

TBA30-12EGWA

TBC30-12EGWA

### Features

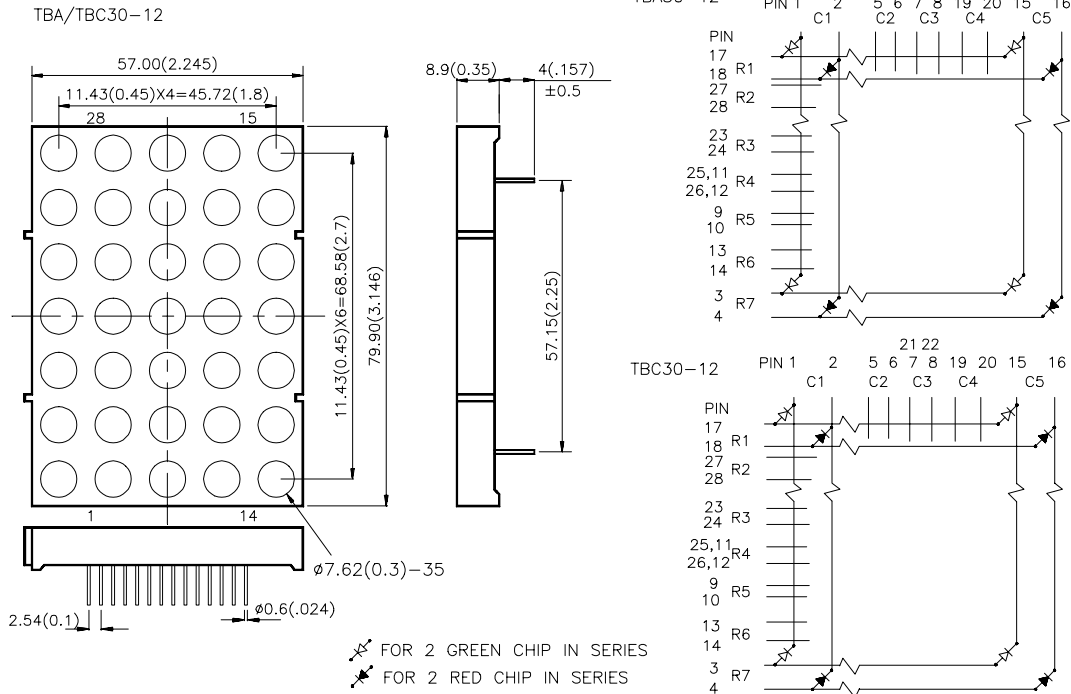
- 3.0 INCH MATRIX HEIGHT.
- DOT SIZE 7.62mm.
- LOW CURRENT OPERATION.
- HIGH CONTRAST AND LIGHT OUTPUT.
- COMPATIBLE WITH ASCII AND EBCDIC CODES.
- STACKABLE HORIZONTALLY.
- COLUMN CATHODE AND COLUMN ANODE AVAILABLE.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- MULTICOLOR AVAILABLE.
- CATEGORIZED FOR LUMINOUS INTENSITY, YELLOW AND GREEN CATEGORIZED FOR COLOR.
- MECHANICALLY RUGGED.
- STANDARD : GRAY FACE, WHITE DOT.

### 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	Iv (ucd) @ 10 mA		Description
		Min.	Typ.	
TBA30-12EGWA	HIGH EFFICIENCY RED (GaAsP/GaP) GREEN (GaP)	8000	18000	Column Anode
TBC30-12EGWA		12000	26000	Column Cathode

