DC-10EWA	HIGH EFFICIENCY RED
DC-10SRWA	SUPER BRIGHT RED
DC-10YWA	YELLOW
DC-10GWA	GREEN
DC-7G3HWA	GREEN/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 High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

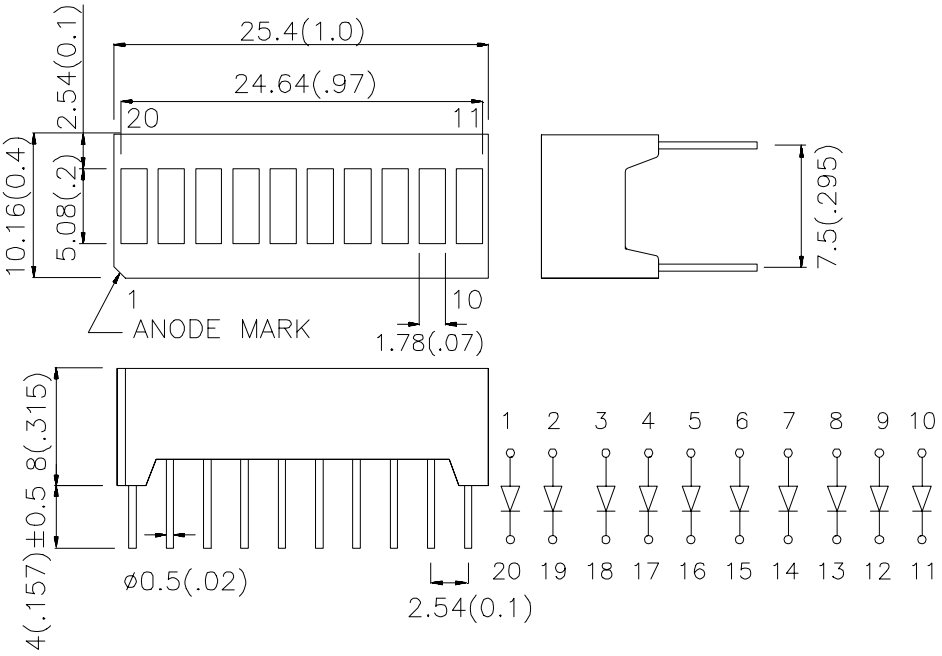
The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

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.

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

Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) @ 10 mA		Description
			Min.	Typ.	
DC-10EWA	HIGH EFFICIENCY RED (GaAsP/GaP)	WHITE DIFFUSED	2200	9000	10 Segments Bargraph-Display
DC-10SRWA	SUPER BRIGHT RED (GaAlAs)	WHITE DIFFUSED	9000	31000	
DC-10YWA	YELLOW (GaAsP/GaP)	WHITE DIFFUSED	2200	9000	
DC-10GWA	GREEN (GaP)	WHITE DIFFUSED	3000	9500	
DC-7G3HWA	GREEN (GaP)	WHITE DIFFUSED	3000	9500	10 Segments Bargraph-Display 7x Green,3x Red
	BRIGHT RED (GaP)		900	2200	

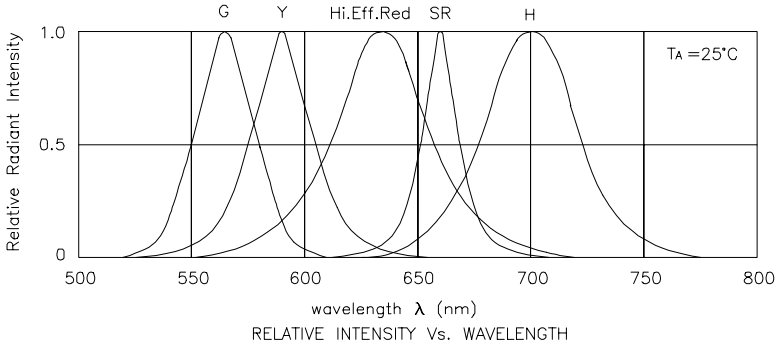
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red Super Bright Red Yellow Green Bright Red	627 660 590 565 700		nm	I_F=20mA
λD	Dominate Wavelength	High Efficiency Red Super Bright Red Yellow Green Bright Red	625 640 588 568 660		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red Super Bright Red Yellow Green Bright Red	45 20 35 30 45		nm	I_F=20mA
C	Capacitance	High Efficiency Red Super Bright Red Yellow Green Bright Red	15 45 20 15 40		pF	V_F=0V;f=1MHz
V_F	Forward Voltage	High Efficiency Red Super Bright Red Yellow Green Bright Red	2.0 1.85 2.1 2.2 2.25	2.5 2.5 2.5 2.5 2.5	V	I_F=20mA
I_R	Reverse Current	All		10	uA	V_R = 5V

