

Part Number: TC40-11EWA

High Efficiency Red

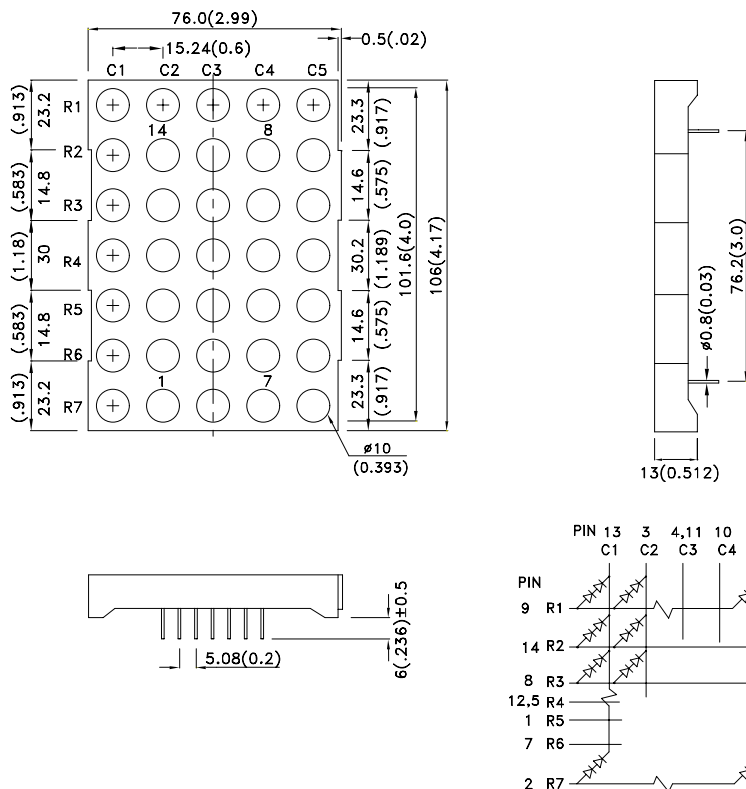
### Features

- 4.0 INCH MATRIX HEIGHT.
- DOT SIZE 10mm.
- LOW CURRENT OPERATION.
- HIGH CONTRAST AND LIGHT OUTPUT.
- COMPATIBLE WITH ASCII AND EBCDIC CODES.
- STACKABLE HORIZONTALLY.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- MULTICOLOR AVAILABLE.
- 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 (ucd) [1] @ 10mA		Description
			Min.	Typ.	
TC40-11EWA	High Efficiency Red (GaAsP/GaP)	WHITE DIFFUSED	8000	33000	Column Cathode

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	I <sub>F</sub> =20mA
$\lambda_D$ [1]	Dominant Wavelength	High Efficiency Red	625		nm	I <sub>F</sub> =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	High Efficiency Red	45		nm	I <sub>F</sub> =20mA
C	Capacitance (Per Chip)	High Efficiency Red	15		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub> [2]	Forward Voltage (Per Dot)	High Efficiency Red	4.0	5.0	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current (Per Dot)	High Efficiency Red		10	uA	V <sub>R</sub> =10V

Notes:

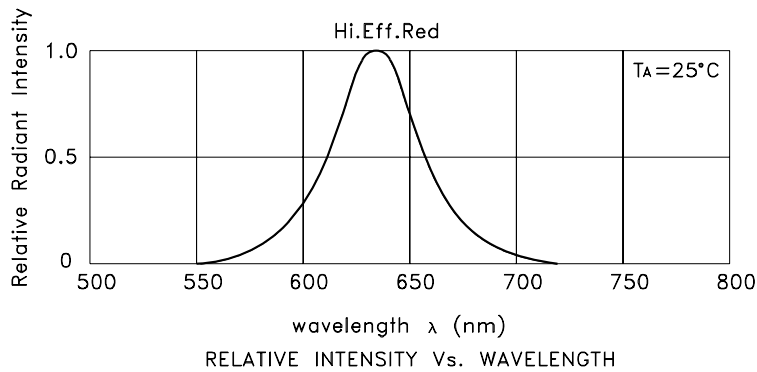
1. Wavelength: +/-1nm.  
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

