

Part Number: PSA12-11EWA HIGH EFFICIENCY RED

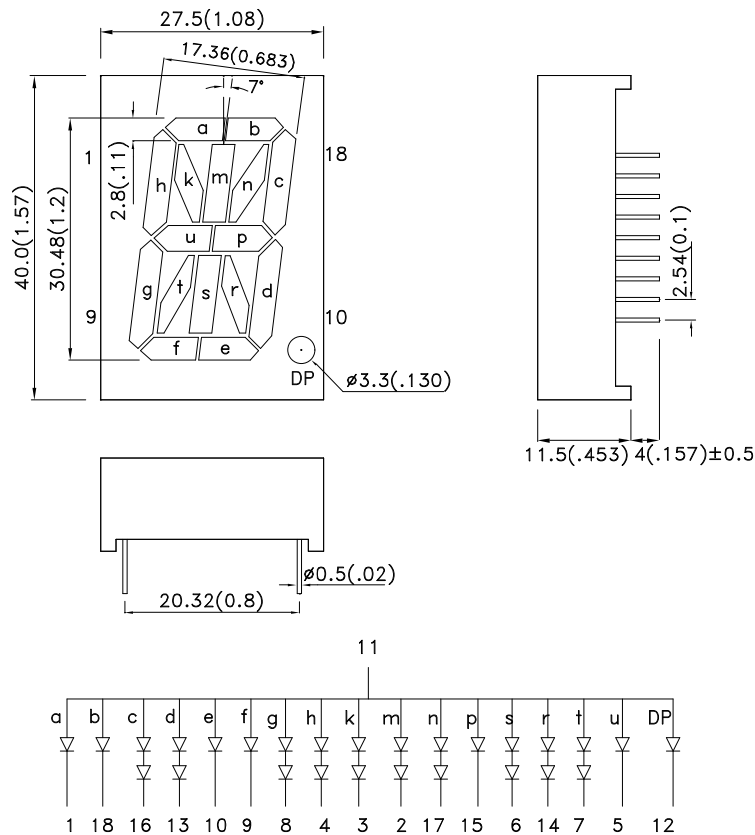
Features

- 1.2 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] @ 10mA | | Description |
|-------------|--------------------------------|----------------|------------------------|-------|--------------------------------|
| | | | Min. | Typ. | |
| PSA12-11EWA | HIGH EFFICIENCY RED(GaAsP/GaP) | WHITE DIFFUSED | 3000 | 12000 | Common Anode, 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 |
|-----------------------|--------------------------|---------------------|------|------|-------|---------------------|
| λ_{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 | c,d,g,h,k,m,n,s,r,t | 4.0 | 5.0 | V | IF=20mA |
| | | a,b,e,f,p,u and DP | 2.0 | 2.5 | | |
| IR | Reverse Current | c,d,g,h,k,m,n,s,r,t | | 10 | uA | VR = 10V VR = 5V |
| | | a,b,e,f,p,u and DP | | 10 | | |

Notes:

1. Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

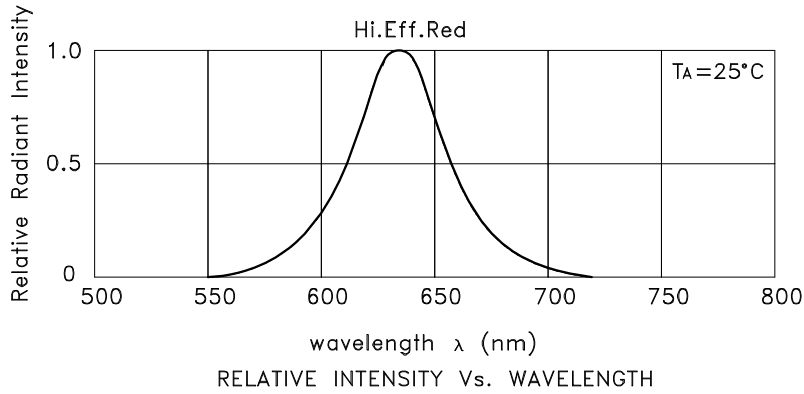
Absolute Maximum Ratings at TA=25°C

| Parameter | High Efficiency Red | Units |
|-------------------------------|-----------------------|-------|
| Power dissipation | c,d,g,h,k,m,n,s,r,t | 150 |
| | a,b,e,f,p,u and DP | 75 |
| DC Forward Current | c,d,g,h,k,m,n,s,r,t | 30 |
| | a,b,e,f,p,u and DP | 30 |
| Peak Forward Current [1] | c,d,g,h,k,m,n,s,r,t | 160 |
| | a,b,e,f,p,u and DP | 160 |
| Reverse Voltage | c,d,g,h,k,m,n,s,r,t | 10 |
| | a,b,e,f,p,u and DP | 5 |
| Operating/Storage Temperature | -40°C To +85°C | |
| Lead Solder Temperature [2] | 260°C For 3-5 Seconds | |

Notes:

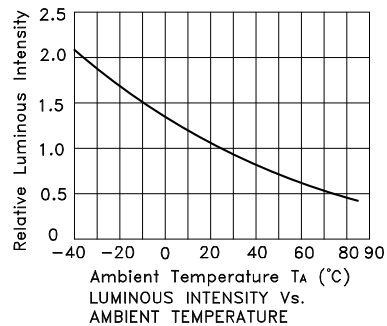
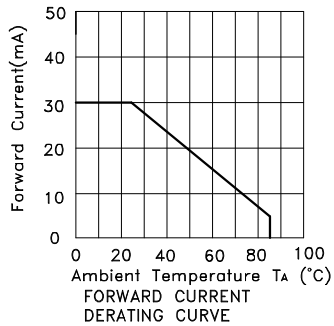
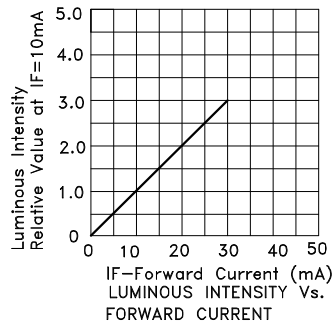
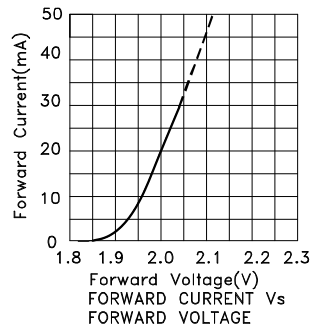
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

2. 2mm below package base.

