

TA12-22EWA

HIGH EFFICIENCY RED

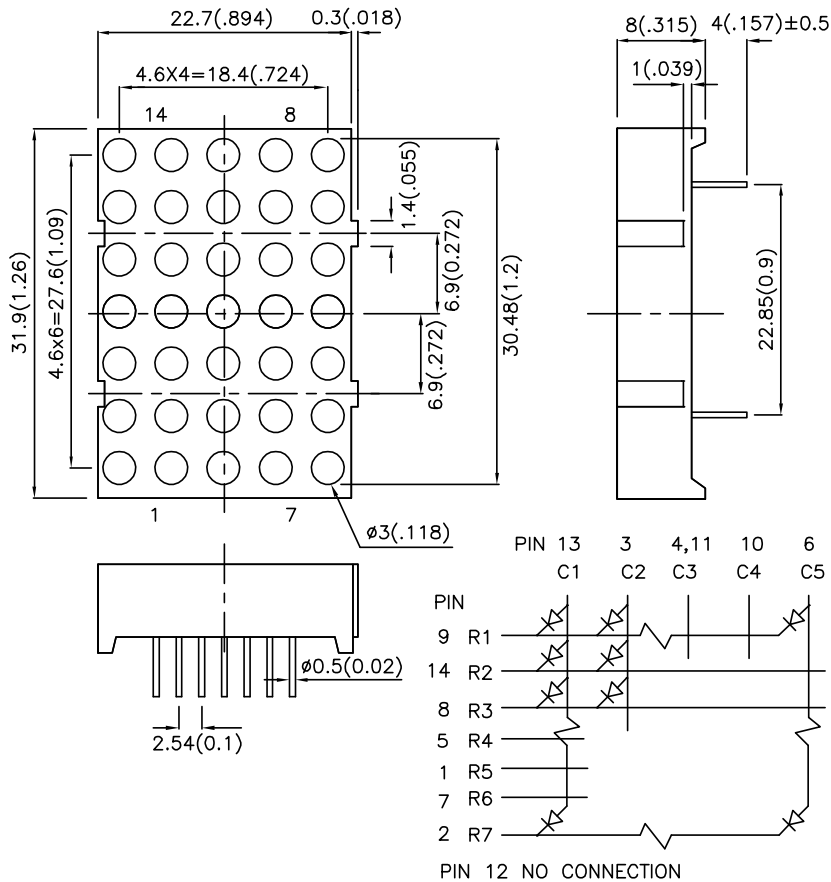
### Features

- 1.2 INCH MATRIX HEIGHT .
- DOT SIZE 3mm.
- LOW CURRENT OPERATION.
- HIGH CONTRAST AND LIGHT OUTPUT.
- COMPATIBLE WITH ASCII AND EBCDIC CODES.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- MECHANICALLY RUGGED.
- STANDARD: GRAY FACE, WHITE DOT.
- 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 ( $\mu$ cd) @ 10mA		Description
			Min.	Typ.	
TA12-22EWA	HIGH EFFICIENCY RED(GaAsP/GaP)	WHITE DIFFUSED	1900	8000	Column Anode

## Electrical / Optical Characteristics at $T_A=25^\circ\text{C}$

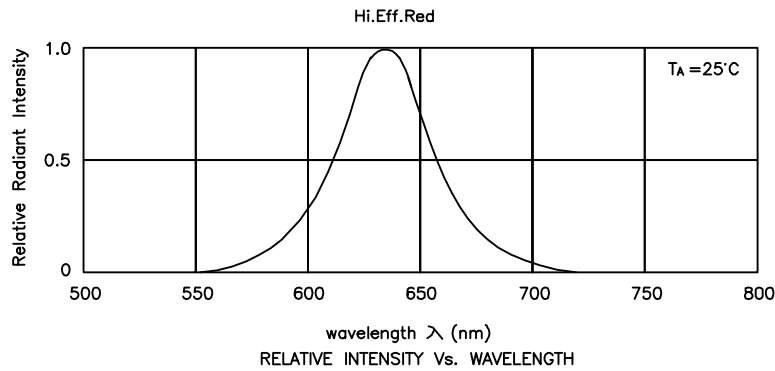
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{\text{peak}}$	Peak Wavelength	High Efficiency Red	627		nm	$I_F=20\text{mA}$
$\lambda_D$	Dominant Wavelength	High Efficiency Red	625		nm	$I_F=20\text{mA}$
$\Delta\lambda_{1/2}$	Spectral Line Half-width	High Efficiency Red	45		nm	$I_F=20\text{mA}$
C	Capacitance	High Efficiency Red	15		pF	$V_F=0\text{V}; f=1\text{MHz}$
$V_F$	Forward Voltage	High Efficiency Red	2.0	2.5	V	$I_F=20\text{mA}$
$I_R$	Reverse Current	High Efficiency Red		10	$\mu\text{A}$	$V_R = 5\text{V}$

## Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

Parameter	High Efficiency Red	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 5 Seconds	

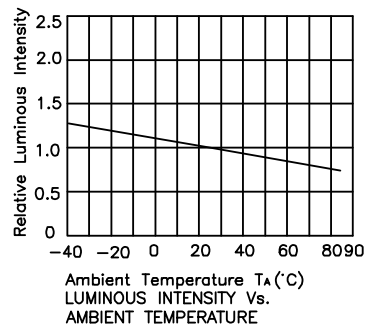
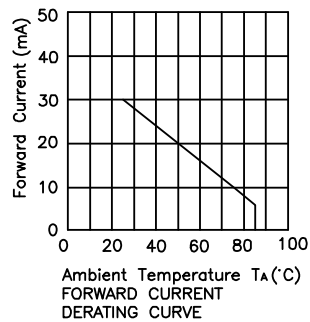
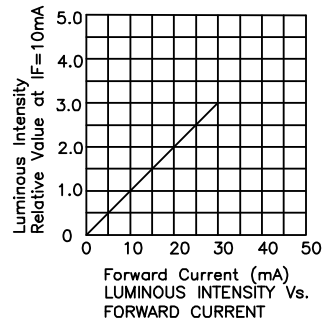
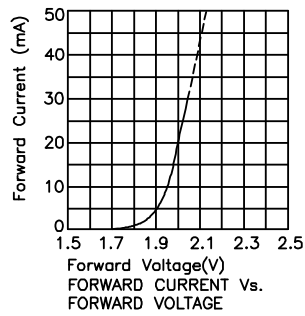
Notes:

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



## High Efficiency Red

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### 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.