

DC10EWA	HIGH EFFICIENCY RED
DC10GWA	GREEN
DC10YWA	YELLOW
DC10SRWA	SUPER BRIGHT RED
DC7G3HWA	BRIGHT RED

### Features

- SUITABLE FOR LEVEL INDICATORS.
- LOW CURRENT OPERATION.
- EXCELLENT ON/OFF CONTRAST.
- WIDE VIEWING ANGLE.
- END STACKABLE.
- MECHANICALLY RUGGED.
- BI-COLOR VERSION AVAILABLE.
- DIFFERENT COLORS IN ONE UNIT AVAILABLE.
- STANDARD : GRAY FACE, WHITE SEGMENT

### Description

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

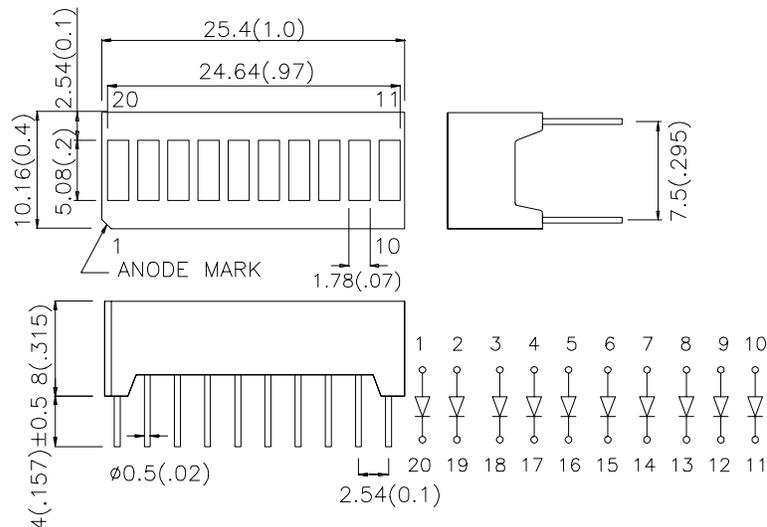
The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

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

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

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

### Package Dimensions & Internal Circuit Diagram



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01)$  unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) @10 mA	
			Min.	Typ.
DC10EWA	HIGH EFFICIENCY RED (GaAsP/GaP)	White Diffused	2200	9000
DC10GWA	GREEN (GaP)	White Diffused	3600	14000
DC10YWA	YELLOW (GaAsP/GaP)	White Diffused	2200	9000
DC10SRWA	SUPER BRIGHT RED (GaAlAs)	White Diffused	9000	31000
DC7G3HWA	GREEN (GaP)	White Diffused	2200	9000
	BRIGHT RED (GaP)	White Diffused	900	2200

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

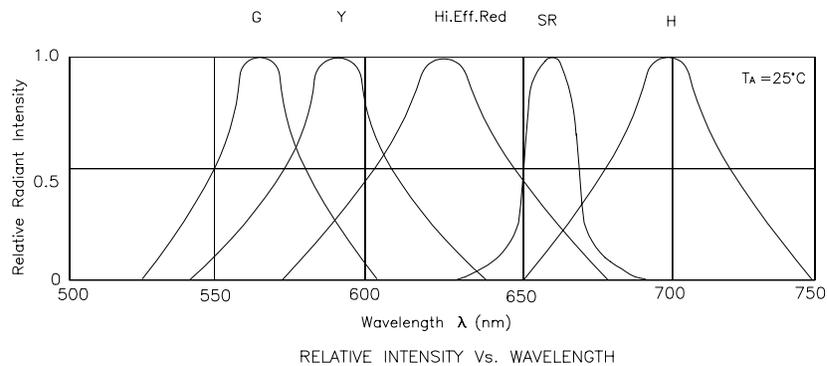
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	Bright Red High Efficiency Red Green Yellow Super Bright Red	700 627 565 590 660		nm	IF=20mA
$\lambda_D$	Dominant Wavelength	Bright Red High Efficiency Red Green Yellow Super Bright Red	660 625 568 588 640		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	Bright Red High Efficiency Red Green Yellow Super Bright Red	45 45 30 35 20		nm	IF=20mA
C	Capacitance	Bright Red High Efficiency Red Green Yellow Super Bright Red	40 15 15 20 45		pF	VF=0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Bright Red High Efficiency Red Green Yellow Super Bright Red	2.25 2.0 2.2 2.1 1.85	2.5 2.5 2.5 2.5 2.5	V	IF=20mA
I <sub>R</sub>	Reverse Current	All		10	uA	VR = 5V

## Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

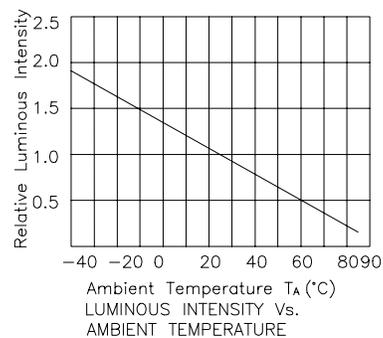
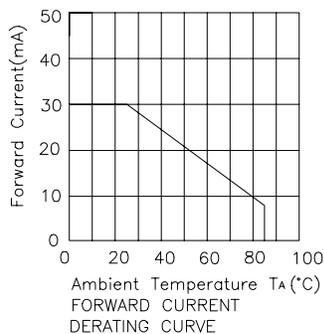
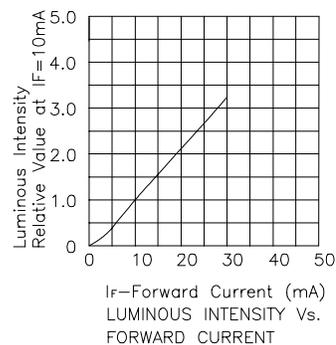
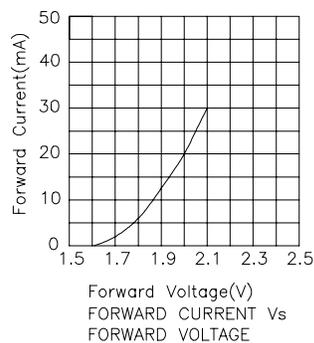
Parameter	Bright Red	High Efficiency Red	Green	Yellow	Super Bright Red	Units
Power dissipation	120	105	105	105	100	mW
DC Forward Current	25	30	25	30	30	mA
Peak Forward Current [1]	120	160	140	140	155	mA
Reverse Voltage	5	5	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C					
Lead Solder Temperature [2]	260°C For 5 Seconds					

