | 10 | uA | VR = 5V |

Absolute Maximum Ratings at TA=25°C

| Parameter | Bright Red | Units |
|-------------------------------|---------------------|-------|
| Power dissipation | 120 | mW |
| DC Forward Current | 25 | mA |
| Peak Forward Current [1] | 130 | 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 | |

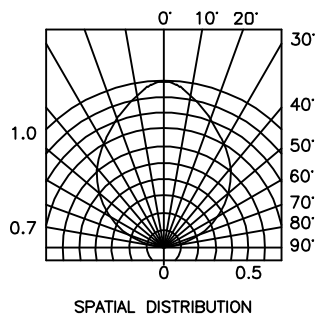
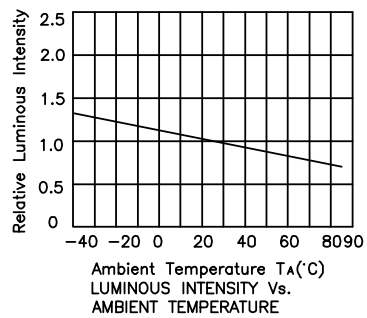
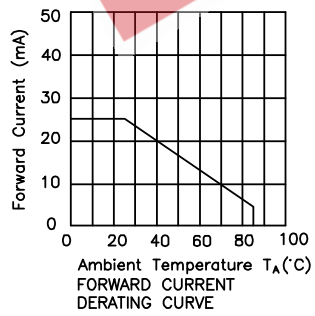
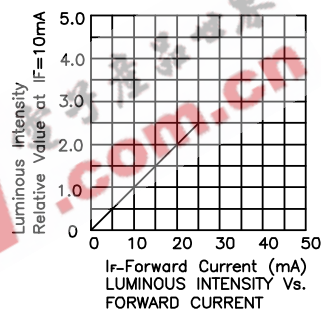
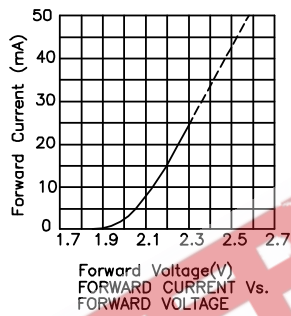
Notes:

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



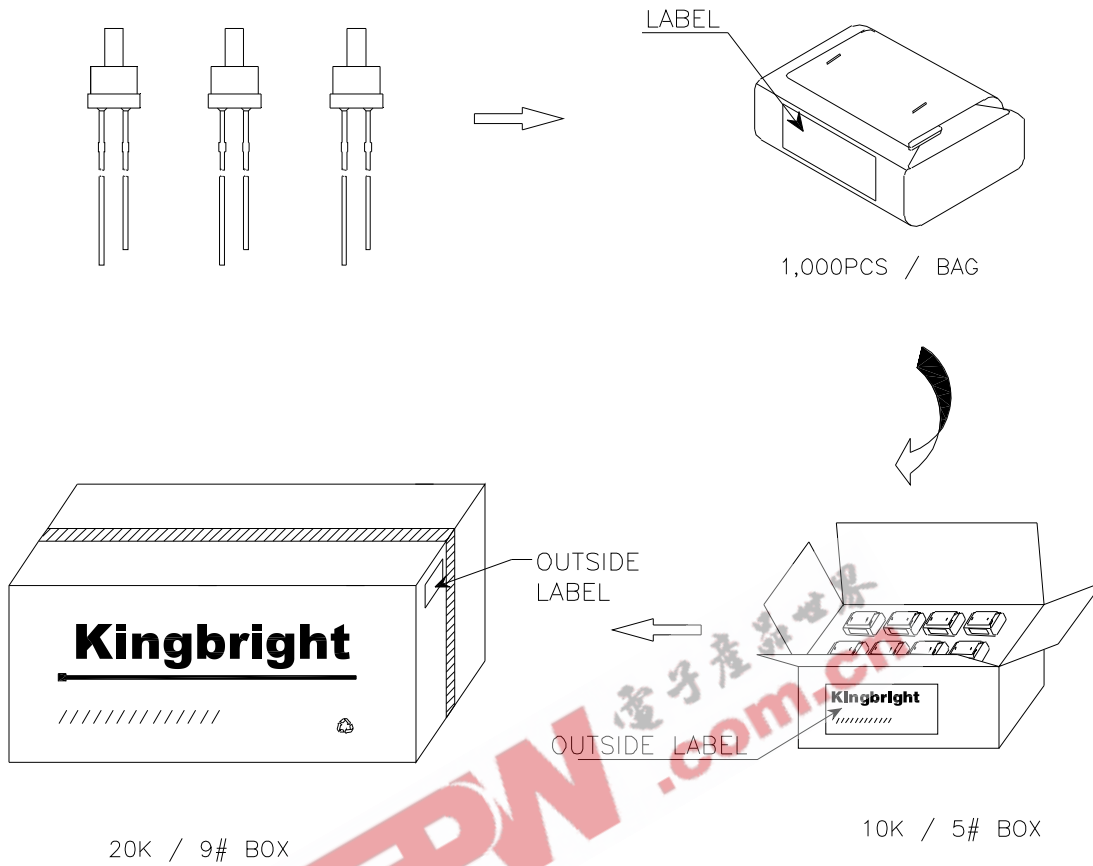
Bright Red


WP443HDT



PACKING & LABEL SPECIFICATIONS

WP443HDT



| | |
|---|------------------------------|
| Kingbright | |
| Q.C. | QC xxx xx. 2005 PASSED |
| TYPE NO : WP443XXX | |
| QUANTITY : 1,000 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.