Absolute Maximum Ratings at T_A=25°C

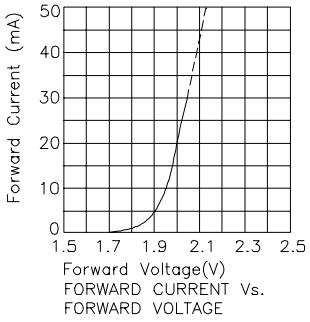
Parameter	High Efficiency Red	Super Bright Red	Yellow	Green	Bright Red	Units
Power dissipation	105	100	105	105	120	mW
DC Forward Current	30	30	30	25	25	mA
Peak Forward Current [1]	160	155	140	140	130	mA
Reverse Voltage	5	5	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C					
Lead Solder Temperature [2]	260°C For 5 Seconds					

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

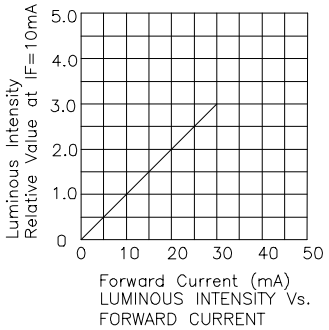


RELATIVE INTENSITY Vs. WAVELENGTH

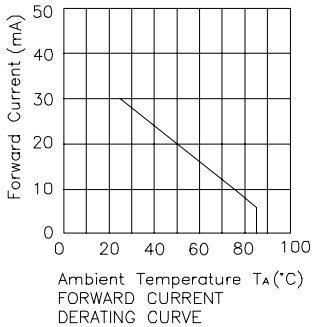
High Efficiency Red



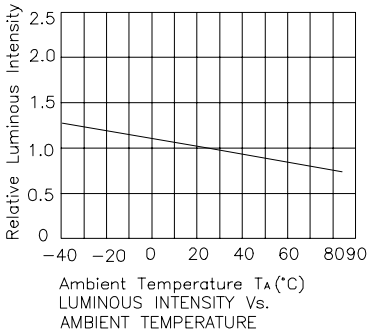
FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT

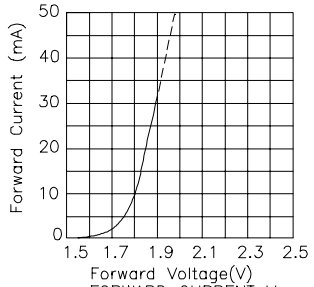


FORWARD CURRENT DERATING CURVE

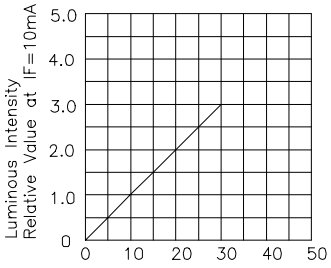


LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE

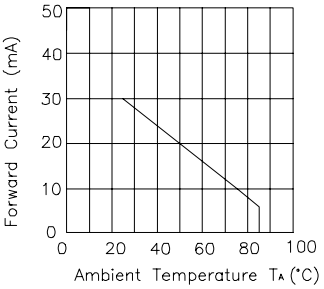
Super Bright Red



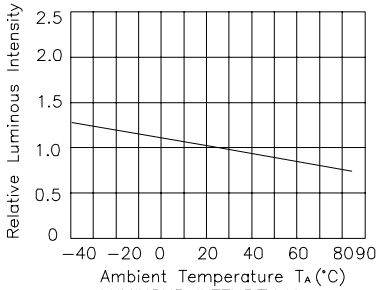
FORWARD CURRENT Vs.
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT

