

Part Number: PDA54-11EWA

HIGH EFFICIENCY RED

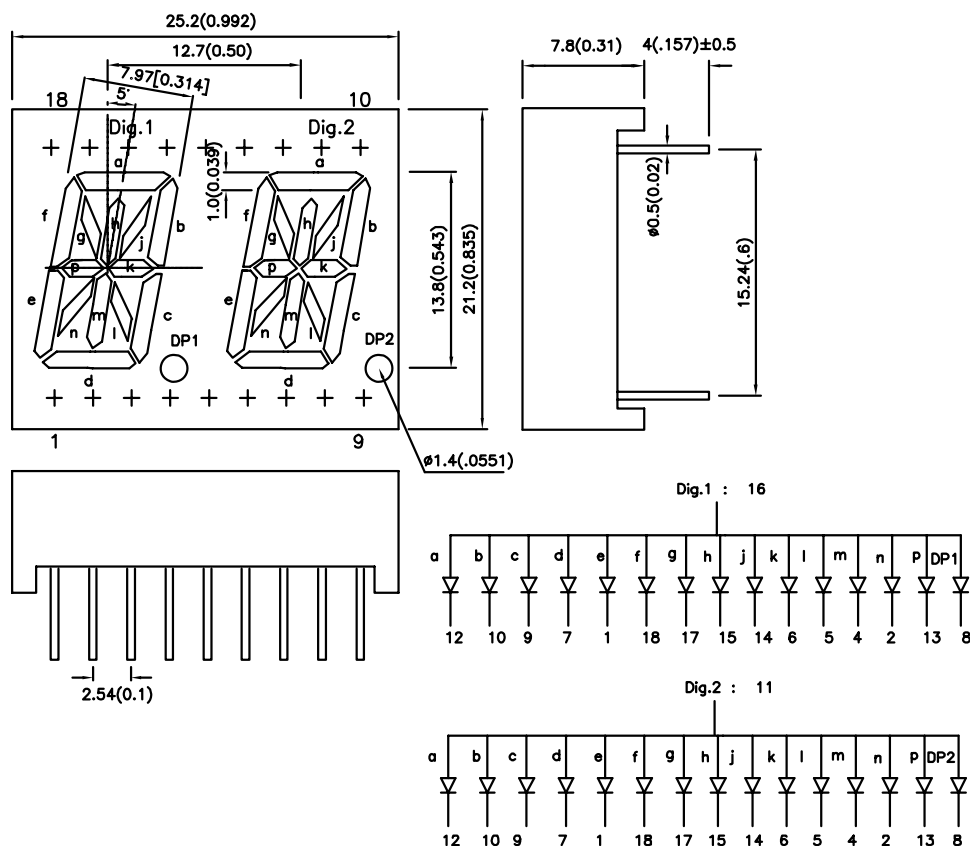
### Features

- 0.54 INCH CHARACTER HEIGHT.
- LOW CURRENT OPERATION.
- HIGH CONTRAST AND LIGHT OUTPUT.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- CATEGORIZED FOR LUMINOUS INTENSITY.
- 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.

## Selection Guide

| Part No.    | Dice                            | Lens Type      | Iv (ucd) [1]<br>@ 10mA |      | Description                        |
|-------------|---------------------------------|----------------|------------------------|------|------------------------------------|
|             |                                 |                | Min.                   | Typ. |                                    |
| PDA54-11EWA | HIGH EFFICIENCY RED (GaAsP/GaP) | WHITE DIFFUSED | 1200                   | 4700 | Common Anode,<br>Rt. Hand Decimal. |

Note:  
1. Luminous Intensity/ Luminous Flux: +/-15%.

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

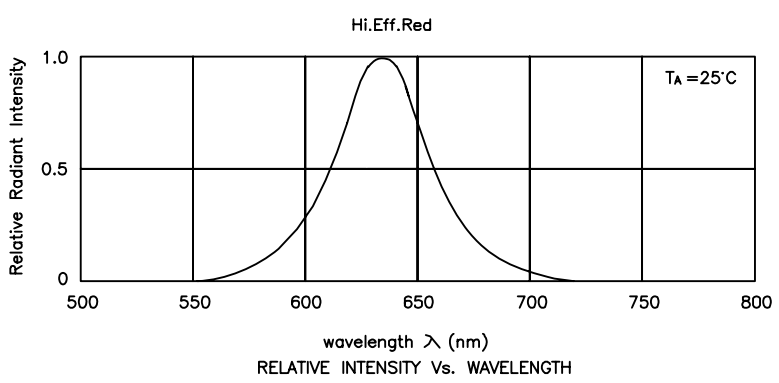
| Symbol                | Parameter                | Device              | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|---------------------|------|------|-------|-----------------|
| $\lambda_{peak}$      | Peak Wavelength          | High Efficiency Red | 627  |      | nm    | IF=20mA         |
| $\lambda_D$ [1]       | Dominant Wavelength      | High Efficiency Red | 625  |      | nm    | IF=20mA         |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | High Efficiency Red | 45   |      | nm    | IF=20mA         |
| C                     | Capacitance              | High Efficiency Red | 15   |      | pF    | VF=0V;f=1MHz    |
| VF [2]                | Forward Voltage          | High Efficiency Red | 2.0  | 2.5  | V     | IF=20mA         |
| IR                    | Reverse Current          | High Efficiency Red |      | 10   | uA    | VR = 5V         |

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

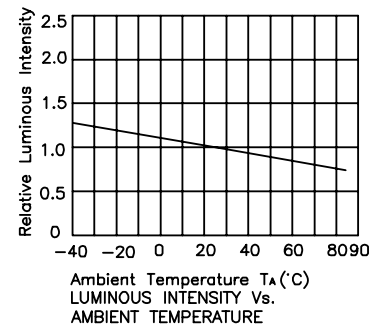
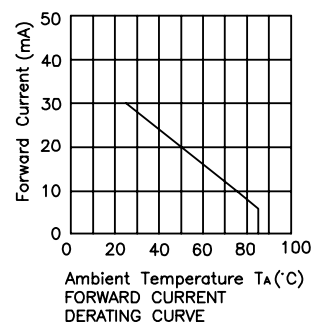
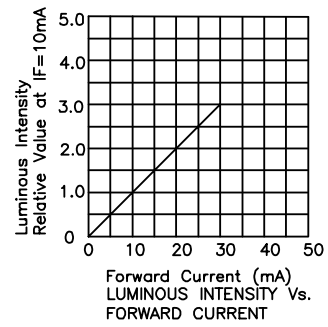
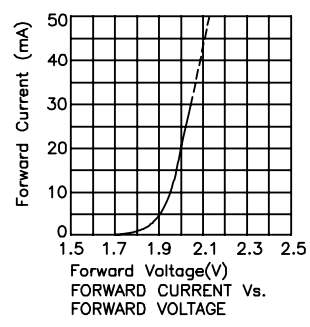
## Absolute Maximum Ratings at TA=25°C

| Parameter                     | High Efficiency Red | Units |
|-------------------------------|---------------------|-------|
| Power dissipation             | 105                 | mW    |
| DC Forward Current            | 30                  | mA    |
| Peak Forward Current [1]      | 160                 | mA    |
| Reverse Voltage               | 5                   | V     |
| Operating/Storage Temperature | -40°C To +85°C      |       |
| Lead Solder Temperature [2]   | 260°C For 3 Seconds |       |

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



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PACKING & LABEL SPECIFICATIONS

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