

Part Number: TBC40-12EGWA

High Efficiency Red
Green

Features

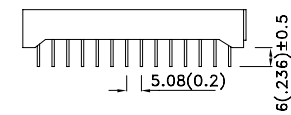
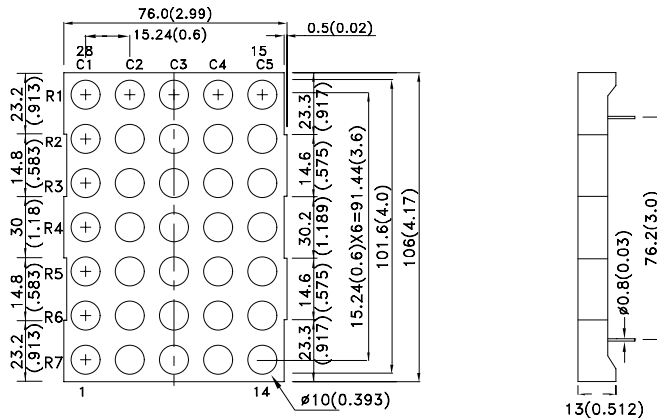
- 4.0 INCH MATRIX HEIGHT.
- DOT SIZE 10mm.
- LOW CURRENT OPERATION.
- HIGH CONTRAST AND LIGHT OUTPUT.
- COMPATIBLE WITH ASCII AND EBCDIC CODES.
- STACKABLE HORIZONTALLY.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- MULTICOLOR AVAILABLE.
- MECHANICALLY RUGGED.
- STANDARD : GRAY FACE, WHITE DOT.
- RoHS COMPLIANT.

Description

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

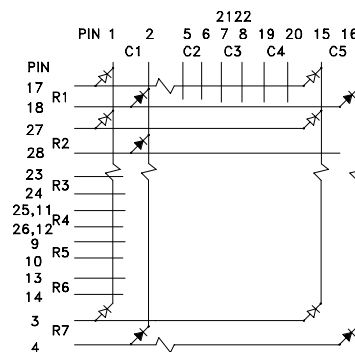
The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

Package Dimensions & Internal Circuit Diagram



✂ FOR 2 RED CHIPS

✂ FOR 2 GREEN CHIPS



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.	
TBC40-12EGWA	High Efficiency Red (GaAsP/GaP)	WHITE DIFFUSED	8000	33000	Column Cathode
	Green (GaP)		12000	42000	

Note:

1. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	High Efficiency Red Green	627 565		nm	I _F =20mA
λ_D [1]	Dominant Wavelength	High Efficiency Red Green	625 568		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	High Efficiency Red Green	45 30		nm	I _F =20mA
C	Capacitance	High Efficiency Red Green	15 15		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage (Per Dot)	High Efficiency Red Green	4.0 4.4	5.0 5.0	V	I _F =20mA
I _R	Reverse Current (Per Dot)	High Efficiency Red Green		10 10	uA	V _R =10V

Notes:

1. Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

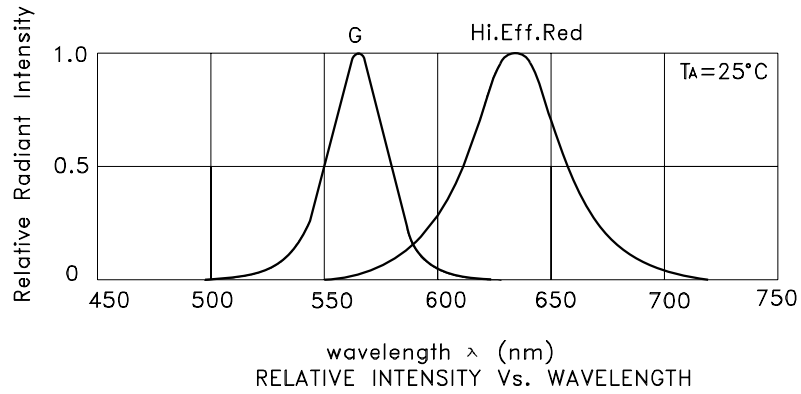
Absolute Maximum Ratings at TA=25°C

Parameter	High Efficiency Red	Green	Units
Power dissipation (Per Dot)	150	125	mW
DC Forward Current (Per Dot)	30	25	mA
Peak Forward Current [1] (Per Dot)	160	140	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		

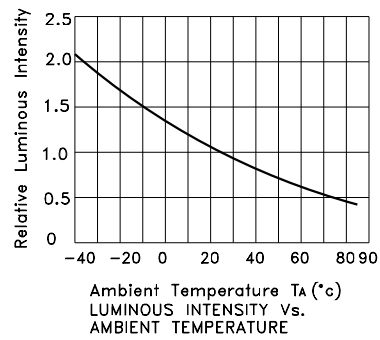
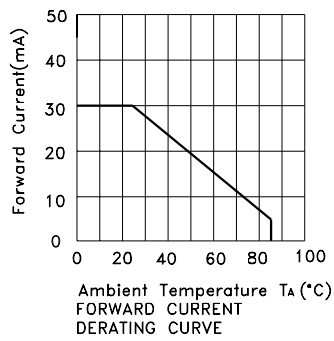
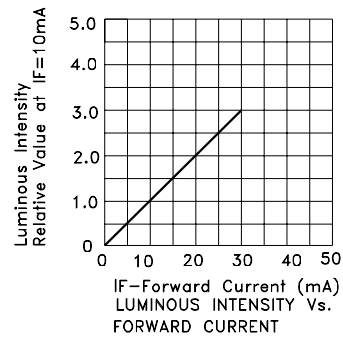
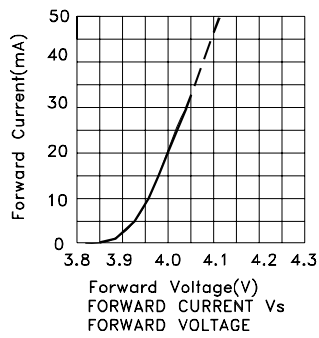
Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.

