# Kingbright

## 12.7mm (0.5INCH)16 SEGMENT SINGLE DIGIT ALPHANUMERIC DISPLAY

PSA05-11EWA HIGH EFFICIENCY RED

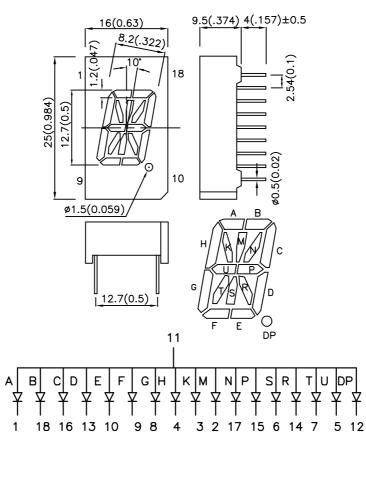
### Features

- •0.5 INCH CHARACTER HEIGHT.
- •LOW CURRENT OPERATION.
- •HIGH CONTRAST AND LIGHT OUTPUT.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- •MECHANICALLY RUGGED.
- •STANDARD: GRAY FACE, WHITE SEGMENT.
- •RoHS COMPLIANT.

### Description

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

## Package Dimensions & Internal Circuit Diagram



#### Notes:

1. All dimensions are in millimeters (inches), Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.

2. Specifications are subject to change without notice.

SPEC NO: DSAB5488 APPROVED: J. Lu REV NO: V.3 CHECKED: Joe Lee DATE: MAR/26/2005 DRAWN: L.Y.WU

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| Selection Guide |                                 |                |                    |      |                                    |  |  |  |  |
|-----------------|---------------------------------|----------------|--------------------|------|------------------------------------|--|--|--|--|
| Part No.        | Dice                            | Lens Type      | lv (ucd)<br>@ 10mA |      | Description                        |  |  |  |  |
|                 |                                 |                | Min.               | Тур. | -                                  |  |  |  |  |
| PSA05-11EWA     | HIGH EFFICIENCY RED (GaAsP/GaP) | WHITE DIFFUSED | 800                | 4100 | Common Anode, Rt.<br>Hand Decimal. |  |  |  |  |

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

| Symbol | Parameter                | Device              | Тур. | Max. | Units | Test Conditions |
|--------|--------------------------|---------------------|------|------|-------|-----------------|
| λpeak  | Peak Wavelength          | High Efficiency Red | 627  |      | nm    | IF=20mA         |
| λD     | Dominant Wavelength      | High Efficiency Red | 625  |      | nm    | IF=20mA         |
| Δλ1/2  | Spectral Line Half-width | High Efficiency Red | 45   |      | nm    | IF=20mA         |
| С      | Capacitance              | High Efficiency Red | 15   |      | pF    | VF=0V;f=1MHz    |
| Vf     | Forward Voltage          | High Efficiency Red | 2.0  | 2.5  | V     | IF=20mA         |
| IR     | Reverse Current          | High Efficiency Red |      | 10   | uA    | Vr = 5V         |

## Absolute Maximum Ratings at TA=25°C

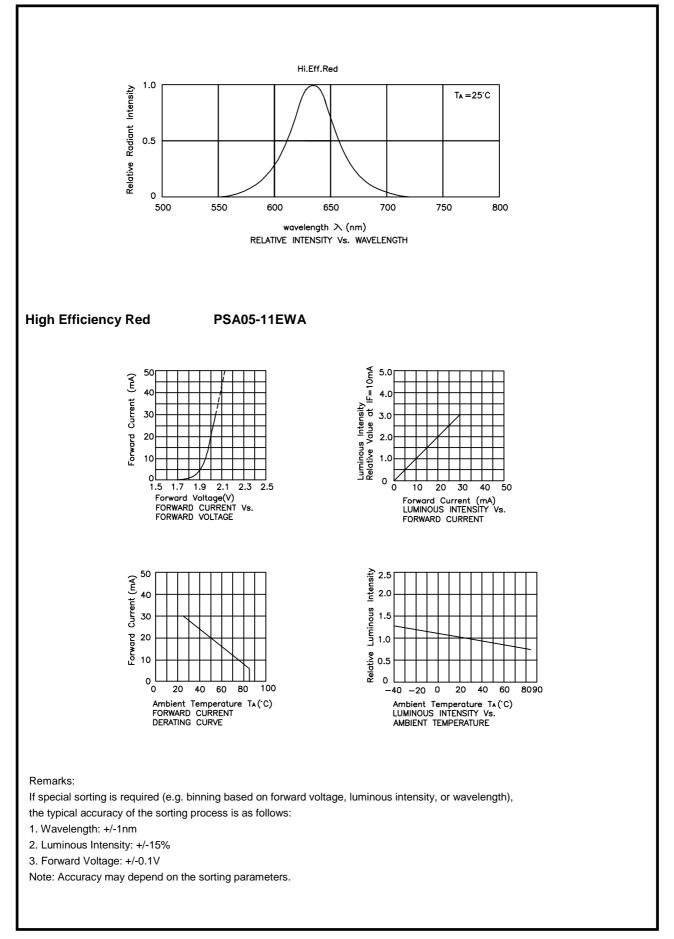
| Parameter                     | High Efficiency Red                           |    |  |  |
|-------------------------------|---|----|--|--|
| Power dissipation             | 105   | mW |  |  |
| DC Forward Current            | 30  | mA |  |  |
| Peak Forward Current [1]      | 160   | mA |  |  |
| Reverse Voltage               | 5   | V  |  |  |
| Operating/Storage Temperature | ure -40°C To +85°C                            |    |  |  |
| Lead Solder Temperature [2]   | ad Solder Temperature [2] 260°C For 5 Seconds |    |  |  |

Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.

2. 5mm below package base.

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