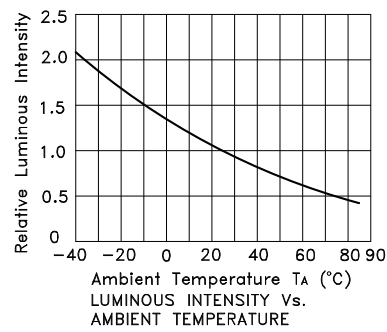
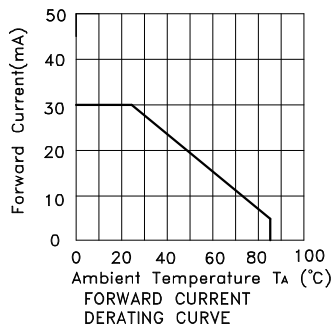
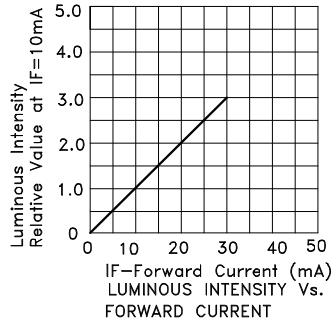
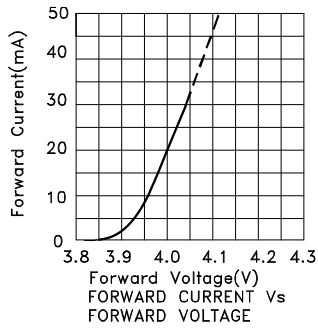


High Efficiency Red

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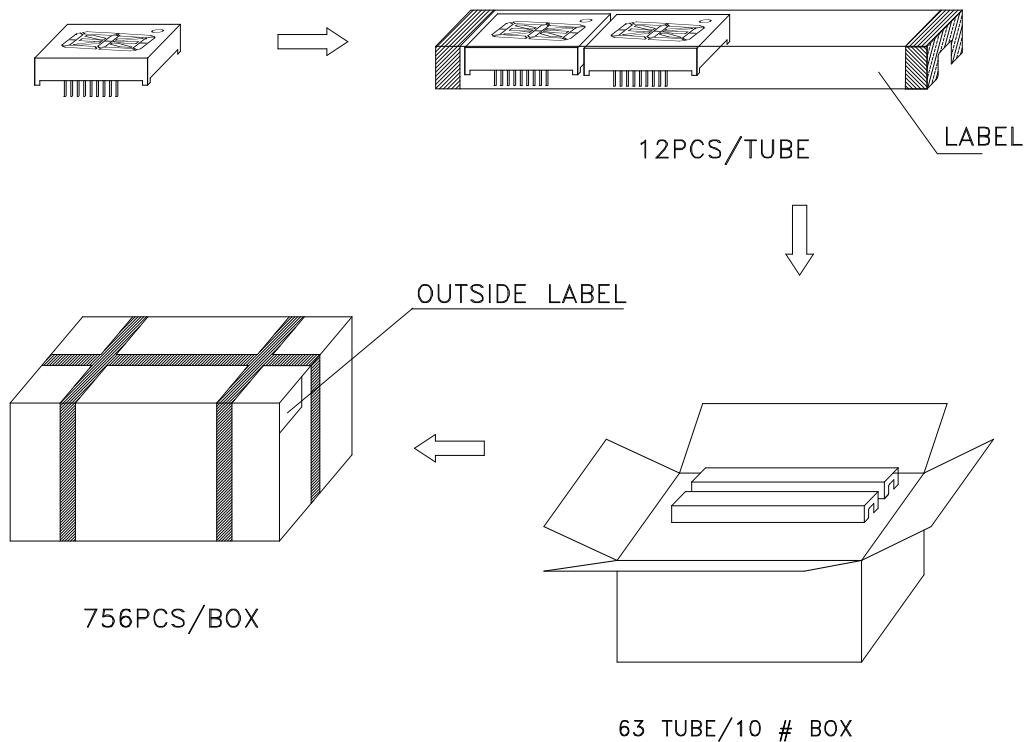
Note:the curves are on the segment a,b,e,f,p,u and DP.



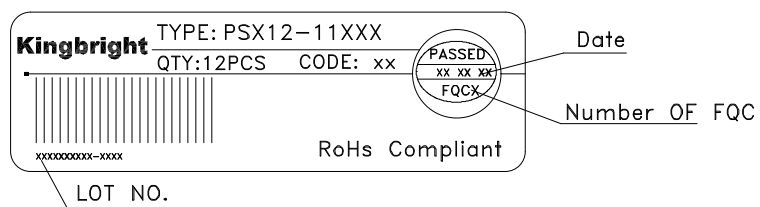
Note:the curves are on the segment c,d,g,h,k,m,n,s,r and t.

PACKING & LABEL SPECIFICATIONS

PSA12-11EWA



Inside LABEL Paste On The IC-tube



Outside LABEL Paste On The Box