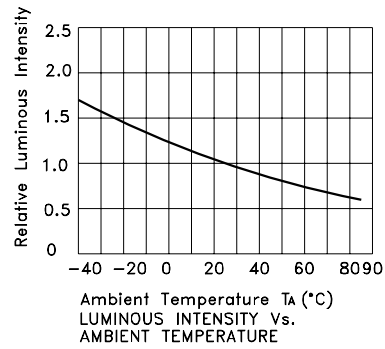
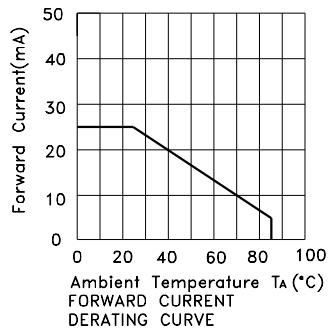
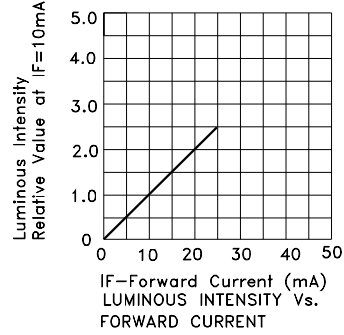
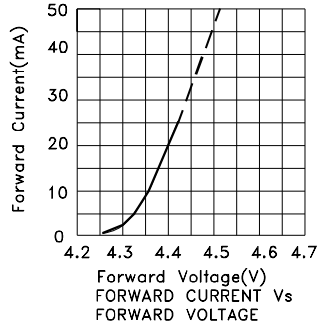
2. 2mm below package base.



TBC40-12EGWA High Efficiency Red

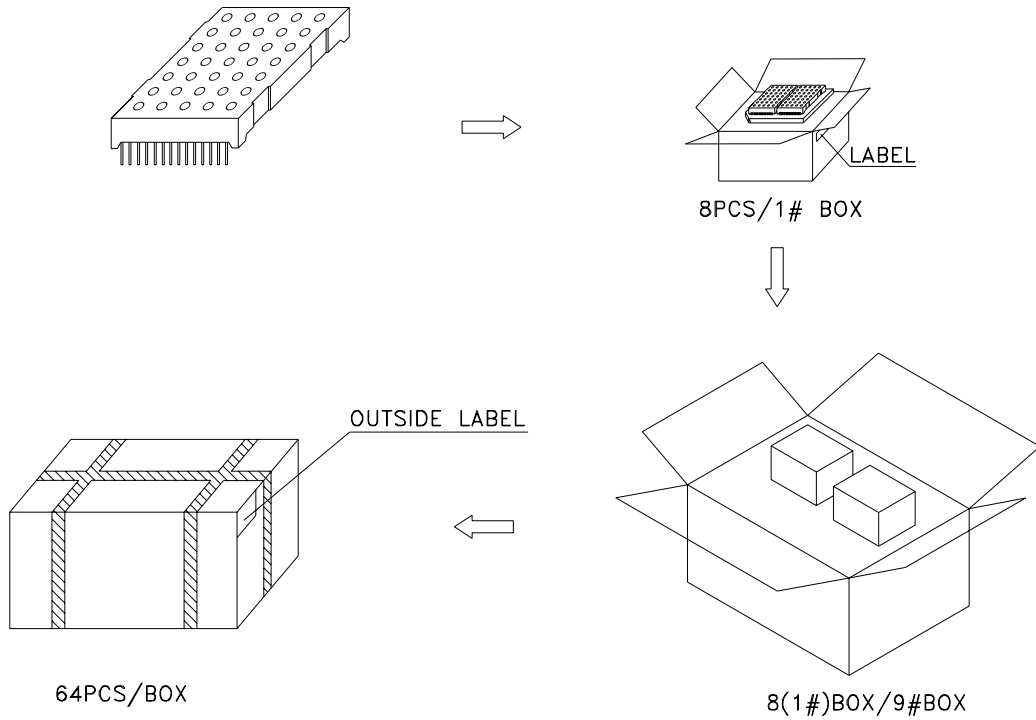


Green

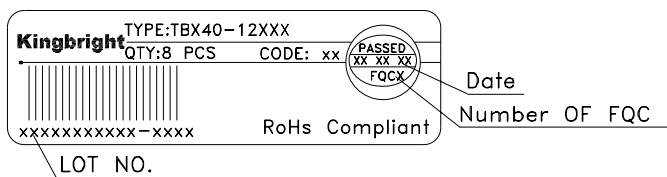


PACKING & LABEL SPECIFICATIONS

TBC40-12EGWA



Inside LABEL Paste On The 1#BOX



Outside LABEL Paste On The Box

