

#### 38mm (1.5 INCH) 8x8 DOT MATRIX DISPLAYS

TA15-11EWA/SRWA/YWA/GWA TC15-11EWA/SRWA/YWA/GWA TBA15-11EGWA TBC15-11EGWA

#### **Features**

- ●1.5 INCH MATRIX HEIGHT.
- ●DOT SIZE 3.7mm.
- •LOW CURRENT OPERATION.
- •HIGH CONTRAST AND LIGHT OUTPUT.
- ●COMPATIBLE WITH ASCIL AND EBCDIC CODES.
- •STACKABLE HORIZONTALLY AND VERTICALLY.
- 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.

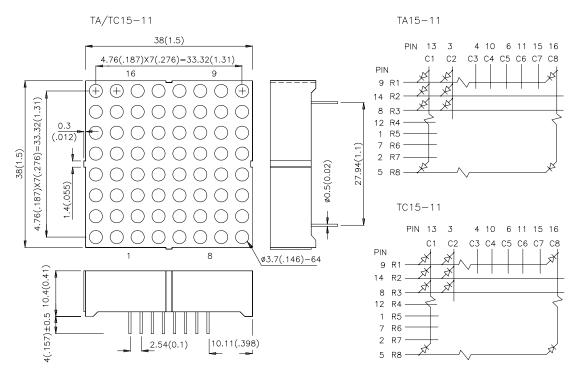
The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

The Yellow source color devices are made with Gallium

Arsenide Phosphide on Gallium Phosphide Yellow Light
Emitting Diode.

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

#### Package Dimensions & Internal Circuit Diagram



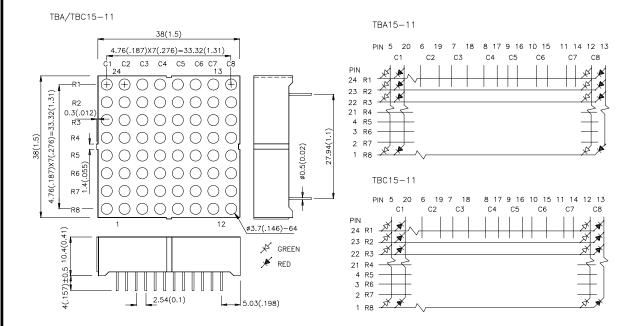
#### Notes

- 1. All dimensions are in millimeters (inches), Tolerance is ±0.25(0.01")unless otherwise noted.
- 2. Specifications are subject to change whitout notice.

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# Package Dimensions & Internal Circuit Diagram



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#### **Selection Guide**

Part No.	Dice	Lens Type	<b>lv (ucd)</b> @ 10 mA		Description	
			Min.	Тур.	Description	
TA15-11EWA	HIGH EFFICIENCY RED	WHITE DIFFUSED	3000	10500	Column Anode	
TC15-11EWA	(GaAsP/GaP)				Column Cathode	
TA15-11SRWA	CUDED DDICUT DED (COAIAO)	WHITE DIFFUSED	12000	26000	Column Anode	
TC15-11SRWA	SUPER BRIGH T RED (GaAlAs)				Column Cathode	
TA15-11YWA	VELLOW (O - A - B (O - B)	WHITE DIFFUSED	3000	8000	Column Anode	
TC15-11YWA	- YELLOW (GaAsP/GaP)				Column Cathode	
TA15-11GWA	CDEEN (CaD)	WHITE DIFFUSED	4700	16000	Column Anode	
TC15-11GWA	- GREEN (GaP)				Column Cathode	
TBA15-11EGWA	HIGH EFFICIENCY RED (GaAsP/GaP)	WHITE DIFFUSED	3000	10500	Column Anode	
TBC15-11EGWA	GREEN (GaP)		4700	16000	Column Cathode	

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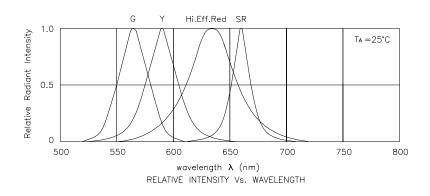
## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red Super Bright Red Yellow Green	627 660 590 565		nm	IF=20mA
λD	Dominate Wavelength	High Efficiency Red Super Bright Red Yellow Green	625 640 588 568		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red Super Bright Red Yellow Green	45 20 35 30		nm	IF=20mA
С	Capacitance	High Efficiency Red Super Bright Red Yellow Green	15 45 20 15		pF	V F=0V;f=1MHz
VF	Forward Voltage	High Efficiency Red Super Bright Red Yellow Green	2.0 1.85 2.1 2.2	2.5 2.5 2.5 2.5	V	IF=20mA
IR	Reverse Current	All		10	uA	V R = 5V

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

Parameter	High Efficiency Red	Super Bright Red	Yellow	Green	Units
Power dissipation	105	100	105	105	mW
DC Forward Current	30	30	30	25	mA
Peak Forward Current [1]	160	155	140	140	mA
Reverse Voltage	5	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C				
Lead Solder Temperature [2]	260°C For 5 Seconds				

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

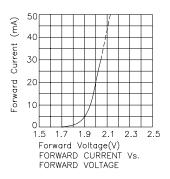


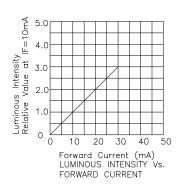
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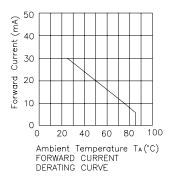
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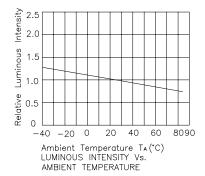
# Kingbright

# **High Efficiency Red**

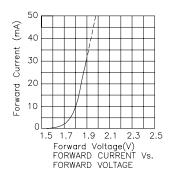


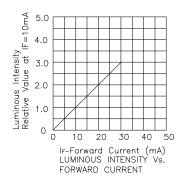


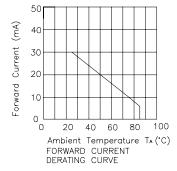


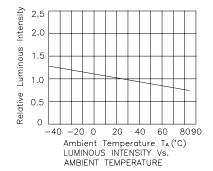


#### Super Bright Red





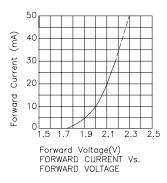


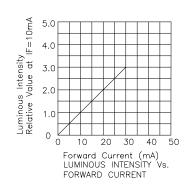


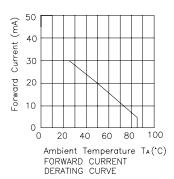
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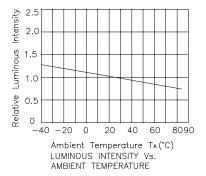
# Kingbright

#### Yellow

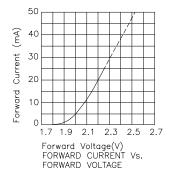


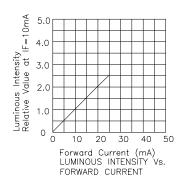


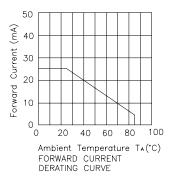


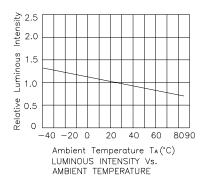


#### Green









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