

SBC15-11EGWA

HIGH EFFICIENCY RED  
GREEN

### Features

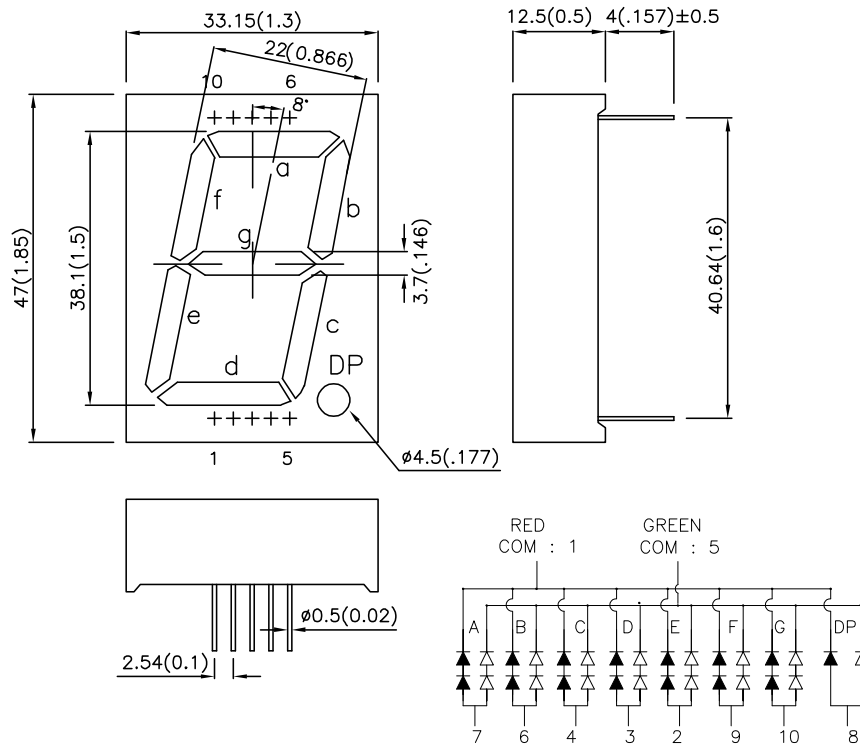
- 1.5 INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- HIGH LIGHT OUTPUT.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- I.C. COMPATIBLE.
- MULTICOLOR AVAILABLE.
- MECHANICALLY RUGGED.
- STANDARD : GRAY FACE, WHITE SEGMENT.
- RoHS COMPLIANT.

### Description

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

The Green source color devices are made with Gallium Phosphide Green 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) @ 10mA		Description
			Min.	Typ.	
SBC15-11EGWA	HIGH EFFICIENCY RED (GaAsP/GaP)	WHITE DIFFUSED	3000	16000	Common Cathode ,Rt. Hand Decimal.
	GREEN (GaP)		4700	24000	

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

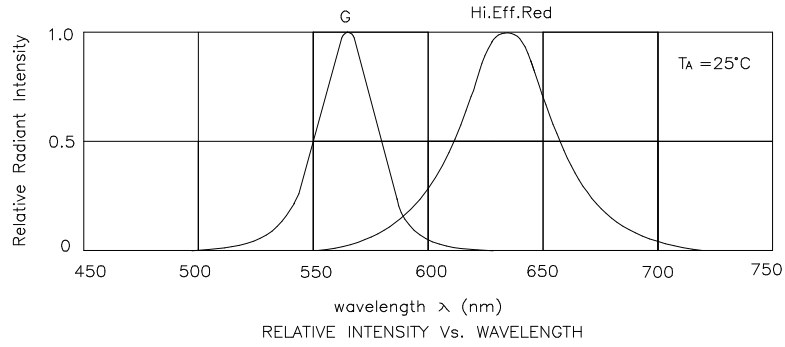
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	High Efficiency Red Green	627 565		nm	IF=20mA
$\lambda_D$	Dominant Wavelength	High Efficiency Red Green	625 568		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	High Efficiency Red Green	45 30		nm	IF=20mA
C	Capacitance	High Efficiency Red Green	15 15		pF	VF=0V;f=1MHz
VF	Forward Voltage Per Segment or (DP)	High Efficiency Red Green	4.0 (2.0) 4.4 (2.2)	5.0 (2.5) 5.0 (2.5)	V	IF=20mA
IR	Reverse Current Per Segment or (DP)	All		10	uA	VR = 10V(5V)