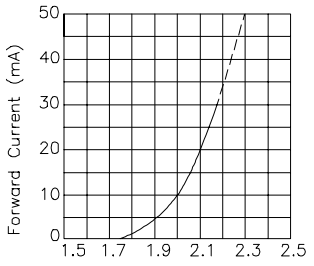


FORWARD CURRENT
DERATING CURVE

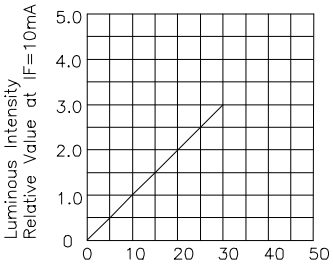


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

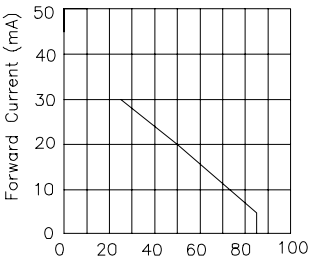
Yellow



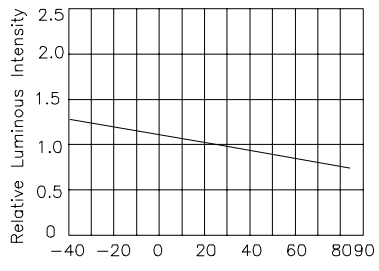
FORWARD CURRENT Vs.
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT

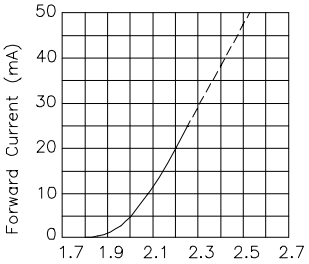


FORWARD CURRENT
DERATING CURVE

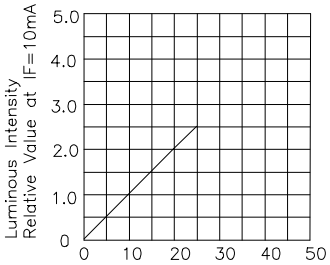


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

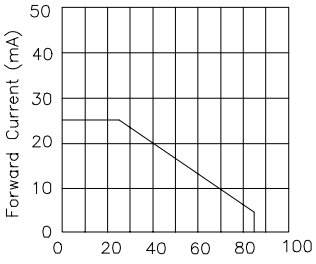
Green



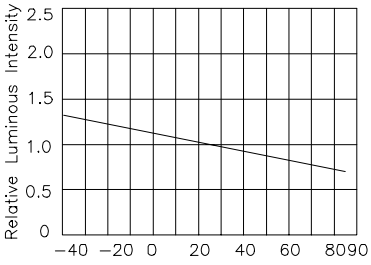
FORWARD CURRENT Vs.
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT

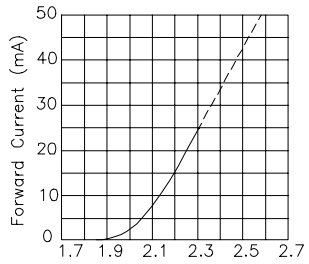


FORWARD CURRENT
DERATING CURVE

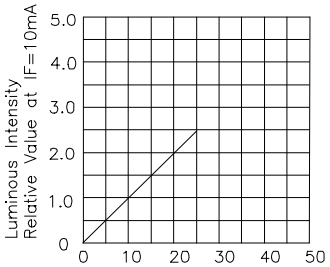


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

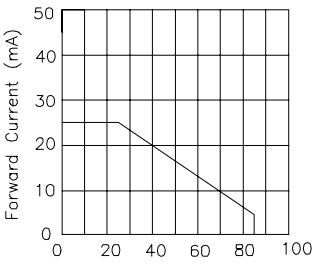
Bright Red



FORWARD CURRENT Vs.
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT



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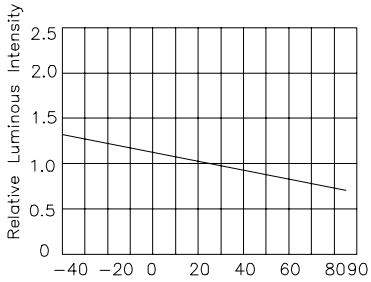
DERATING CURVE



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE