

P/N: PSA12-11SRWA

SUPER BRIGHT RED

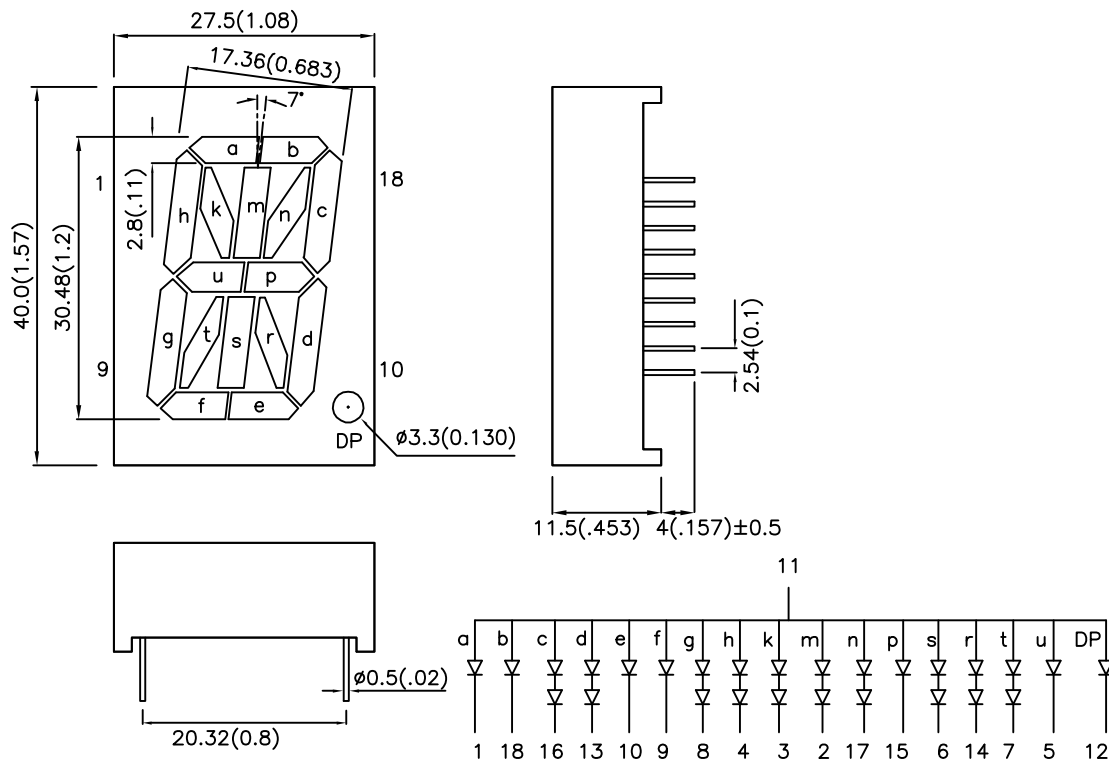
### Features

- 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 Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

### Package Dimensions & Internal Circuit Diagram



**Notes:**

1. All dimensions are in millimeters (inches), Tolerance is ±0.25(0.01") unless otherwise noted.
2. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) @ 10mA		Description
			Min.	Typ.	
PSA12-11SRWA	SUPER BRIGHT RED (GaAlAs)	WHITE DIFFUSED	8000	26000	Common Anode, Rt. Hand Decimal