**Notes:**

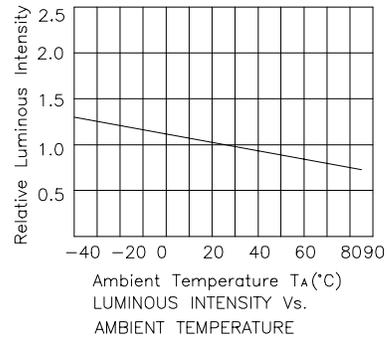
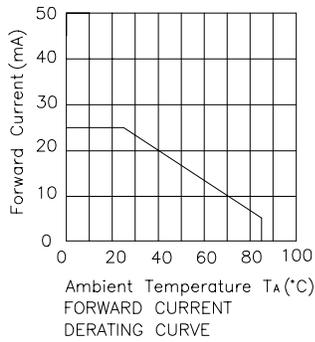
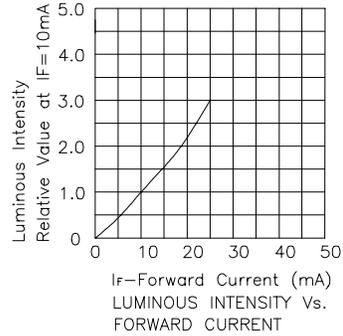
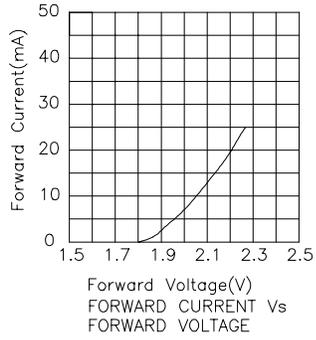
- 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.



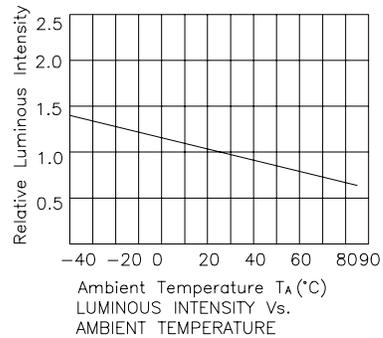
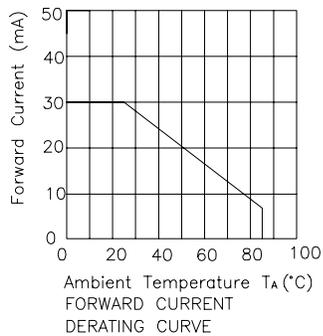
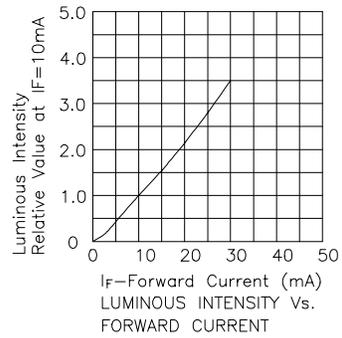
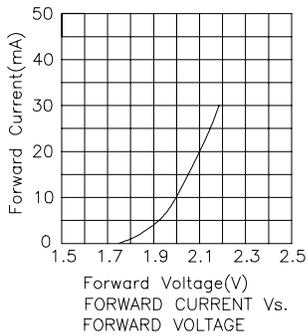
## High Efficiency Red



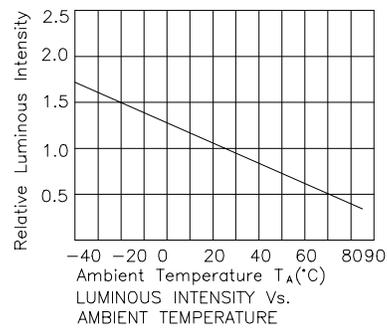
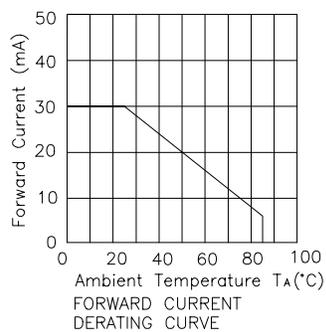
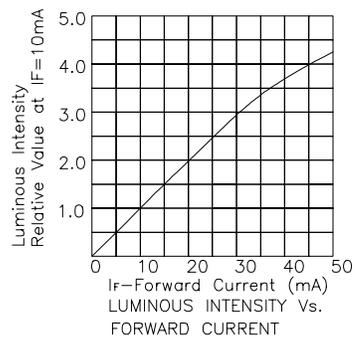
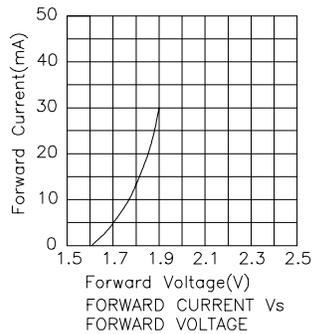
## Green



## Yellow



## Super Bright Red



## Bright Red