## Absolute Maximum Ratings at TA=25°C

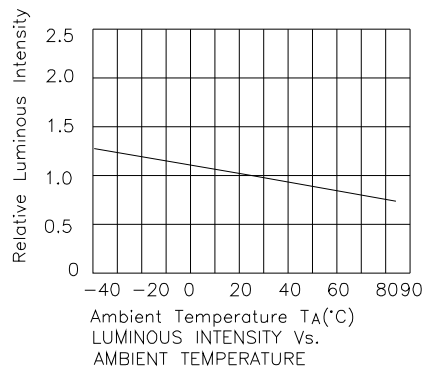
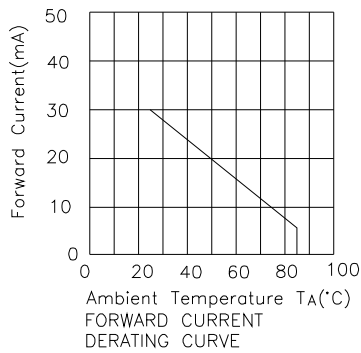
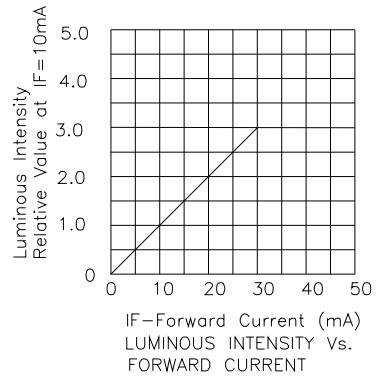
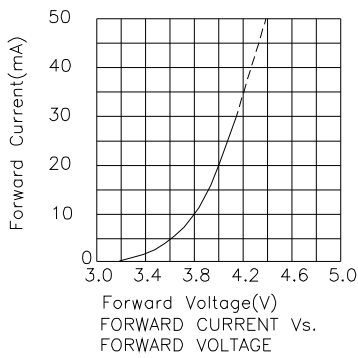
Parameter	High Efficiency Red	Green	Units
Power dissipation Per Segment or (DP)	150 (105)	125 (105)	mW
DC Forward Current Per Segment or (DP)	30	25	mA
Peak Forward Current [1] Per Segment or (DP)	160	140	mA
Reverse Voltage Per Segment or (DP)	10 (5)		V
Operating/storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 5 Seconds		

Notes:

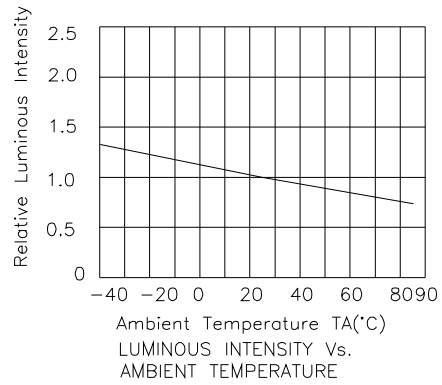
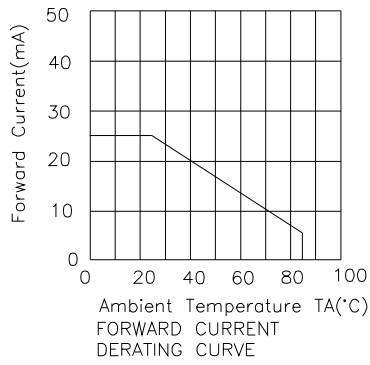
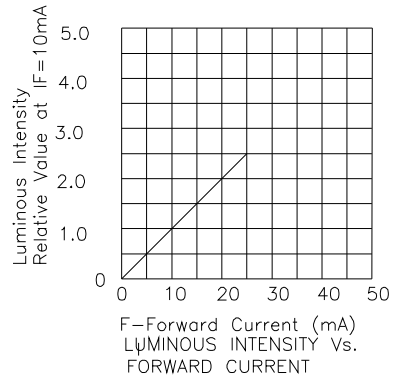
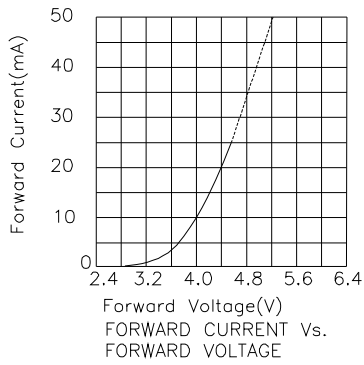
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 5mm below package base.



## SBC15-11EGWA High Efficiency Red



## Green



**Remarks:**

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

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

Note: Accuracy may depend on the sorting parameters.