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

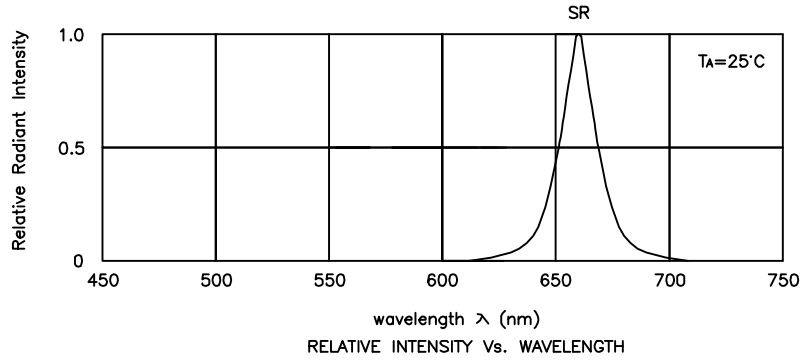
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	Super Bright Red	660		nm	I <sub>F</sub> =20mA
$\lambda_D$	Dominant Wavelength	Super Bright Red	640		nm	I <sub>F</sub> =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Super Bright Red	20		nm	I <sub>F</sub> =20mA
C	Capacitance	Super Bright Red	45		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub>	Forward Voltage	c,d,g,h,k,m,n,s,r,t	3.7	5.0	V	I <sub>F</sub> =20mA
		a,b,e,f,p,u and DP	1.85	2.5		
I <sub>R</sub>	Reverse Current	c,d,g,h,k,m,n,s,r,t		10	uA	V <sub>R</sub> = 10V
		a,b,e,f,p,u and DP		10		V <sub>R</sub> = 5V

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

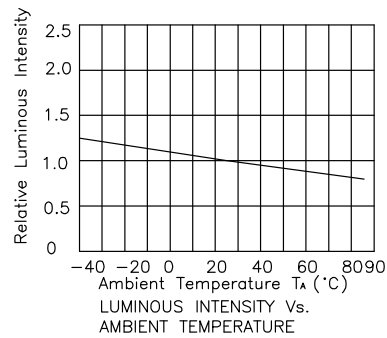
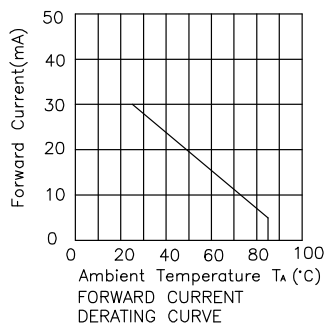
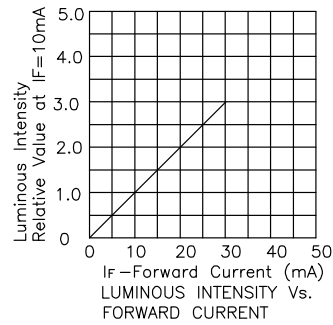
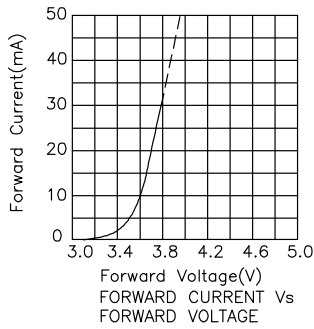
Parameter	Super Bright Red	Units
Power dissipation	c,d,g,h,k,m,n,s,r,t	150
	a,b,e,f,p,u and DP	100
DC Forward Current	c,d,g,h,k,m,n,s,r,t	30
	a,b,e,f,p,u and DP	
Peak Forward Current [1]	c,d,g,h,k,m,n,s,r,t	155
	a,b,e,f,p,u and DP	
Reverse Voltage	c,d,g,h,k,m,n,s,r,t	10
	a,b,e,f,p,u and DP	5
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 5 Seconds	

Notes:

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

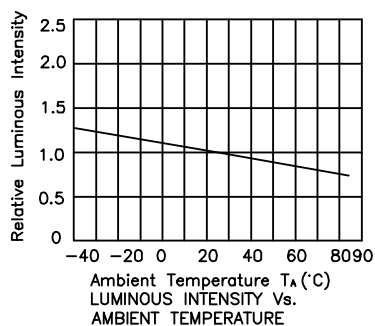
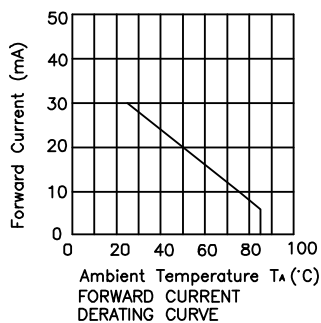
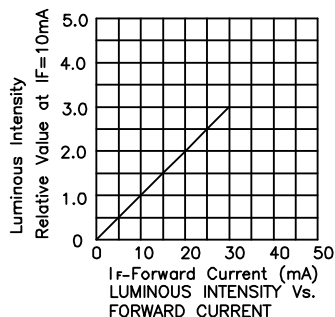
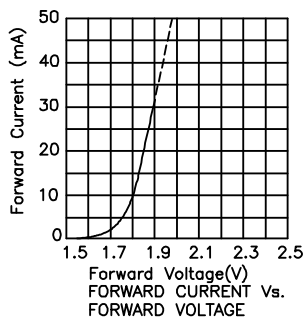