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

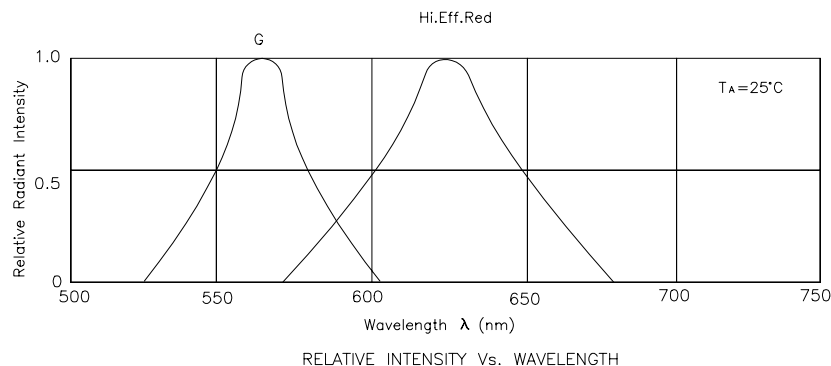
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	High Efficiency Red Green	627 565		nm	IF=20mA
$\lambda_D$	Dominate Wavelength	High Efficiency Red Green	625 568		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	High Efficiency Red Green	45 30		nm	IF=20mA
C	Capacitance	High Efficiency Red Green	15 15		pF	VF=0V;f=1MHz
V <sub>F</sub>	Forward Voltage	High Efficiency Red Green	2.0 2.2	2.5 2.5	V	IF=20mA
I <sub>R</sub>	Reverse Current	All		10	uA	VR = 5V

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

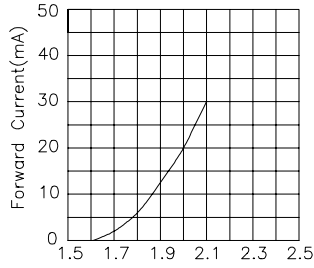
Parameter	High Efficiency Red	Green	Units
Power dissipation	105	105	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	160	140	mA
Reverse Voltage	5	5	V
Operating/Storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 5 Seconds		

Notes:

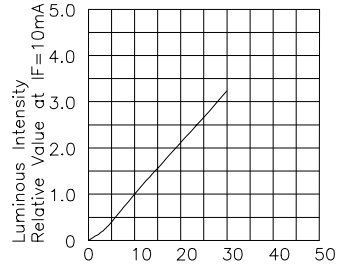
- 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.



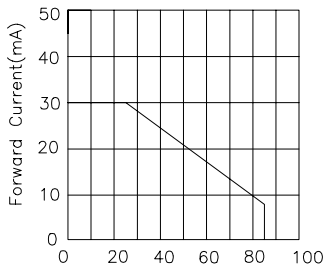
## High Efficiency Red



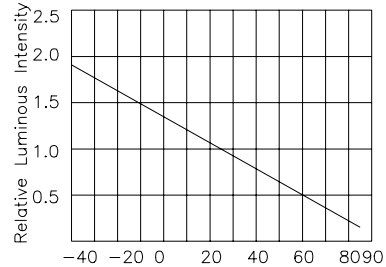
FORWARD CURRENT Vs  
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.  
FORWARD CURRENT

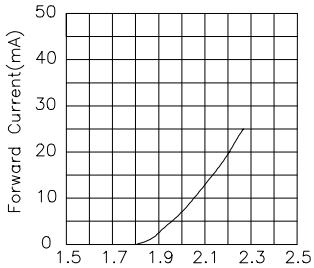


FORWARD CURRENT  
DERATING CURVE

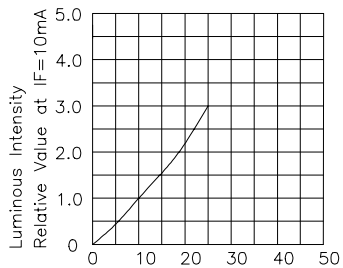


LUMINOUS INTENSITY Vs.  
AMBIENT TEMPERATURE

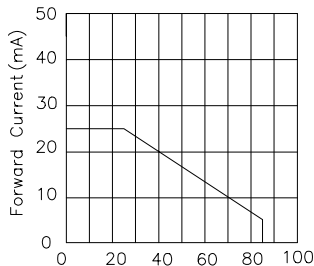
## Green



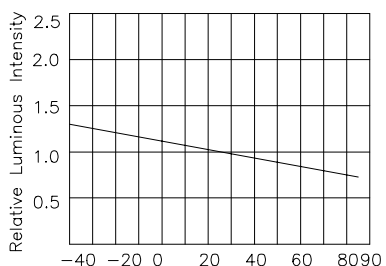
FORWARD CURRENT Vs  
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.  
FORWARD CURRENT



FORWARD CURRENT  
DERATING CURVE



LUMINOUS INTENSITY Vs.  
AMBIENT TEMPERATURE