

Kingbright

60.8mm (2.4 INCH) 5x8 DOT MATRIX DISPLAY

Part Number: TBC24-22EGWA

High Efficiency Red
Green

Features

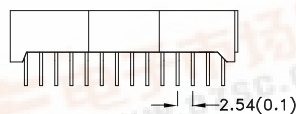
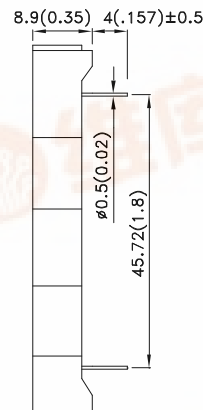
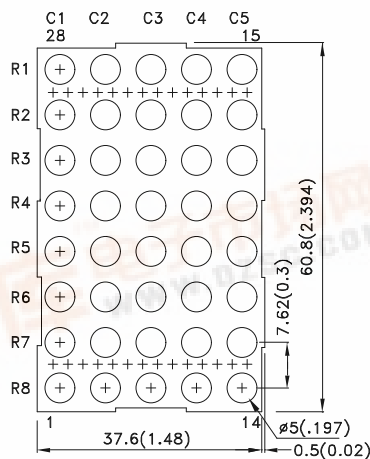
- 2.4 INCH MATRIX HEIGHT.
- DOT SIZE 5mm.
- LOW CURRENT OPERATION.
- HIGH CONTRAST AND LIGHT OUTPUT.
- COMPATIBLE WITH ASCII AND EBCDIC CODES.
- STACKABLE HORIZONTALLY.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- MULTICOLOR AVAILABLE.
- MECHANICALLY RUGGED.
- STANDARD : GRAY FACE, WHITE DOT.
- RoHS COMPLIANT

Description

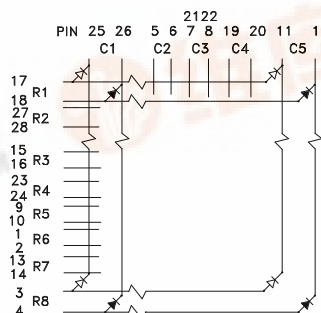
The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

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

Package Dimensions & Internal Circuit Diagram



✕ RED ✕ GREEN



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.	
TBC24-22EGWA	High Efficiency Red (GaAsP/GaP)	WHITE DIFFUSED	3000	13500	Column Cathode
	Green (GaP)		4700	20000	

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	High Efficiency Red Green	2.0 2.2	2.5 2.5	V	I _F =20mA
I _R	Reverse Current	High Efficiency Red Green		10	uA	V _R =5V

Notes:

1.Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

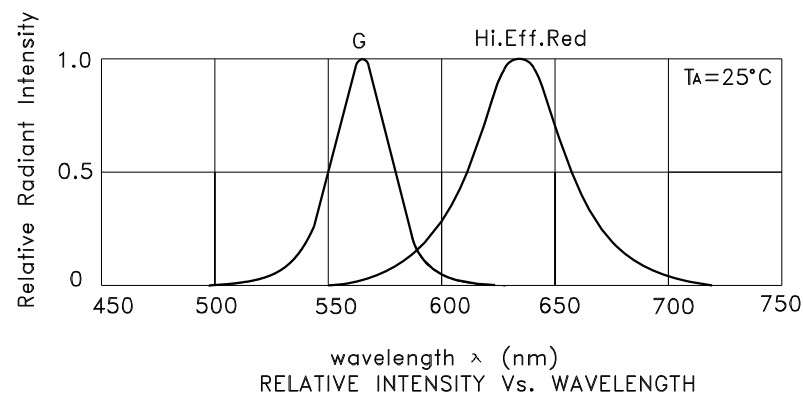
Absolute Maximum Ratings at TA=25°C

Parameter	High Efficiency Red	Green	Units
Power dissipation	75	62.5	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	160	140	mA
Reverse Voltage	5		V
Operating/Storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 3-5 Seconds		

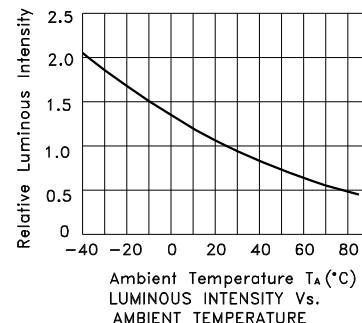
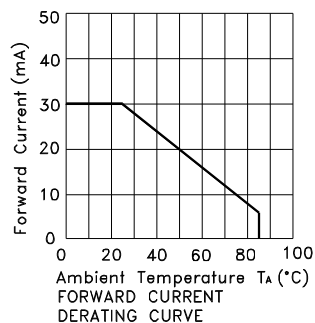
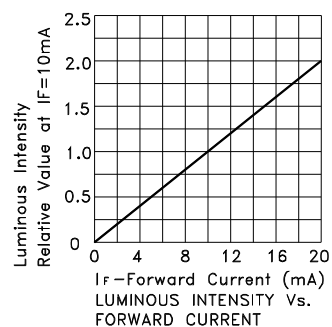
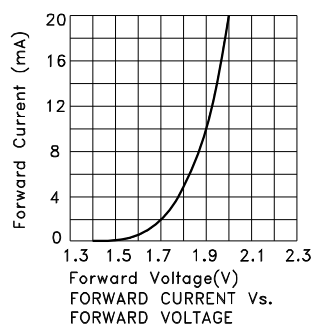
Notes:

