

Part Number: PSA12-11EWA HIGH EFFICIENCY RED

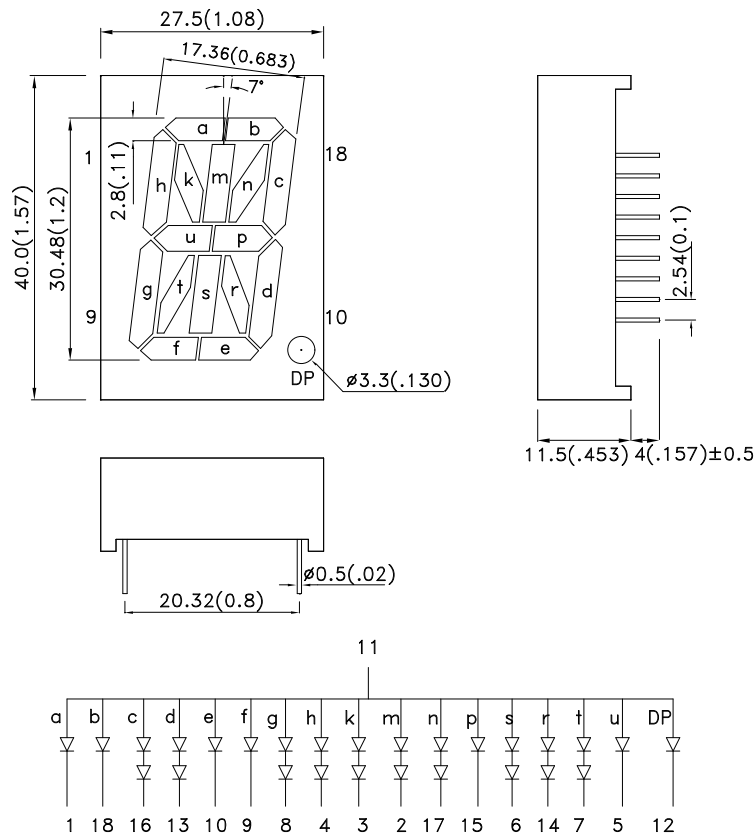
### Features

- 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
$\lambda_{peak}$	Peak Wavelength	High Efficiency Red	627		nm	IF=20mA
$\lambda D[1]$	Dominant Wavelength	High Efficiency Red	625		nm	IF=20mA
$\Delta\lambda/2$	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.

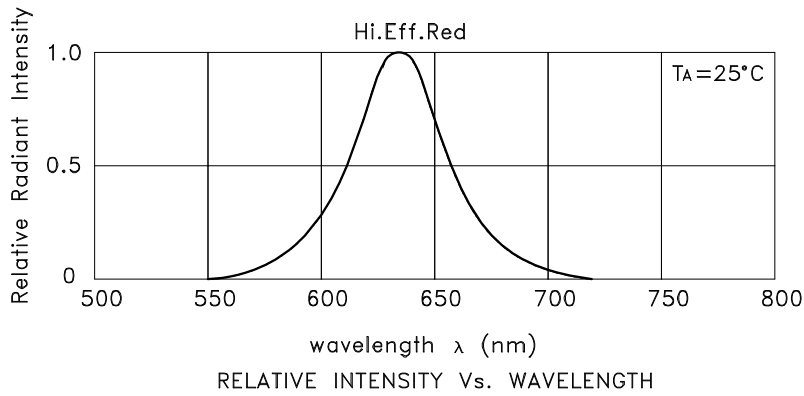
## Absolute Maximum Ratings at TA=25°C

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:

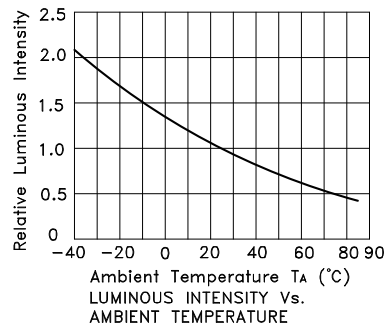
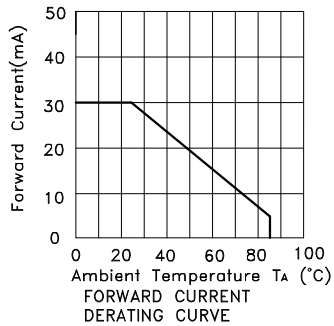
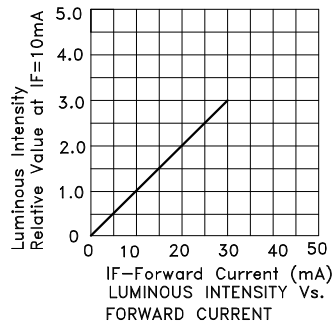
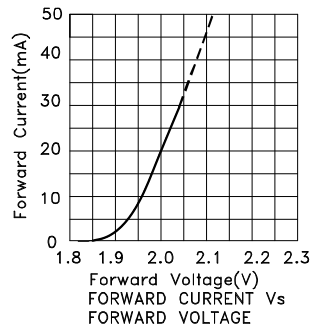
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

2. 2mm below package base.

