

P/N: TBC40-11EGWA

HIGH EFFICIENCY RED
GREEN

Features

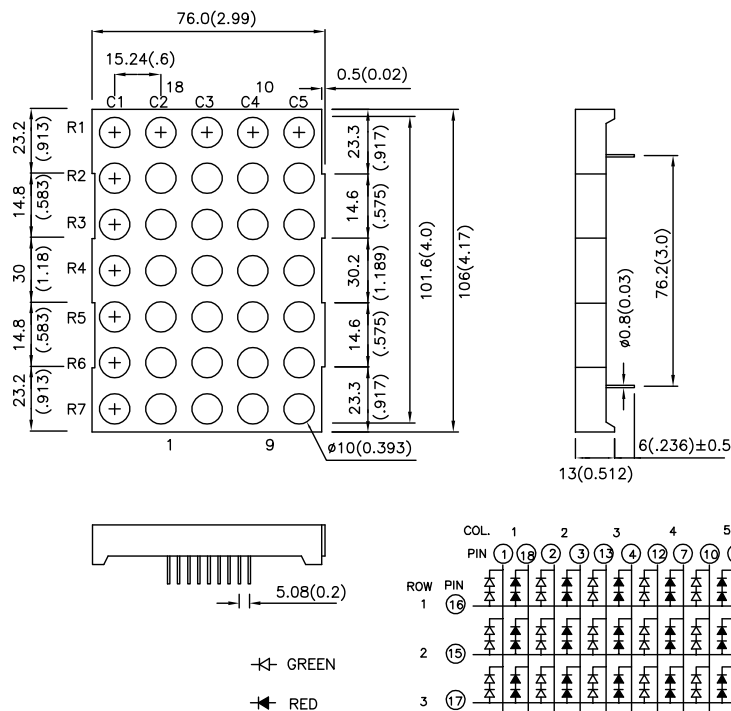
- 4.0 INCH MATRIX HEIGHT.
- DOT SIZE 10mm.
- LOW CURRENT OPERATION.
- HIGH CONTRAST AND LIGHT OUTPUT.
- COMPATIBLE WITH ASCII AND EBCDIC CODES.
- STACKABLE HORIZONTALLY.
- COLUMN CATHODE AND COLUMN ANODE AVAILABLE.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- MULTICOLOR AVAILABLE.
- MECHANICALLY RUGGED.
- 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



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.	
TBC40-11EGWA	HIGH EFFICIENCY RED (GaAsP/GaP)	WHITE DIFFUSED	3000	16000	Column Cathode
	GREEN (GaP)		4700	24000	

Electrical / Optical Characteristics at TA=25°C

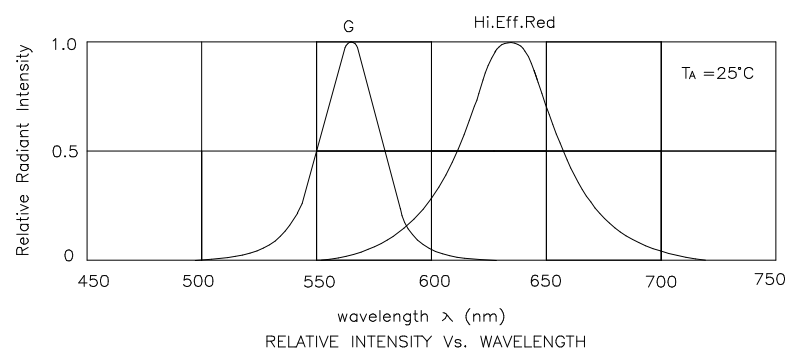
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	High Efficiency Red Green	627 565		nm	IF=20mA
λ_D	Dominant Wavelength	High Efficiency Red Green	625 568		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	High Efficiency Red Green	45 30		nm	IF=20mA
C	Capacitance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

Absolute Maximum Ratings at TA=25°C

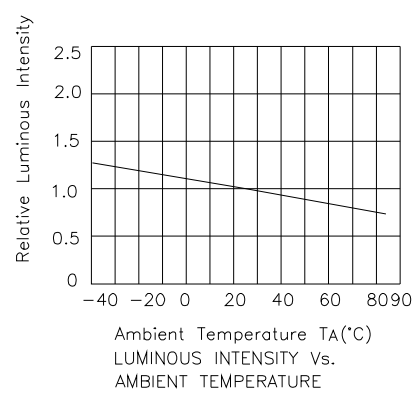
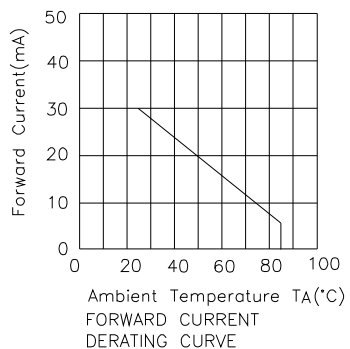
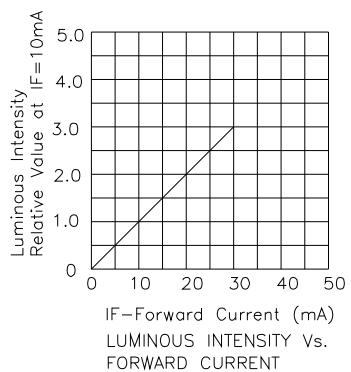
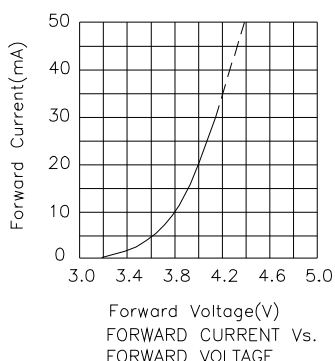
Parameter	High Efficiency Red	Green	Units
Power dissipation (Per Dot)	150	125	mW
DC Forward Current (Per Dot)	30	25	mA
Peak Forward Current [1] (Per Dot)	160	140	mA
Reverse Voltage (Per Dot)	10		V
Operating/storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 5 Seconds		