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

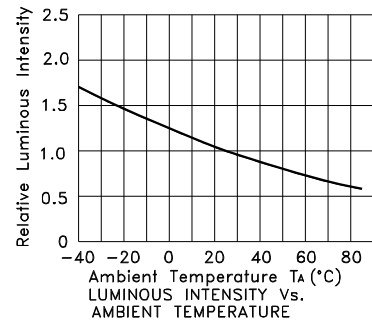
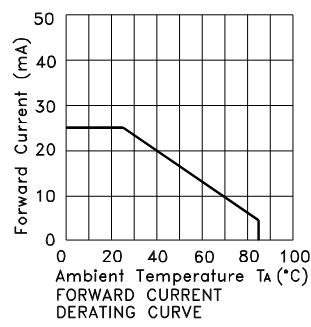
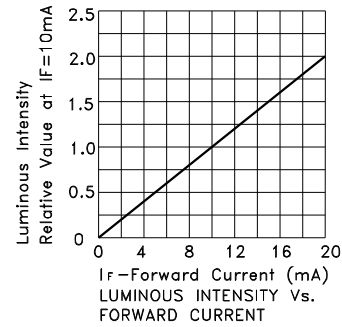
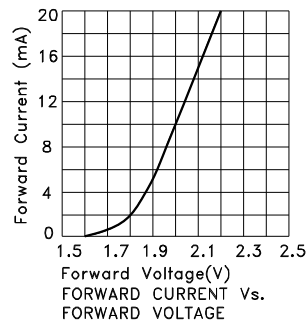
2. 2mm below package base.



TBC24-22EGWA
High Efficiency Red

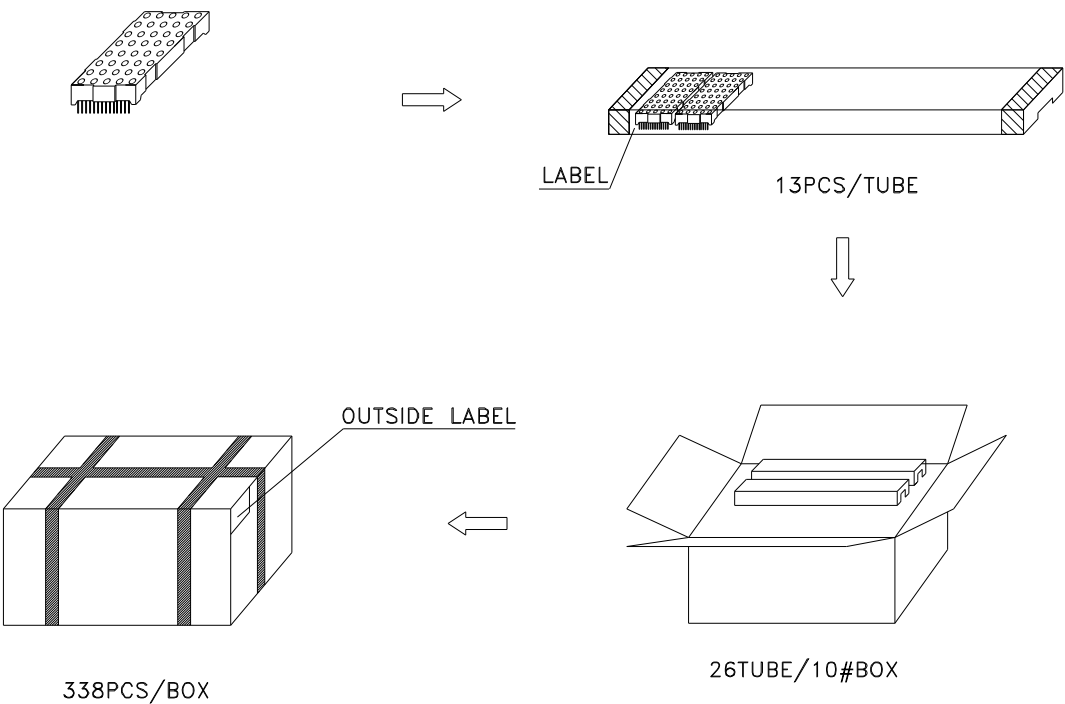


Green



PACKING & LABEL SPECIFICATIONS

TBC24-22EGWA



Inside LABEL Paste On The IC-tube

Kingbright	TYPE:TBX24-22XXX		Date
QTY:13PCS	CODE: xx		
		RoHs Compliant	
XXXXXXXXXX-XXXX		LOT NO.	

Outside LABEL Paste On The Box

BOX Number	XXXX	XXXX
TBX24-22XXX	338	PCS
RoHs Compliant		

Number OF QA
Date