**PSA12-11SRWA  
Super Bright Red**



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

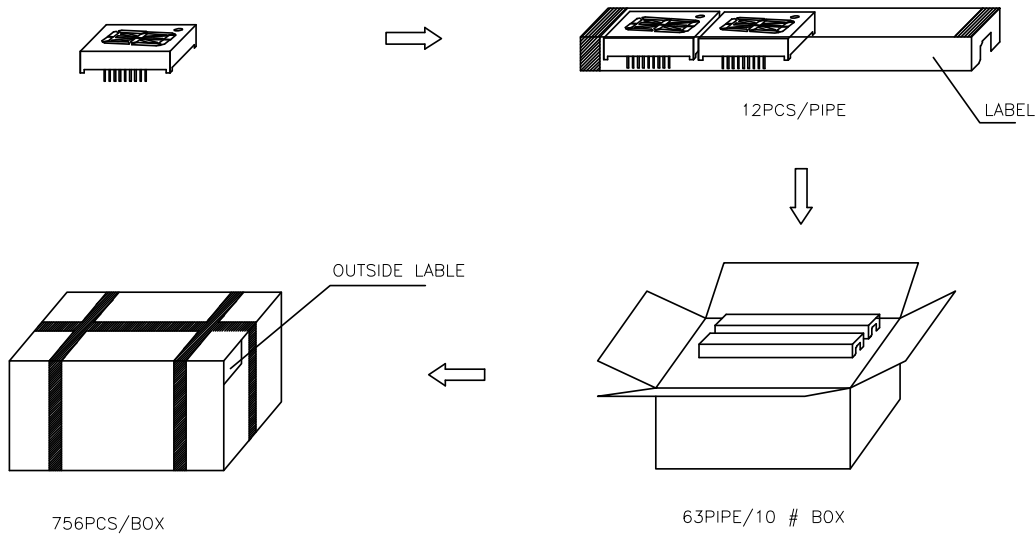
## Super Bright Red



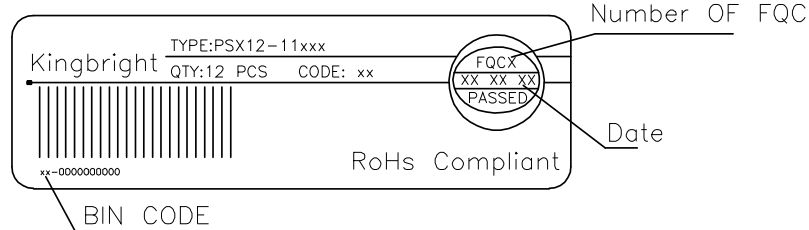
Note: the curves are on the segment a,b,e,f,p,u and DP.

## PACKING & LABEL SPECIFICATIONS

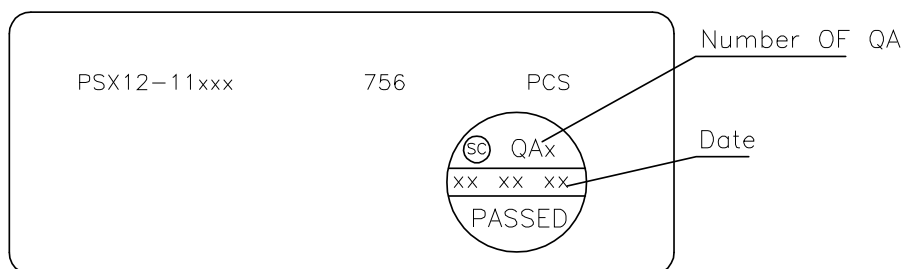
## PSA12-11SRWA



Inside LABEL Paste On The IC-pipe



Outside LABEL Paste On The Box



### Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity/ luminous flux or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity/ Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.