Notes:

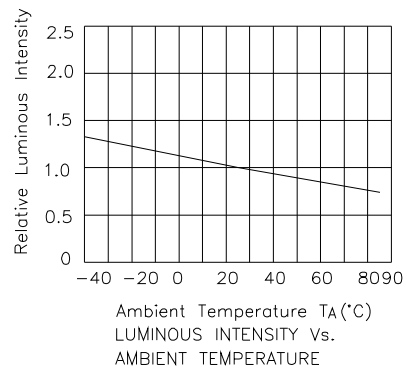
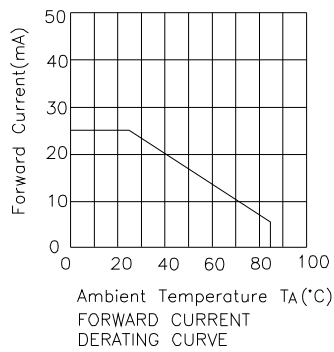
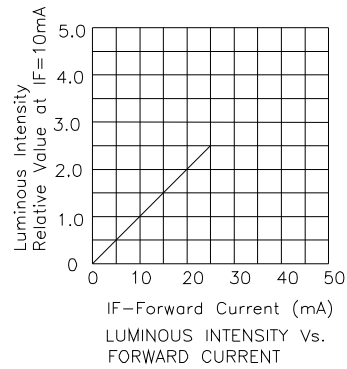
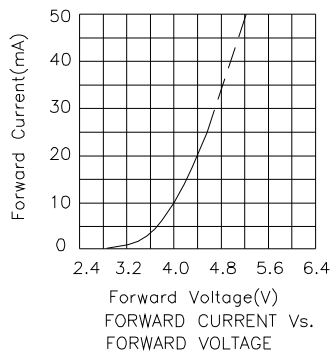
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.



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High Efficiency Red

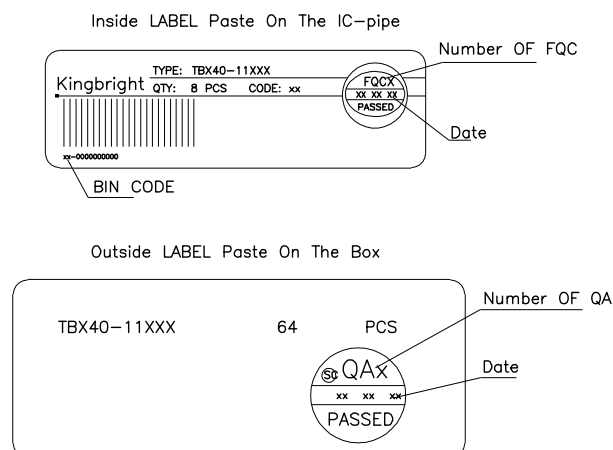
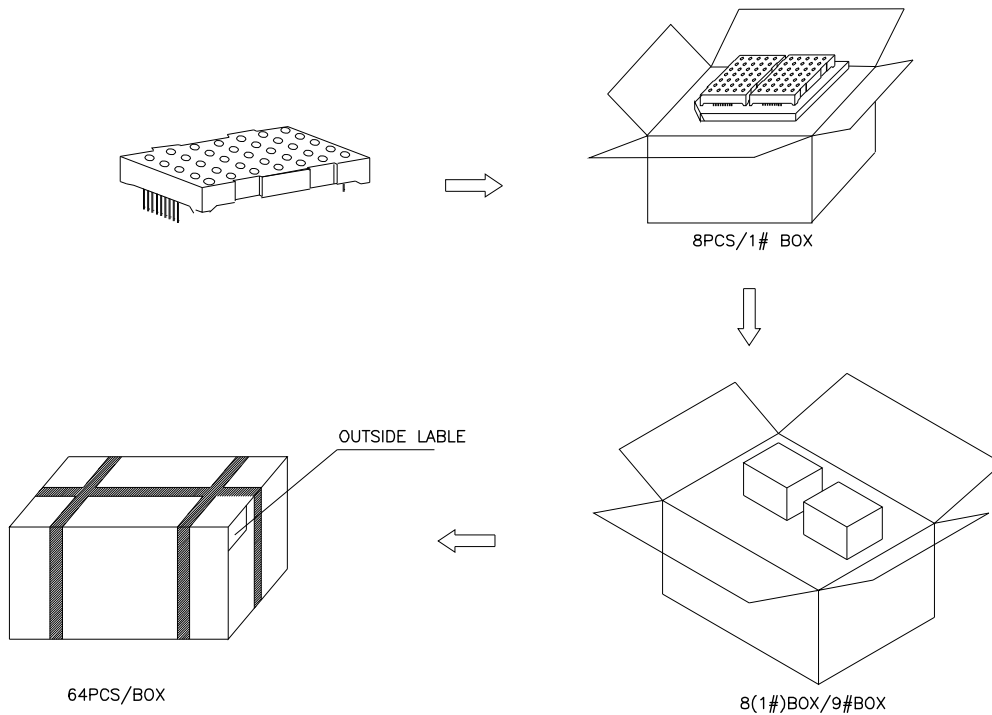


Green



PACKING & LABEL SPECIFICATIONS

TBC40-11EGWA



Remarks:

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

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

Note: Accuracy may depend on the sorting parameters.