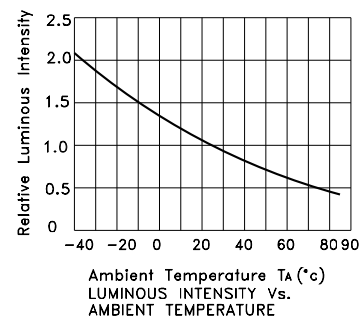
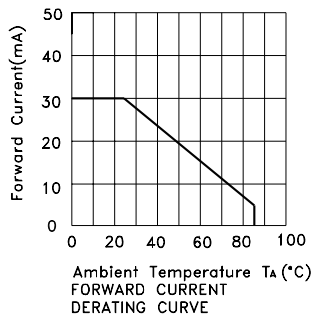
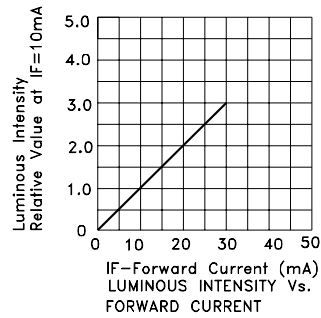
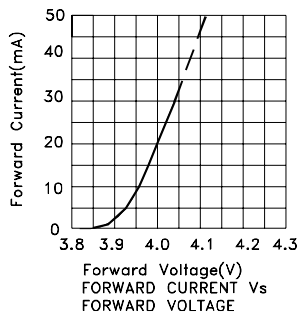
Parameter	High Efficiency Red	Units
Power dissipation (Per Dot)	150	mW
DC Forward Current (Per Dot)	30	mA
Peak Forward Current [1] (Per Dot)	160	mA
Reverse Voltage (Per Dot)	10	V
Operating / Storage Temperature	-40°C To +85°C	
Lead Solder Temperature[2]	260°C For 3-5 Seconds	

Notes:

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

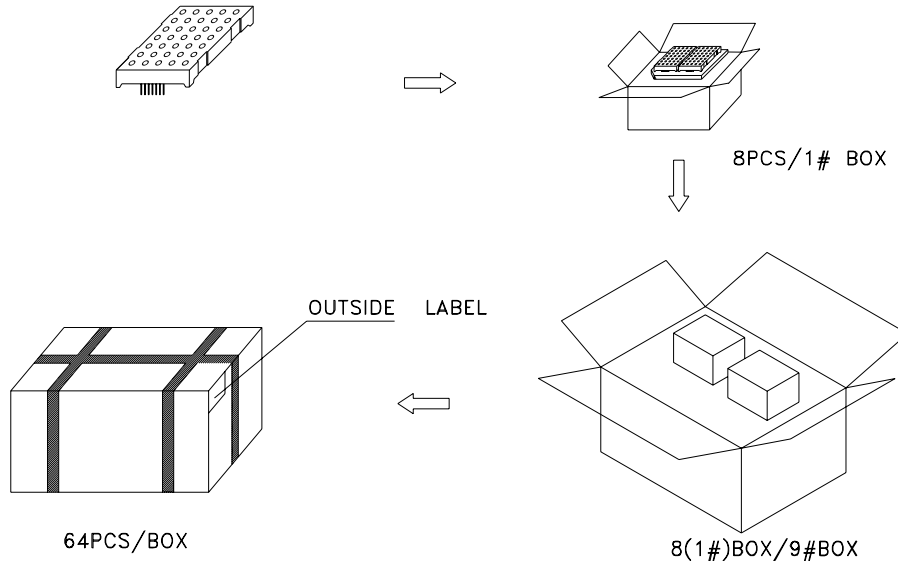


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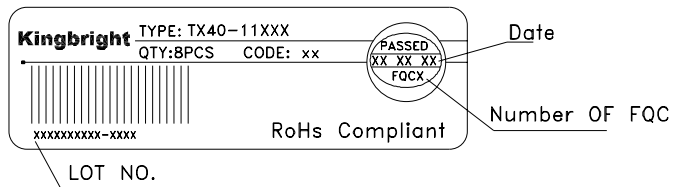


## PACKING & LABEL SPECIFICATIONS

## TC40-11EWA



Inside LABEL Paste On The IC-tube



Outside LABEL Paste On The Box