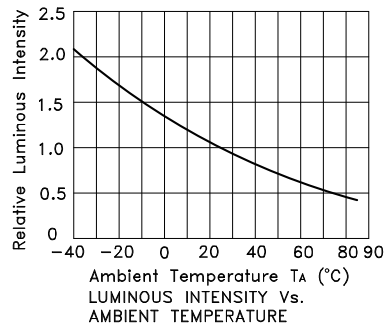
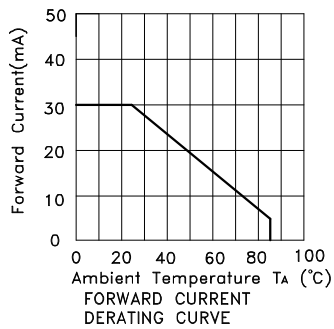
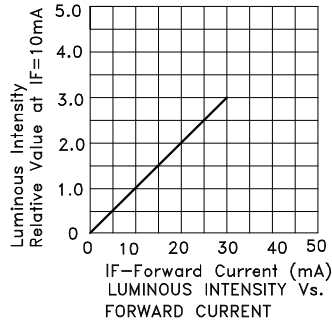
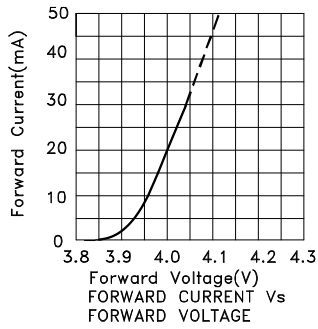


## High Efficiency Red

## PSA12-11EWA



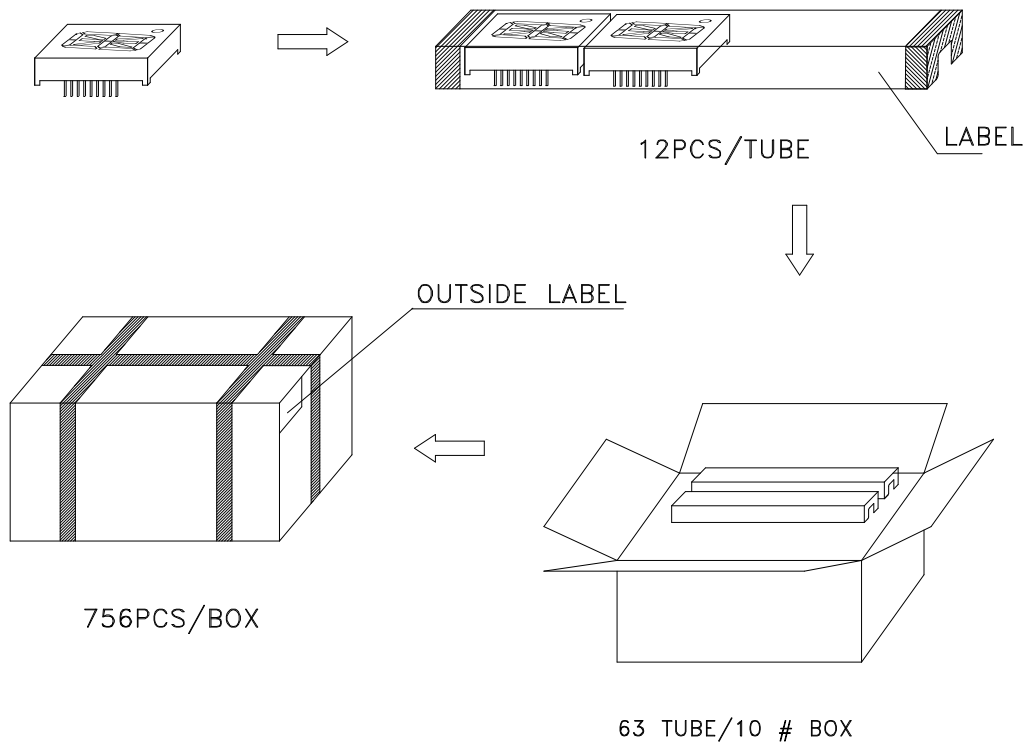
Note:the curves are on the segment a,b,e,f,p,u and DP.



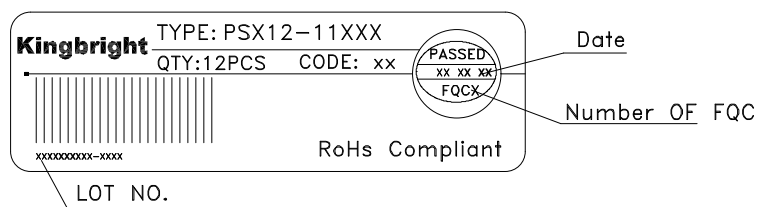
Note:the curves are on the segment c,d,g,h,k,m,n,s,r and t.

## PACKING & LABEL SPECIFICATIONS

## PSA12-11EWA



Inside LABEL Paste On The IC-tube



Outside LABEL Paste On The Box

