

Part Number: SA23-12EWA HIGH EFFICIENCY RED

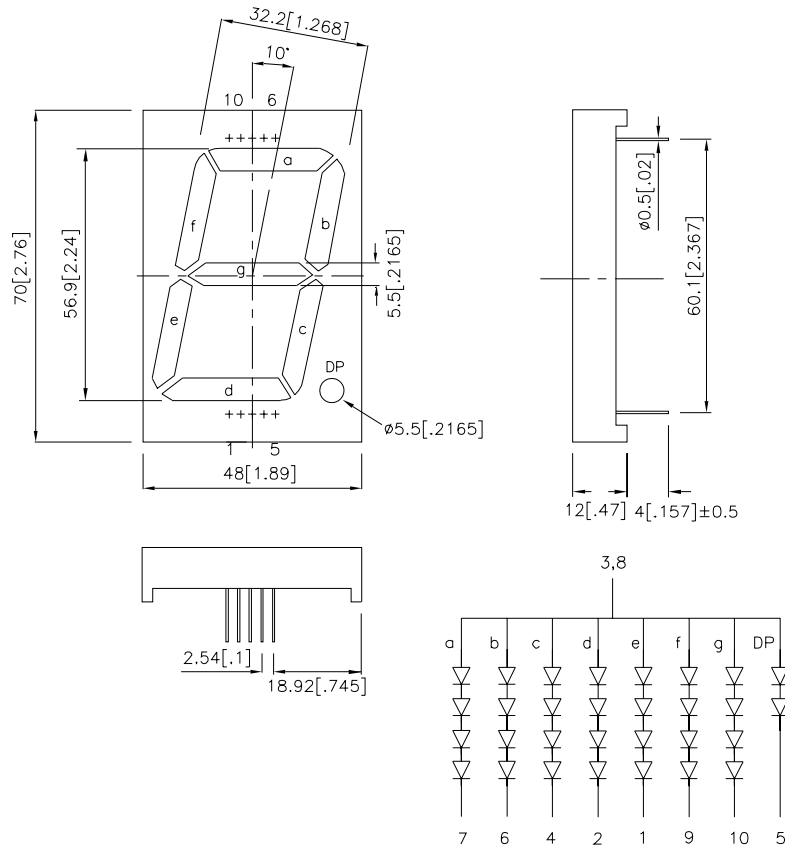
### Features

- 2.3 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.

### 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 [1]		Description
			Min.	Typ.	
SA23-12EWA	HIGH EFFICIENCY RED (GaAsP/GaP)	WHITE DIFFUSED	4700	18000	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
$\Delta\lambda_{1/2}$	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 Per Segment or (Dp)	High Efficiency Red	8.2 (4.0)	10 (5)	V	IF=20mA
IR	Reverse Current Per Segment or (Dp)	High Efficiency Red		10	uA	VR = 20V (VR = 10V)

Notes:

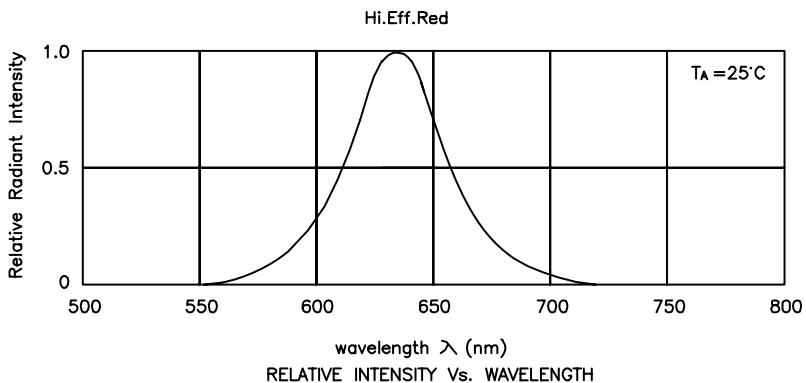
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

Parameter	High Efficiency Red	Units
Power dissipation Per Segment or (Dp)	300(150)	mW
DC Forward Current Per Segment or (Dp)	30	mA
Peak Forward Current [1] Per Segment or (Dp)	160	mA
Reverse Voltage Per Segment or (Dp)	20(10)	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3 Seconds	

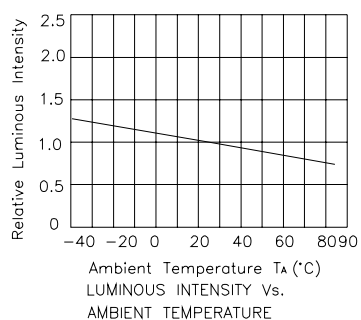
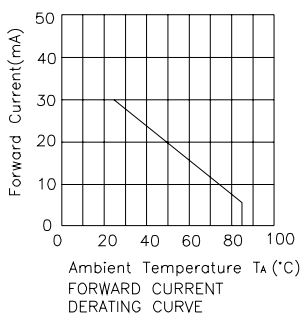
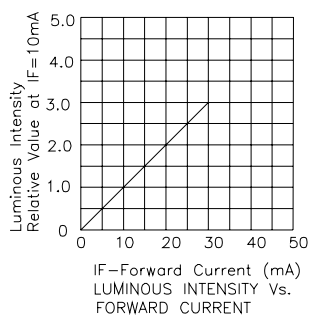
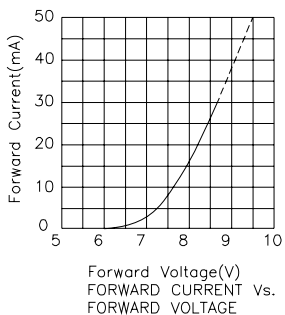
Notes:

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



## High Efficiency Red

## SA23-12EWA



**PACKING & LABEL SPECIFICATIONS**

**SA23-12EWA**

